



# 2014 NATIONAL UNIVERSITY GENERAL CATALOG

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**NATIONAL  
UNIVERSITY**

2013/2014

# GENERAL CATALOG

**Volume 77** | September 1, 2013

**National University Academic Headquarters**

11255 North Torrey Pines Road • La Jolla, CA 92037-1011 • 858.642.8800



**NATIONAL UNIVERSITY**



**MICHAEL R.  
CUNNINGHAM, PH.D.**

President  
National University

## MESSAGE FROM THE PRESIDENT

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Dear Student,

On behalf of the Board of Trustees, faculty, staff, alumni and your fellow students, it is my pleasure to welcome you to National University. We are so pleased that you have chosen to pursue your academic goals with us.

Founded in 1971, National University was among the first institutions in the United States to recognize and focus on the unique educational needs of non-traditional learners. Today, National University is the second-largest, private, nonprofit institution of higher learning in California. The University is unique because of its intensive one-course-per-month format, regional campuses, and flexible online degree programs which enable students to complete their degree programs in an accelerated time frame.

Throughout this catalog, and in every class offered at National University, you will observe a consistent focus on quality and an ongoing commitment to incorporating current subject matter into our curricula. Our goal is to ensure that the education you receive is among the most rigorous, relevant, and rewarding in higher learning.

National University remains focused on providing students with state-of-the-art technologies, including high-tech classrooms and a library with one of the largest collections of e-books in the United States. The University offers more than 100 programs that are available either completely or partially online, allowing students locally, nationally, and globally to pursue a broad range of degrees and credentials.

Our commitment to serving students is embodied in our Student Concierge Service which provides a one-stop student service center seven days a week, 365 days a year. The Student Concierge Service can assist you in many ways, including acting as a liaison with other units in the University, as an advocate for you as you navigate National's processes and programs, and as a central source of quality assurance.

National University is proud of what it has accomplished in the past 42 years, and we look forward to sharing an even more distinguished future with you as we continue to seek new and better ways to address your needs as a student.

I wish you the best of luck and much success.

Sincerely,

A handwritten signature in cursive script that reads "Michael R. Cunningham". The signature is written in dark ink and is positioned above the printed name.

Michael R. Cunningham, Ph.D.

For more information, call  
800.NAT.UNIV (628.8648)

Current students call  
866.NU-ACCESS (682-2237)  
Student Concierge Services  
866.NU-ACCESS ext 8900  
Visit us on the web  
[www.nu.edu](http://www.nu.edu)

Note: The University reserves the right to change or modify policies, regulations, curricula, courses, tuition and fees, or any other aspect of its programs described in this catalog at any time.

Not all courses or programs listed in this catalog will be available at every campus or online.

Not all facilities, equipment and other resources will be available at every campus.

Catalog Effective Date: September 1, 2013

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## TABLE OF CONTENTS

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iii	A Message from the President
2	Calendar
4	Class Schedules
6	Campus Directory
9	Department Directory
10	Campus Administration
11	Board of Trustees
12	Administration
13	General Information
23	Support Services
31	Financial Aid
41	Policies and Procedures
55	Academic Information for Undergraduate Degrees
67	Academic Information for Graduate Degrees and Credentials
73	General Education
79	College of Letters and Sciences
131	School of Business and Management
163	School of Education
212	School of Education Credential Information
221	School of Engineering, Technology and Media
247	School of Health and Human Services
281	School of Professional Studies
301	Extended Learning
319	Nevada Programs
333	National University Language Institute
339	Course Descriptions
343	Index



# CLASS CALENDAR AT A GLANCE

## JULY 2013

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## AUGUST 2013

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## SEPTEMBER 2013

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## OCTOBER 2013

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## NOVEMBER 2013

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## DECEMBER 2013

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## JANUARY 2014

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## FEBRUARY 2014

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

## MARCH 2014

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## APRIL 2014

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

## MAY 2014

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## JUNE 2014

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## JULY 2014

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## AUGUST 2014

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## SEPTEMBER 2014

S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

## OCTOBER 2014







S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## NOVEMBER 2014

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## DECEMBER 2014

S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

-  Commencement
-  National holiday. The University will be closed.
-  Make-up Days
-  Starting Dates
-  Last week/ Evaluations
-  Vacation week/ No classes

# CALENDAR AND CLASS SCHEDULES

## 2013 SUMMER

Summer Break: June 30 – July 6

Independence Day: Thursday, July 4

Summer Quarter Begins: Monday, July 8

Labor Day: Monday, September 2

Summer Quarter Ends: Saturday, September 28

## 2013 FALL

Fall Quarter Begins: Monday, September 30

Thanksgiving: Thursday, November 28 and  
Friday, November 29

Fall Quarter Ends: Saturday, December 21

Winter Break: December 22 – January 4

Christmas Eve: Tuesday, December 24

Christmas: Wednesday, December 25

## 2014 WINTER

New Year's Day: Wednesday, January 1

Winter Quarter Begins: Monday, January 6

Martin Luther King's Birthday: Monday, January 20

President's Day: Monday, February 17

Winter Quarter Ends: Saturday, March 29

## 2014 SPRING

Spring Break: Sunday, March 30 – April 5

Spring Quarter Begins: Monday, April 7

Northern Commencement: Sunday April 27, 2014

Memorial Day: Monday, May 26

Southern Commencement: Wednesday June 11, 2014

(Southern Region: No classes will be held)

Spring Quarter Ends: Saturday, June 28

## 2014 SUMMER

Summer Break: June 29 – July 5

Independence Day: Friday, July 4

Summer Quarter Begins: Monday, July 7

Labor Day: Monday, September 1

Summer Quarter Ends: Saturday, September 27

## 2014 FALL

Fall Quarter Begins: Monday, September 29

Thanksgiving: Thursday, November 27 and  
Friday, November 28

Fall Quarter Ends: Saturday, December 20

Winter Break: December 21 – January 3

Christmas Eve: Wednesday, December 24

Christmas: Thursday, December 25

## 2015 WINTER

New Year's Day: Thursday, January 1

Winter Quarter Begins: Monday, January 5

Martin Luther King's Birthday: Monday, January 19

President's Day: Monday, February 16

Winter Quarter Ends: Saturday, March 28

## 2015 SPRING

Spring Break: Sunday, March 29 – April 4

Spring Quarter Begins: Monday, April 6

Memorial Day: Monday, May 25

Spring Quarter Ends: Saturday, June 27

## 2015 SUMMER

Summer Break: June 28 – July 4

Independence Day: Friday, July 3, & Saturday, July 4

Summer Quarter Begins: Monday, July 6

Labor Day: Monday, August 31

Summer Quarter Ends: Saturday, September 26

## 2015 FALL

Fall Quarter Begins: Monday, September 28

Thanksgiving: Thursday, November 26 and  
Friday, November 27

Fall Quarter Ends: Saturday, December 19

Winter Break: December 20 – January 2

Christmas Eve: Thursday, December 24

Christmas: Friday, December 25



# UNDERGRADUATE CLASS SCHEDULE

Undergraduate classes are 4.5 quarter units, 45 contact hours, unless otherwise noted. All online classes begin on Mondays, with the exception of those terms when Monday is a holiday. In these cases, online courses begin on Tuesday. Ending dates vary by program.

- National University's academic year is divided into four twelve-week quarters, each composed of three one-month classes.
- Classes are held two evenings each week from 5:30 to 10 p.m.
- Undergraduate students generally attend two Saturday sessions from 8 a.m. to 12:30 p.m. or 1 p.m. to 5:30 p.m.
- Undergraduate day classes are held either Monday and Wednesday or Tuesday and Thursday from 9 a.m. to 2:30 p.m.
- Eight-week class schedules are listed in SOAR.

WEEKDAY	TIME	SATURDAY SCHEDULE
Mon/Wed (8 sessions)	5:30 p.m.-10 p.m.	8 a.m.-12:30 p.m. or 1 p.m.-5:30 p.m.; Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.
Tues/Thurs (8 sessions)	5:30 p.m.-10 p.m.	8 a.m.-12:30 p.m. or 1 p.m.-5:30 p.m.; Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.

24 month calendar follows:

## ONSITE UNDERGRADUATE CLASS SCHEDULE

### Mondays and Wednesdays

#### 2013 / SUMMER

July 8, 10, 15, 17, 22, 24, 27 (8-12:30), 29, 31 August 3(8-12:30)  
August 5, 7, 12, 14, 17 (8-12:30), 19, 21, 26, 28, 31 (1-5:30)  
September 4, 7 (8-12:30), 9, 11, 16, 18, 21 (8-12:30), 23, 25, 28(8-12:30)

#### 2013 / FALL

September 30, October 2, 7, 9, 12 (8-12:30), 14, 16, 21, 23, 26(1-5:30)  
October 28, 30 November 4, 6, 11, 13, 16 (8-12:30), 18, 20, 23(8-12:30)  
November 25, 27, December 2, 4, 9, 11, 14 (8-12:30), 16, 18, 21(1-5:30)

#### 2014 / WINTER

January 6, 8, 11(8-12:30), 13, 15, 22, 25(1-5:30pm), 27, 29  
February 1(8-12:30)  
February 3, 5, 8(8-12:30), 10, 12, 19, 22(8-12:30), 24, 26, March 1(1-5:30)  
March 3, 5, 10, 12, 17, 19, 22 (8-12:30), 24, 26, 29(8-12:30)

#### 2014 / SPRING

April 7, 9, 14, 16, 19 (8-12:30), 21, 23, 28, 30, May 3(1-5:30pm)  
May 5, 7, 10 (8-12:30), 12, 14, 17 (1-5:30), 19, 21, 28, 31 (8-12:30)  
June 2, 4, 9, 11, 14 (8-12:30), 16, 18, 23, 25, 28(1-5:30)

#### 2014 / SUMMER

July 7, 9, 14, 16, 21, 23, 26 (8-12:30), 28, 30 August 2(8-12:30)  
August 4, 6, 11, 13, 16 (8-12:30), 18, 20, 25, 27, 30 (1-5:30)  
September 3, 6 (8-12:30), 8, 10, 15, 17, 20 (1-5:30), 22, 24, 27(8-12:30)

#### 2014 / FALL

September 29, October 1, 6, 8, 13, 15, 18 (8-12:30) 20, 22, 25(1-5:30)  
October 27, 29 November 3, 5, 10, 12, 15 (8-12:30), 17, 19, 22(8-12:30)  
November 24, 26, December 1, 3, 6 (8-12:30) 8, 10, 15, 17, 20(1-5:30)

#### 2015 / WINTER

January 5, 7, 10(8-12:30), 12, 14, 21, 24(1-5:30), 26, 28, 31(8-12:30)  
February 2, 4, 7(8-12:30), 9, 11, 18, 21(8-12:30), 23, 25, 28(1-5:30)  
March 2, 4, 9, 11, 16, 18, 21(8-12:30), 23, 25, 28(8-12:30)

#### 2015 / SPRING

April 6, 8, 13, 15, 18(8-12:30), 20, 22, 27, 29, May 2(1-5:30)  
May 4, 6, 9(8-12:30), 11, 13, 16(1-5:30), 18, 20, 27, 30(8-12:30)  
June 1, 3, 8, 10, 13(8-12:30), 15, 17, 22, 24, 27(1-5:30)

#### 2015 / SUMMER

July 6, 8, 13, 15, 20, 22, 25(8-12:30), 27, 29, August 1(8-12:30)  
August 3, 5, 10, 12, 15(8-12:30), 17, 19, 24, 26, 29(1-5:30)  
August 31, September 2, 9, 12(1-5:30pm), 14, 16, 19(8-12:30), 21, 23, 26(8-12:30)

#### 2015 / FALL

September 28, 30, October 5, 7, 10(8-12:30), 12, 14, 19, 21, 24(1-5:30)  
October 26, 28, November 2, 4, 9, 11, 14(8-12:30), 16, 18, 21(8-12:30)  
November 23, 25, 30, December 2, 5(8-12:30), 7, 9, 14, 16, 19(1-5:30)

## ONSITE UNDERGRADUATE CLASS SCHEDULE

### Tuesdays and Thursdays

#### 2013 / SUMMER

July 9, 11, 16, 18, 20 (8-12:30), 23, 25, 30 August 1, 3(1-5:30)  
August 6, 8, 13, 15, 20, 22, 24 (8-12:30), 27, 29, 31 (8-12:30)  
September 3, 5, 10, 12, 14 (8-12:30), 17, 19, 24, 26, 28(1-5:30)

#### 2013 / FALL

October 1, 3, 8, 10, 15, 17, 19 (8-12:30), 22, 24, 26 (8-12:30)  
October 29, 31 November 5, 7, 9 (8-12:30), 12, 14, 19, 21, 23(1-5:30)  
November 26, December 3, 5, 7(8-12:30), 10, 12, 14 (1-5:30), 17, 19, 21 (8-12:30)

#### 2014 / WINTER

January 7, 9, 14, 16, 21, 23, 25 (8-12:30), 28, 30,  
February 1(1-5:30) February 4, 6, 11, 13, 18, 20, 22 (1-5:30), 25, 27,  
March 1(8-12:30) March 4, 6, 11, 13, 15 (8-12:30), 18, 20 25, 27, 29 (1-5:30)

#### 2014 / SPRING

April 8, 10, 15, 17, 22, 24, 26 (8-12:30), 29, May 1, 3(8-12:30)  
May 6, 8, 13, 15, 17 (8-12:30), 20, 22, 27, 29, 31(1-5:30)  
June 3, 5, 10, 12, 17, 19, 21 (8-12:30), 24, 26, 28(8-12:30)

#### 2014 / SUMMER

July 8, 10, 15, 17, 19 (8-12:30), 22, 24, 29, 31, August 2 (1-5:30)  
August 5, 7, 12, 14, 19, 21, 23 (8-12:30), 26, 28, 30 (8-12:30)  
September 2, 4, 9, 11, 16, 18, 20 (8-12:30) 23, 25, 27(1-5:30)

#### 2014 / FALL

September 30, October 2, 7, 9, 11 (8-12:30), 14, 16, 21, 23, 25 (8-12:30)  
October 28, 30 November 4, 6, 8 (8-12:30), 11, 13, 18, 20, 22(1-5:30)  
November 25, December 2, 4, 6(1-5:30), 9, 11, 13 (8-12:30), 16, 18, 20(8-12:30)

#### 2015 / WINTER

January 6, 8, 13, 15, 20, 22, 24(8-12:30), 27, 29, 31(1-5:30)  
February 3, 5, 10, 12, 17, 19, 21(1-5:30), 24, 26, 28(8-12:30)  
March 3, 5, 10, 12, 14(8-12:30), 17, 19, 24, 26, 28(1-5:30)

#### 2015 / SPRING

April 7, 9, 14, 16, 21, 23, 25(8-12:30), 28, 30, May 2(8-12:30)  
May 5, 7, 12, 14, 16(8-12:30), 19, 21, 26, 28, 30(1-5:30)  
June 2, 4, 9, 11, 16, 18, 20(8-12:30), 23, 25, 27(8-12:30)

#### 2015 / SUMMER

July 7, 9, 14, 16, 18(8-12:30), 21, 23, 28, 30, August 1(1-5:30)  
August 4, 6, 11, 13, 18, 20, 22(8-12:30), 25, 27, 29(8-12:30)  
September 1, 3, 8, 10, 12(8-12:30), 15, 17, 22, 24, 26(1-5:30)

#### 2015 / FALL

September 29, October 1, 6, 8, 13, 15, 17(8-12:30), 20, 22, 24(8-12:30)  
October 27, 29, November 3, 5, 7(8-12:30), 10, 12, 17, 19, 21(1-5:30)  
November 24, December 1, 3, 5(1-5:30), 8, 10, 12(8-12:30), 15, 17, 19(8-12:30)

# GRADUATE CLASS SCHEDULE

Graduate classes are 4.5 quarter units, 40 contact hours, unless otherwise noted. All online classes begin on Mondays, with the exception of those terms when Monday is a holiday. In these cases, online courses begin on Tuesday. Ending dates vary by program.

- National University's academic year is divided into four twelve-week quarters, each composed of three one-month classes.
- Graduate students meet for a final session on the last Saturday of the four-week term, either from 8:30 a.m. to 12:30 p.m. or 1 p.m. to 5 p.m.
- Classes are held two evenings each week from 5:30 to 10 p.m.
- Eight-week class schedules are listed in SOAR.

WEEKDAY	TIME	SATURDAY SCHEDULE
Mon/Wed (8 sessions)	5:30 p.m.-10 p.m.	8:30 a.m.-12:30 p.m. or 1 p.m.-5 p.m.; Normally one Saturday, two Saturdays if weekday holiday makes it necessary.
Tues/Thurs (8 sessions)	5:30 p.m.-10 p.m.	8:30 a.m.-12:30 p.m. or 1 p.m.-5 p.m.; Normally one Saturday, two Saturdays if weekday holiday makes it necessary.

24 month calendar follows:

## ONSITE GRADUATE CLASS SCHEDULE

### Mondays and Wednesdays

#### 2013 / SUMMER

July 8, 10, 15, 17, 22, 24, 29, 31 August 3(8:30-12:30)  
August 5, 7, 12, 14, 19, 21, 26, 28, 31 (1-5:00)  
September 4, 7 (8-12:30), 9, 11, 16, 18, 23, 25, 28(8:30-12:30)

#### 2013 / FALL

September 30, October 2, 7, 9, 14, 16, 21, 23, 26(1-5:00)  
October 28, 30 November 4, 6, 11, 13, 18, 20, 23(8:30-12:30)  
November 25, 27, December 2, 4, 9, 11, 16, 18, 21(1-5:00)

#### 2014 / WINTER

January 6, 8, 11(8-12:30), 13, 15, 22, 27, 29  
February 1(8:30-12:30)  
February 3, 5, 8(8-12:30), 10, 12, 19, 24, 26, March 1(1-5:00)  
March 3, 5, 10, 12, 17, 19, 24, 26, 29(8:30-12:30)

#### 2014 / SPRING

April 7, 9, 14, 16, 21, 23, 28, 30, May 3(1-5:00)  
May 5, 7, 10 (8-12:30), 12, 14, 19, 21, 28, 31 (8:30-12:30)  
June 2, 4, 9, 11, 16, 18, 23, 25, 28(1-5:00)

#### 2014 / SUMMER

July 7, 9, 14, 16, 21, 23, 28, 30 August 2(8:30-12:30)  
August 4, 6, 11, 13, 18, 20, 25, 27, 30 (1-5:00)  
September 3, 6 (8-12:30), 8, 10, 15, 17, 22, 24, 27(8:30-12:30)

#### 2014 / FALL

September 29, October 1, 6, 8, 13, 15, 20, 22, 25(1-5:00)  
October 27, 29 November 3, 5, 10, 12, 17, 19, 22(8:30-12:30)  
November 24, 26, December 1, 3, 8, 10, 15, 17, 20(1-5:00)

#### 2015 / WINTER

January 5, 7, 10(8-12:30), 12, 14, 21, 26, 28, 31(8-12:30)  
February 2, 4, 7(8-12:30), 9, 11, 18, 23, 25, 28(1-5:30)  
March 2, 4, 9, 11, 16, 18, 23, 25, 28(8-12:30)

#### 2015 / SPRING

April 6, 8, 13, 15, 20, 22, 27, 29, May 2(1-5:30)  
May 4, 6, 9(8-12:30), 11, 13, 18, 20, 27, 30(8-12:30)  
June 1, 3, 8, 10, 15, 17, 22, 24, 27(1-5:30)

#### 2015 / SUMMER

July 6, 8, 13, 15, 20, 22, 27, 29, August 1(8-12:30)  
August 3, 5, 10, 12, 17, 19, 24, 26, 29(1-5:30)  
August 31, September 2, 9, 14, 16, 19(8-12:30), 21, 23, 26(8-12:30)

#### 2015 / FALL

September 28, 30, October 5, 7, 12, 14, 19, 21, 24(1-5:30)  
October 26, 28, November 2, 4, 9, 11, 16, 18, 21(8-12:30)  
November 23, 25, 30, December 2, 7, 9, 14, 16, 19(1-5:30)

## ONSITE GRADUATE CLASS SCHEDULE

### Tuesdays and Thursdays

#### 2013 / SUMMER

July 9, 11, 16, 18, 23, 25, 30 August 1, 3(1-5:00)  
August 6, 8, 13, 15, 20, 22, 27, 29, 31 (8:30-12:30)  
September 3, 5, 10, 12, 17, 19, 24, 26, 28(1-5:00)

#### 2013 / FALL

October 1, 3, 8, 10, 15, 17, 22, 24, 26 (8:30-12:30)  
October 29, 31 November 5, 7, 12, 14, 19, 21, 23(1-5:00)  
November 26, December 3, 5, 7(8:00-12:30), 10, 12, 17, 19, 21(8:30-12:30)

#### 2014 / WINTER

January 7, 9, 14, 16, 21, 23, 28, 30, February 1(1-5:00)  
February 4, 6, 11, 13, 18, 20, 25, 27, March 1(8:30-12:30)  
March 4, 6, 11, 13, 18, 20, 25, 27, 29 (1-5:00)

#### 2014 / SPRING

April 8, 10, 15, 17, 22, 24, 29, May 1, 3(8:30-12:30)  
May 6, 8, 13, 15, 20, 22, 27, 29, 31(1-5:00)  
June 3, 5, 10, 12, 17, 19, 24, 26, 28(8:30-12:30)

#### 2014 / SUMMER

July 8, 10, 15, 17, 22, 24, 29, 31, August 2 (1-5:00)  
August 5, 7, 12, 14, 19, 21, 26, 28, 30 (8:30-12:30)  
September 2, 4, 9, 11, 16, 18, 23, 25, 27(1-5:00)

#### 2014 / FALL

September 30, October 2, 7, 9, 14, 16, 21, 23, 25 (8:30-12:30)  
October 28, 30 November 4, 6, 11, 13, 18, 20, 22(1-5:00)  
November 25, December 2, 4, 9, 11, 13 (8-12:30), 16, 18, 20(8:30-12:30)

#### 2015 / WINTER

January 6, 8, 13, 15, 20, 22, 27, 29, 31(1-5:30)  
February 3, 5, 10, 12, 17, 19, 24, 26, 28(8-12:30)  
March 3, 5, 10, 12, 17, 19, 24, 26, 28(1-5:30)

#### 2015 / SPRING

April 7, 9, 14, 16, 21, 23, 28, 30, May 2(8-12:30)  
May 5, 7, 12, 14, 19, 21, 26, 28, 30(1-5:30)  
June 2, 4, 9, 11, 16, 18, 23, 25, 27(8-12:30)

#### 2015 / SUMMER

July 7, 9, 14, 16, 21, 23, 28, 30, August 1(1-5:30)  
August 4, 6, 11, 13, 18, 20, 25, 27, 29(8-12:30)  
September 1, 3, 8, 10, 15, 17, 22, 24, 26(1-5:30)

#### 2015 / FALL

September 29, October 1, 6, 8, 13, 15, 20, 22, 24(8-12:30)  
October 27, 29, November 3, 5, 10, 12, 17, 19, 21(1-5:30)  
November 24, December 1, 3, 8, 10, 12(8-12:30), 15, 17, 19(8-12:30)

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Vice Chancellor, Business and Administration

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Associate Vice Chancellor, Marketing

**Carol A. Tiernan, B.A.**

Associate Vice Chancellor, Marketing

**Beth Schechter, B.A.**

Associate Vice Chancellor, Communications



# NATIONAL UNIVERSITY ADMINISTRATION

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**Thomas MacCalla, Ed.D.**

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Dean, School of Education

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**Mark Redfern, M.B.A.**

Associate Regional Dean, Costa Mesa

**Abena Salvant, M.A.**

Associate Regional Dean, North San Diego County

**Gwendolyn Smith, M.A.**

Associate Regional Dean, San Jose

## **GENERAL INFORMATION**

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<b>14</b>	<b>Degrees Offered</b>
<b>18</b>	<b>Mission Statement</b>
<b>18</b>	<b>Institutional Learning Outcomes</b>
<b>18</b>	<b>General Description</b>
<b>18</b>	<b>Accreditation/Memberships</b>
<b>19</b>	<b>State Regulatory Information</b>
<b>19</b>	<b>Granting of Credit</b>
<b>19</b>	<b>Faculty</b>
<b>19</b>	<b>Familiarity with University Regulations</b>
<b>19</b>	<b>National University Community Research Institute (NUCRI)</b>
<b>19</b>	<b>General Fees</b>
<b>20</b>	<b>National University Golf Academy</b>
<b>20</b>	<b>Tuition</b>
<b>20</b>	<b>Military Community</b>
<b>20</b>	<b>Enrollment Agreement</b>
<b>20</b>	<b>Payments and Release of Records</b>
<b>20</b>	<b>Safety Program</b>
<b>21</b>	<b>Campus Security</b>
<b>21</b>	<b>Conference Services</b>
<b>21</b>	<b>Professional Development and Seminars</b>




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# DEGREE PROGRAMS OFFERED AT NATIONAL UNIVERSITY

## UNDERGRADUATE DEGREES




### Associate of Arts

with a Major in:

- General Education  
with Concentrations in:
  - » Business Administration 






### Associate of Arts

with Majors in:

- Communication 
- Creative Writing 
- Digital Media Design 
- Early Childhood Education 
- Hospitality and Customer Service 
- Property Management
- School Site Paraprofessional 













### Associate of Science














with Majors in:

- Alcohol and Drug Abuse Counseling 
- Business 
- Criminal Justice Administration 
- Engineering Technology 
- Health Informatics 
- Human Biology
- Paralegal Studies
- Professional Golf Management 

### Bachelor of Arts

with Majors in:

- Digital Media Design 
- Digital Journalism 
- Early Childhood Development with a Preliminary Multiple Subject Teaching Credential (CA) 
- Early Childhood Education 
- with Concentrations in:
  - » Early Childhood Administration 
  - » Infant and Toddler
  - » Teacher Education 
- English 
- with a Concentration in:
  - » Creative Writing
- English with Preliminary Single Subject Teaching Credential (CA) 
- English with Single Subject Matter Preparation 
- General Studies 
- Global Studies 
- Health Sciences with a Preliminary Single Subject Teaching Credential (California)
- History 

- Integrated Marketing Communication 
- Interdisciplinary Studies 
- Interdisciplinary Studies with a Preliminary Multiple Subject Teaching Credential (CA) 
- With concentration in:
  - » STEM (Science, Technology, Engineering, Mathematics)
- Management 
- with Concentrations in:
  - » Alternative Dispute Resolution 
  - » Business Law 
  - » Economics 
  - » Entrepreneurship 
  - » Hospitality & Casino Management 
  - » Human Resource Management 
  - » Marketing 
- Project Management 
- Mathematics with a Preliminary Single Subject Teaching Credential (CA) 
- Political Science 
- Pre-Law Studies 
- Psychology 
- Social Science with a Preliminary Single Subject Teaching Credential (California) 
- Sociology 
- Spanish 
- with optional:
  - » Preliminary Single Subject Teaching Credential (CA) 
- Sport Psychology 
- Strategic Communications 

### Bachelor of Business Administration



with Concentrations in:

- » Accountancy 
- » Alternative Dispute Resolution 
- » Business Law 
- » Economics 
- » Entrepreneurship 
- » Finance 
- » Hospitality & Casino Management 
- » Human Resources Management 
- » Marketing 
- » Professional Golf Management 
- » Project Management 

### Bachelor of Public Administration

### Bachelor of Science

with Majors in:

- Accountancy 
- Allied Health 

with a Concentration in:

- » Health Informatics
- Biology
- Biomedical Engineering Technology
- Clinical Laboratory Science 
- Computer Science 
- Construction Engineering Technology 
- Construction Management 
- Criminal Justice Administration 
- Electrical and Computer Engineering
- Financial Management 
- Healthcare Administration 
- Homeland Security & Emergency Management 
- Hospitality & Casino Management 
- Information Systems 
- Information Technology Management 
- Manufacturing Design Engineering 
- Mathematics 
- Nursing (Accelerated Post-Bachelor Degree)
- Nursing (BSN) (Generic Entry)
- Nursing (Licensed Vocational Nurse to BSN)
- Nursing (RN Completion)
- Organizational Behavior 
- Organizational Leadership 
- Paralegal Studies
- Public Health 
- Radiation Therapy

### Foreign Credential Bridge Program

(for students with foreign three-year bachelor's degrees)



## GRADUATE DEGREES

### Global Master of Business Administration (in Spanish)

### Master of Accountancy

### Master of Arts

with Fields of Study in:

- Applied Linguistics
- Counseling Psychology  
With Specializations in:
  - » Licensed Professional Clinical Counseling
  - » Marriage and Family Therapy
- Digital Journalism 
- Education  
With Specializations in:
  - » Best Practices 

# DEGREE PROGRAMS OFFERED AT NATIONAL UNIVERSITY

- » Education Technology
- » e-Teaching and Learning
- » Teacher Leadership
- » Teaching and Learning in a Global Society
- » Teaching Mathematics
- English   
*with specializations in:*
  - » Gothic Studies
  - » Rhetoric
- Film Studies
- Gerontology
- History
- Human Behavior
- Human Resource Management   
*with Specializations in:*
  - » Organizational Development & Change Management
  - » Organizational Leadership
- Performance Psychology
- Strategic Communications
- Teaching   
*with Specializations in:*
  - » Applied Behavior Analysis
  - » Autism
  - » Best Practices
  - » E-Teaching and Learning
  - » Early Childhood Education
  - » Educational Technology
  - » National Board Certified Teacher Leadership
  - » Reading
  - » Special Education
  - » Teacher Leadership
  - » Teaching & Learning in a Global Society
  - » Teaching Mathematics

## Master of Business Administration

*with Specializations in:*

- » Financial Management
- » Human Resources Management
- » Integrated Marketing Communication
- » International Business
- » Management Accounting
- » Marketing
- » Mobile Marketing and Social Media
- » Organizational Leadership
- » Professional Golf Management

## Master of Criminal Justice

### Master of Education with a Preliminary Multiple or Single Subject Teaching Credential and Internship Option (California)

*with Specializations in:*

- » Best Practices
- » e-Teaching and Learning
- » Educational and Instructional Technology
- » Teacher Leadership
- » Teaching and Learning in a Global Society
- » Teaching Mathematics

## Master of Fine Arts

*with Fields of Study in:*

- Creative Writing
- Digital Cinema
- Professional Screenwriting

## Master of Forensic Sciences

*with Specializations in:*

- » Criminalistics
- » Investigation

## Master of Global Management

## Master of Healthcare Administration

## Master of Public Administration

*with Specializations in:*

- » Human Resource Management
- » Organizational Leadership
- » Public Finance

## Master of Public Health

*with Specializations in:*

- » Health Promotion
- » Healthcare Administration
- » Mental Health

## Master of Science

*with Fields of Study in:*

- Applied School Leadership
- Biology
- Clinical Affairs
- Clinical Regulatory Affairs
- Computer Science   
*with Specializations in:*
  - » Advanced Computing
  - » Database Engineering
  - » Software Engineering
- Cyber Security & Information Assurance   
*with Specializations in:*

- » Computer Forensics
- » Ethical Hacking and Pen Testing
- » Health Information Assurance
- » Information Assurance and Security
- Data Analytics
- Educational Administration with a Preliminary Administrative Services Credential
- Educational Counseling
- Educational & Instructional Technology
- Engineering Management   
*with Specializations in:*
  - » Enterprise Architecture (DoDAF, FEAF)
  - » Project Management
  - » Systems Engineering
  - » Technology Management
- Environmental Engineering
- Health Informatics
- Health and Life Science Analytics
- Higher Education Administration
- Homeland Security & Emergency Management
- Management Information Systems
- Mathematics for Educators
- Innovative School Leadership
- Instructional Leadership
- Juvenile Justice
- Nurse Anesthesia
- Nursing   
*with Specializations in:*
  - » Forensic Nursing
  - » Nursing Administration
  - » Nursing Informatics
- Organizational Leadership   
*with Specialization in:*
  - » Community Development
- School Psychology with PPSC Credential
- Special Education   
*with Specializations in:*
  - » Deaf and Hard-of-Hearing
  - » Mild/Moderate
  - » Moderate/Severe
- Sustainability Management
- Wireless Communications

## DOCTORAL PROGRAM

### Doctor of Nursing Practice

# DEGREE PROGRAMS OFFERED AT NATIONAL UNIVERSITY

## NEVADA PROGRAMS















- Associate of Science in Human Biology
- Bachelor of Arts in Early Childhood Education
- Bachelor of Arts in Elementary Education with Nevada Elementary Licensure
- Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure
- Bachelor of Arts in English Education with Nevada Secondary Licensure
- Bachelor of Arts in Special Education with Nevada Secondary Licensure
- Bachelor of Business Administration
- Bachelor of Public Administration
- Bachelor of Science in Criminal Justice Administration
- English Language Program (ELP)
- Master of Arts in Counseling Psychology
- Master of Arts in Teaching
- Master of Business Administration
- Master of Education with Nevada Elementary Licensure
- Master of Education with Nevada Secondary Licensure
- Master of Forensic Science
- Master of Public Administration
- Master of Science in Organizational Leadership
- Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room

## CERTIFICATE PROGRAMS


### Undergraduate Level

- Accountancy 
- Advanced Professional Golf Management (NU Golf Academy)
- Alcohol & Drug Abuse Counseling 
- Alternative Dispute Resolution 
- Basic Human Resource Management 
- Basic Sales & Marketing
- Basics of Casino Management 
- Criminal Justice Administration 
- Finance 
- Hospitality & Casino Management 
- Human Resource Management 
- Information Technology Management 
- LVN "30 Unit" Option
- Marketing 
- Professional Golf Management (NU Golf Academy)

### Graduate Level

- Accountancy 
- Applied Behavior Analysis
- Autism 
- Clinical Informatics
- e-Teaching and Learning
- Early Childhood Education 
- Early Childhood Special Education Add-On Authorization 
- Educational Technology 
- Forensic & Crime Scene Investigations 
- Health Coaching 
- International Business 
- National Board Certified Teacher Leadership 
- Nursing Administration 
- Nursing Informatics 
- Project Management 
- Reading 
- Subject Matter Authorization in Introductory Mathematics for Single or Multiple Subject Teaching Credential Holders (California)
- Teaching Mathematics 

## EXTENDED LEARNING PROGRAMS

- American Society of Quality (ASQ) Certification Training
- Autism Education Certificate 
- Behavior Management Workshops
- Career Technical Education Credential
- CSET Preparation 
- Department of Defense Architecture Framework
- Executive Business Certificate 
- Federal Enterprise Architecture
- Medical Billing and Coding
- Online Health Continuing Education 
- Online Career Training Programs 
- Online Personal Enrichment Programs 
- Organizational Training Workshops
- Paralegal Specialist Certificates with Specializations in:
  - » Corporations
  - » Criminal Law
  - » Litigation
- Professional & Life Enrichment Workshops
- Reading Instruction Competence Assessment (RICA) Preparation 
- Teacher Development Self-Paced Online Course











- US Constitution Test Prep & Exam 

## NATIONAL UNIVERSITY POLYTECHNIC INSTITUTE


- Emergency Medical Technician Certificate of Completion
- Marine Technology with Concentrations in:
  - » Diver Medic Technician
  - » Underwater Inspection Technology


## CALIFORNIA CREDENTIAL PROGRAMS

Approved by the Commission on Teacher Credentialing (CTC)

- Clear Administrative Services Credential 
- Clear Level II Education Specialist: Deaf or Hard-of-Hearing (DHH) 
- Clear Level II Education Specialist: Mild/Moderate Disabilities 
- Clear Level II Education Specialist: Moderate/Severe Disabilities 
- Early Childhood Special Education Add-on Authorization
- Preliminary Administrative Services Certificate/Credential 
- Preliminary Education Specialist Authorization Teaching Credential 
- Preliminary Multiple Subject Teaching Credential with Internship Option 
- Preliminary Single Subject Credential with Internship Option 
- Pupil Personnel Services Credential School Counseling (PPSC) 
- University Internship Pupil Personnel Services Credential School Counseling (PPSC) 

 Entire program can be completed online.

 On-site program with possible online courses or prerequisites.

 Online program with residency in Los Angeles.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.



# GENERAL INFORMATION

## Mission Statement

National University is dedicated to making lifelong learning opportunities accessible, challenging, and relevant to a diverse student population. Its aim is to facilitate educational access and academic excellence through exceptional management of University operations and resources, innovative delivery systems and student services, and relevant programs that are learner-centered, success-oriented, and responsive to technology.

National University's central purpose is to promote continuous learning by offering a diversity of instructional approaches, by encouraging scholarship, by engaging in collaborative community service, and by empowering its constituents to become responsible citizens in an interdependent, pluralistic, global community.

## Institutional Learning Outcomes

1. Apply information literacy skills necessary to support continuous, lifelong learning
2. Communicate effectively orally and in writing, and through other appropriate modes of expression
3. Display mastery of knowledge and skills in a discipline
4. Demonstrate cultural and global awareness to be responsible citizens in a diverse society
5. Demonstrate professional ethics and practice academic integrity
6. Utilize research and critical thinking to solve problems
7. Use collaboration and group processes to achieve a common goal

## General Description

National University is the second largest private, nonprofit institution of higher learning in California. The University is geographically dispersed, with its academic and administrative centers located in La Jolla, California. These centers include all administrative offices—the offices of the president, vice presidents, school deans and department chairs, financial aid, registrar, and admissions.

From its administrative center, National University supports a variety of campuses, making learning convenient for its students.

## Campuses

<b>Campuses</b>	<b>Military Learning Centers</b>	Escondido
Bakersfield	ASW	Fairfield
Carlsbad	Camp Pendleton	Houston, Texas
Costa Mesa	MCAS Miramar	Long Beach
Fresno	MCRD San Diego	National City
Henderson, Nevada	NAB Coronado	Northridge
Kearny Mesa	NAS North Island	Orlando, Florida
La Mesa	Naval Base San Diego	Palm Desert
Los Angeles	Naval Medical Center San Diego	Pasadena
Ontario	Twentynine Palms	Pleasanton*
Oxnard	<b>Online Information Centers</b>	Quantico, Virginia
Rancho Bernardo	Arcadia	Riverside
Rancho Cordova	Atlanta, Georgia	Roseville
Redding	Brea*	San Francisco
San Bernardino	Dallas, Texas	Santa Ana
San Jose	Downey*	Summerlin, Nevada
South Bay	El Cajon	Temecula
Spectrum		Torrance
Stockton		West Covina
Woodland Hills		West Los Angeles

\*Opening Fall 2013

## Accreditation/Memberships

Since 1977, National University has been accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC).

The University is also:

- Approved by the Commission on Teacher Credentialing (CTC)
- Accredited by the California Board of Registered Nursing (BRN)
- Approved by the Commission on Collegiate Nursing Education (CCNE) for the offering of the Bachelor of Science in Nursing Program
- Accredited by the International Assembly for Collegiate Business Education (IACBE) for programs offered by the School of Business & Management
- Approved by the American Bar Association (ABA) for the offering of the Bachelor of Science in Paralegal Studies at the Los Angeles and Woodland Hills Campus
- Approved by the Association of Commercial Diving Educators (ACDE) for the offering of the Professional Certificate in Marine Technology
- Approved by the California Association of Alcoholism and Drug Abuse Counselors (CCADAC) for the offering of the Associate of Science in Alcohol and Drug Abuse Counseling
- Accredited by the Council on Education in Public Health (CEPH) for the offering of the Master of Public Health
- Accredited by the Council on Accreditation for Nurse Anesthesia Educational Programs (COA) for the offering of the Master of Science in Nurse Anesthesia
- Approved by the Nevada State Board of Education
- A member of the American Association of Colleges for Teacher Education (AACTE)
- Approved to train veterans under Title 38, U.S. Code (GI Bill®)
- Approved for student financial aid by the Department of Education
- A member of the Council of Colleges of Arts and Sciences (CCAS)
- Authorized under federal law to enroll non-immigrant alien students
- A member of the American Association of Intensive English Programs (AAIEP) through its American Language and Intercultural Studies program
- A participant in the Servicemembers Opportunity College network (SOC)
- Approved for Army, Air Force, Coast Guard, Marine Corps, Navy and U.S. government tuition assistance. Students in San Diego, Los Angeles, and Rancho Cordova who qualify may enroll in the Army or Air Force ROTC cross-enrollment programs.

The Division of Extended Learning is a member of the following organization:

- The International Association for Continuing Education and Training (IAC-ET) as an Authorized Provider of the Continuing Education Unit (CEU)

National University has received specialized accreditation for its business programs through the International Assembly for Collegiate Business Education (IACBE), located in Olathe, Kansas. The business programs in the following degrees are accredited by the IACBE:

- Master of Accountancy
- Master of Arts
  - » Human Resources Management
- Master of Business Administration
- Master of Public Administration
- Master of Science
  - » Organizational Leadership
  - » Management Information Systems
- Bachelor of Arts
  - » Management
- Bachelor of Business Administration
- Bachelor of Science
  - » Accountancy
  - » Financial Management

- » Hospitality and Casino Management
- » Organizational Leadership

### State Regulatory Information

In compliance with the USDOE State Authorization Regulation in Section 600.9 of the Oct 29, 2010, Program Integrity Rule, National University has/is made/ making a “good faith effort” in pursuing state authorization from all states and territories within the U.S. National University Authorized States: Alabama, Arkansas, California, Florida, Georgia, Kentucky, Minnesota, Nevada, Oregon, Texas, Wyoming and Washington.

#### Arkansas

Arkansas Higher Education Coordinating Board certification does not constitute an endorsement of any institution or program. Such certification merely indicates that certain criteria have been met as required under the rules and regulations implementing institutional and program certification as defined in Arkansas Code §6-61-301.

#### Minnesota

National University is registered as a Private Institution with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credit earned at institution may not transfer to all other institution.

HIS 233 and HIS 234 courses are not recognized as Humanities classes in Minnesota. Minnesota residents must be required to complete other Humanities classes to satisfy the Minnesota Degree Standards.

ILR 260 is not recognized as an English or Communication class in Minnesota. Minnesota residents must be required to complete other English or Communication class to satisfy the Minnesota Degree Standards.

#### Texas

National University has permission to operate in the state of Texas, and has been regionally accredited by the Western Association of Schools and Colleges since 1977. The Texas State Board of Accountancy’s new regulations preclude National University graduates from being qualified applicants for the CPA exam in Texas.

#### Washington

National University is authorized by the Washington Student Achievement Council (WSAC) and meets the requirements and minimum educational standards established for degree-granting institutions under the Degree-Granting Institutions Act. This authorization is subject to periodic review and authorizes National University to advertise and recruit for specific degree programs. The WSAC may be contacted for a list of currently authorized programs. Authorization by the WSAC does not carry with it an endorsement by the board of the institution or its programs. Any person desiring information about the requirements of the act or the applicability of those requirements to the institution may contact the WSAC at P.O. Box 43430 Olympia, WA 98504-3430.

### Granting of Credit

The academic year is divided into four 12-week quarters, each comprised of three one-month classes. (Refer to the Financial Aid section for a definition of the academic year used for financial aid calculations.) Students may enroll in classes in most programs any month of the year. National University awards credit in quarter units. Under the current policy, 4.5 units of credit are awarded for most courses. A unit of credit is based upon the hours of classroom instruction for each course and the hours that a typical student reasonably should expect to devote preparing for each hour of class. An undergraduate course requires 45 hours of classroom instruction and an undergraduate student generally is expected to devote two hours or more in outside preparation for each hour of class. A graduate course requires 40 hours of classroom instruction and a graduate student generally is expected to devote three hours or more in outside preparation for each hour of class. Undergraduate courses typically are scheduled for a one-month period, generally for 4.5 hours on two weekdays and 4.5 hours on two Saturdays during the month. Graduate courses typically are scheduled for a one-month period, generally 4.5 hours two weekday nights with a 4.5-hour session on one Saturday.

### Faculty

There are three tiers of faculty at National University—full-time and part-time, which includes associate and adjunct.

**FULL-TIME FACULTY** are members of the University whose primary responsibilities include teaching, scholarship, service, intellectual coordination with the part-time faculty, professional development, student advising and participation in the University’s governance.

**ASSOCIATE FACULTY** are teachers who make a half-time commitment to the University faculty over the course of the year. They are contracted to teach a designated number of courses per year, advise students on course, program, or career-related issues, participate in departmental, school and University activities and engage in scholarship relevant to their teaching.

**ADJUNCT FACULTY** are teachers whose principal professional commitments are elsewhere in their fields, but who are contracted to teach a designated number of courses per year, advise students on course-related topics, and maintain currency in their professional and disciplinary fields. Adjunct faculty serve initially as adjunct and may be promoted over time to Core Adjunct and Certified Core Adjunct.

All faculty hold advanced degrees in their areas of expertise and are respected professionals with many years of career experience. When hired, they receive an orientation to the University as well as training in the various learning modalities used at National University. Ongoing professional development occurs throughout the academic year.

### Familiarity with University Regulations

When signing an enrollment agreement, students acknowledge receipt of the General Catalog and agree to abide by the policies, rules, and regulations of the University. When students enrolling through the Internet checkmark the box on the online agreement constituting a virtual signature, they acknowledge that they are bound by the policies, rules, and regulations of the University contained in this catalog. This publication includes academic standards and the general requirements for graduation. Ignorance of or lack of familiarity with this information does not serve as an excuse for noncompliance or infractions. The University provides assistance in the form of academic advising, but students are responsible for meeting the published requirements of their respective programs.

### National University Community Research Institute (NUCRI)

The National University Community Research Institute (NUCRI) is an outgrowth of the 1997 President’s Commission on Community. A major outcome of the commission was to envision the University’s collaborative future as a full community partner. Community became an institutional core value and NUCRI developed into a university-wide, point of contact for making the university-community connection across disciplines and facilitating community research and technology applications for smart and creative community building.

The academically-oriented and practitioner-based Institute focuses on community research and technology, knowledge sharing, professional development, educational outreach and service. Through its University Consultant Corps of faculty, students, and community practitioners NUCRI engages in collaborative research and innovative technology transfer initiatives with strategic alliances to pursue its mission. The overarching goal is to enhance community capacity building and involvement for sustainable community development.

### General Fees

Fees are non-refundable. All records and services are withheld from students who have any outstanding financial obligations to the University or have defaulted on a Title IV loan at the University. Effective May 1, 2011 National University began reporting student account defaults to credit reporting agencies.

Application Fee . . . . .	\$60
<i>For students entering any degree program. This fee is charged to all but international students.</i>	
Non-Degree Application Fee . . . . .	\$60
<i>For students entering any non-degree program.</i>	
Application Fee for Continuing Education Unit Certificates . . . . .	\$25
International Student Application Fee . . . . .	\$65
<i>See also International Student Prepayment and Refund policy.</i>	
International Student Activity Fee . . . . .	\$50
<i>See also International Student Prepayment and Refund policy.</i>	
Re-admission Fee . . . . .	\$60
<i>For students who have been inactive for more than 12 months or who are entering another degree program.</i>	



Graduation Processing Fee . . . . .	\$100
<i>Charged to all students before graduation.</i>	
Transcript Fee . . . . .	\$5
<i>Per copy fee for each transcript (additional \$2 surcharge applicable to e-transcripts)</i>	
Returned Check Charge . . . . .	\$20
Reinstatement Fee . . . . .	\$100
<i>Charged only to those students with unpaid delinquent financial obligations.</i>	
Late Payment Fee . . . . .	\$25
<i>Charged when tuition payment has not been received by the first night of class.</i>	
Credit by Examination Fee . . . . .	\$100
<i>Per examination, per course.</i>	
Challenge Examinations Fee. . . . .	\$50
<i>Per examination charge, course waiver, no credit.</i>	

**Nursing Fees**

Basic BSN Program Orientation Fee . . . . .	\$2,450
Nursing Clinical Laboratory (NSG) Fee. . . . .	\$675 per course
E-Portfolio. . . . .	\$35 per year
E-Portfolio Renewal Fee. . . . .	\$30 per year

**MFA Digital Cinema and Professional Screenwriting Fees:**

MDC 688 Course Fee . . . . .	\$1,200
MDC 689 Course Fee . . . . .	\$550
SCR 675 Course Fee. . . . .	\$750
SCR 670P Course Fee. . . . .	\$250
SCR 690 Course Fee. . . . .	\$350
SCR 691 Course Fee. . . . .	\$350

**MS Anesthesia Fees:**

Application Fee . . . . .	\$60
<i>(In addition to University Application fee)</i>	
Unit Fee. . . . .	\$329.70
<i>(In addition to tuition fee)</i>	
Master of Arts in Counseling Psychology MFT Program Fees . . . . .	\$350
Teaching Performance Assessment Fees. . . . .	\$305
<i>Total cost for initial submission of all 4 TPA Tasks. See Credentials section under School of Education for further information on TPA tasks and Task Stream.</i>	

**National University Golf Academy**

**Player's Lab Fee**

The labs are part of the practical portion of the National University Golf Academy curriculum that incorporate and build upon prior learning in the Player's Lab series. Students participate in individual and/or group activities that can include instruction, training, play and practice activities.

ORI 37 Player's Lab IA . . . . .	\$160
<i>(per lab session)</i>	
ORI 31/ ORI 34 Player's Lab I . . . . .	\$100
ORI 32/ ORI 35 Player's Lab II . . . . .	\$225
ORI 19/ ORI 21 Player's Lab III . . . . .	\$350

Students enrolled in a National University Golf Academy program, Certificate, or approved Professional Golf Management elective, who are in good academic standing, are eligible to enroll in the Player's Labs I and IA, provided they are enrolled in a course, and Player's Lab II and III, provided they are enrolled in or have completed a course in the past 45 days.

**Tuition**

Tuition rates in effect as of September 3, 2013.

Undergraduate . . . . .	\$336 per quarter unit
Graduate . . . . .	\$384 per quarter unit

Doctorate . . . . . \$518 per quarter unit

COURSE LEVEL	4.5	3	2.25	1.5
	quarter units	quarter units	quarter units	quarter units
100,200,300,400,	\$1,512	\$1,008	\$756	\$504
500 (Undergrad)*	\$1,512	\$1,008	\$756	\$504
500 (Grad)*	\$1,728	\$1,152	\$864	\$576
600 & 700	\$1,728	\$1,152	\$864	\$576

\* Tuition for 500-level courses is charged according to students' degree programs.

Tuition is due and payable prior to the first class session of each course. Tuition not fully paid when due is subject to a late fee.

If a tuition payment check is returned due to insufficient funds, the University reserves the right to drop all current and future classes for that student. Students will be notified of this action and assessed a return check charge. The University may require students who have written multiple insufficient-fund checks to make all future payments by cashier's check, cash, or money order.

The University reserves the right to modify tuition at any time. Students whose employers have entered into a contractual agreement with the University may be eligible for reduced tuition.

**Military Community**

National University has eight convenient locations for the military community in San Diego County, and one in San Bernardino County. Centers are located at Naval Base San Diego, Anti-Submarine Warfare Training Center San Diego, Naval Air Station North Island, Marine Corps Recruit Depot San Diego, Marine Corps Air Station Miramar, Marine Corps Base Camp Pendleton, Naval Base Coronado, Naval Medical Center San Diego, and Marine Corps Air Ground Combat Center Twentynine Palms. National University also has admissions offices at Naval Hospital and Naval Submarine Base in San Diego, at Naval Base Bremerton, Washington and at the online information center in Quantico, Virginia.

National University offers reduced tuition for classes on base for qualified students, including: active duty members, their spouses and dependents, Department of Defense employees, military retirees and selective military reserve members. The University accepts DANTES tests offered through the military voluntary education program. National University is a member of the Servicemembers Opportunity Colleges (SOC) network, and participates in the Department of Defense's Third Party Review.

**Enrollment Agreement**

Students must sign an enrollment agreement before beginning classes at National University. The agreement includes topics pertaining to tuition and fees, billing, attendance, financial assistance, payment options and other matters of enrollment. Contact an admissions advisor for further information.

**Payments and Release of Records**

The University grants degrees and releases transcripts only after a student satisfies all financial obligations to the University. All records and services are withheld from students who have any outstanding financial obligations to the University or who have defaulted on a federal Perkins or NU-Help loan.

**Safety Program**

National University is concerned about the safety of its students and employees and has instituted a University Safety Policy and an Injury and Illness Prevention Program. Students play an important role in ensuring that their classroom facilities are safe. Students should:

- Review fire, medical, and earthquake emergency procedures posted in each classroom and be prepared to respond accordingly
- Review emergency egress routes and know the location of fire extinguishers (posted in each classroom)
- Watch for any hazardous conditions and report them immediately to the center assistant

## **Campus Security**

In general, National University's campuses are situated in highly populated urban areas. As such, they are subject to the same security problems as other businesses in the area. To help prevent crime, students should:

- Lock their cars
- Never leave valuable items in their parked cars
- Return to their cars in the company of other students when they leave the classroom at night. If no other students are going in that direction, students should request that a security guard or the center assistant accompany them
- Take items of value with them when they leave a classroom, unless they are certain that the classroom will be locked or monitored while they are away
- Report anything that appears to be out of the ordinary (e.g., a stranger lingering in the area) immediately to the center assistant

Safety procedures are posted at campuses and labs.

Students should never single-handedly try to stop a criminal in the act. Students should call for security or report the act by calling 911. When the emergency operator answers, students should give the operator their direct dial number, name, and specific location, including building and room number. (For students calling from La Mesa, South Bay, Marine Corps Recruit Depot, or any of the San Diego Naval installations, the location displayed on the 911 emergency operator's console will be that of the central telephone switch unit in Mission Valley, rather than that of the caller.) If time permits, students should also notify the University operator by dialing 0, since it is possible the 911 emergency operator may try to contact them through the main University number.

If students are involved in or aware of any event that requires the attention of University administration, they should complete a "Report of Student/Visitor Incident or Injury," available through the center assistant.

Pursuant to the Campus Security Act of 1990, the University publishes the Annual Report on Campus Security that discloses information about campus safety policies, procedures, and crime statistics. This report is available on the University's website, and printed copies are available upon request to all current students and prospective students at each National University campus.

## **Conference Services**

National University offers conveniently located facilities available for conference needs at very competitive rates. The University's conference style classrooms are perfect for hosting seminars, conferences, off-site meetings, or training sessions in an academic atmosphere that is comfortable, focused and conducive to interaction and learning.

## **Professional Development and Seminars**

National University's Division of Extended Learning is an authorized provider of the Continuing Education Unit (CEU); benchmarked to International Association for Continuing Education and Training (IACET) standards. The IACET CEU is considered the hallmark of quality in continuing education and training. IACET CEUs enhance the credibility of professional development and training in disciplines, such as: education, engineering, accounting, legal, medical, Real Estate and others. National University provides many administrative services to support professional development events and conferences. These may be held at National University's campuses throughout California, client locations, online, or by real-time web seminars. Extended Learning documents CEUs with a certificate and/or an official National University transcript. For more information regarding professional excellence with NU CEUs, please call (858) 642-8600.



MARY ALICE GUNTER  
THOMAS H. ESTES  
JAN SCHWAB

## **STUDENT SUPPORT SERVICES**

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- 24 Mathematics Tutoring**
- 24 National University Library System (NULS)**
- 24 Library Resources and Services**
- 24 Online Information Centers**
- 24 Online Courses**
- 24 Writing Across the Curriculum**
- 25 Writing Center**
- 25 Bookstore**
- 25 English Language Programs**
- 25 Transfer of Credits to Other Institutions**
- 25 Internet and Wireless Student Access**
- 25 SOAR Student Portal**
- 25 Student Concierge Services**
- 25 Students with Disabilities**
- 26 The Student Relations Coordinator (SRC)**
- 26 Career Center**
- 27 Testing Services**
- 27 Development and Alumni Relations**
- 27 California Community College Transfer Support**
- 27 CSU General Education Certifications and IGETC**
- 27 California Community College Scholarships**
- 28 International Students Support Services**
- 28 Language Proficiency**



# STUDENT SUPPORT SERVICES

National University provides a number of services to help students attain their educational goals. In addition to the Office of Academic Affairs, several offices of the University join together to provide services for the academic, economic, and personal needs of enrolled students. Student services include student advising and scheduling, records evaluation, veteran's assistance, financial aid, and other services. Additionally, the library, alumni association, extended learning office, and student accounts office are available to help students.

## MATHEMATICS TUTORING

National University students have the opportunity to work one-on-one with math tutors in mathematics, sciences, engineering and business in the Math Center.

Mathematics tutors are available to work with students online or onsite in San Diego. Visit our website (<http://www.nu.edu/OurPrograms/StudentServices/math-center.html>) for more information. To access our online scheduler, visit (<http://numath.mywconline.com>).

## NATIONAL UNIVERSITY LIBRARY SYSTEM

The Library offers a wide range of resources and services designed to meet the needs of all students. All print collections and library support services are located in the Library at the Spectrum Center in San Diego, CA. Free document delivery of books and articles is available. Library services include tutorials, research guides, and consultations. For more information, see the Research Guide: Library Services (<http://nu.libguides.com/services>) available from the Library website.

Online resources and services are available 24/7 at <http://library.nu.edu>. Access to online resources may require authentication: Log in using your 9-digit NU ID number and 6-digit birth date (mmddyy).

Location:

9393 Lightwave Avenue, San Diego, CA 92123

Hours (Pacific Time, excluding holidays and breaks):

Monday – Thursday	10 a.m. – 10 p.m.
Friday	10 a.m. – 6 p.m.
Saturday	8:30 a.m. – 5 p.m.
Sunday	10 a.m. – 5 p.m.

Contact Information: E-mail: [refdesk@nu.edu](mailto:refdesk@nu.edu) | Text: (858) 367-0904 | In San Diego: (858) 541-7900 | Toll Free: (866) 682-2237 x7900 | Ask Us (Chat & FAQ Service): <http://nu.libanswers.com/>

## ONLINE INFORMATION CENTERS

National University's Online Information Centers (OIC) enable prospective students to test-drive online programs, find answers to questions about studying at National University, apply, enroll, pay fees, update study schedules, and receive other services normally available on campus. The OICs have been designed for the growing number of online students who enjoy the flexibility of online learning, but also prefer a live student advisory service a reasonable distance from home.

## ONLINE COURSES

National University offers many programs and courses in an online format using the eCollege platform. Students may complete an online course orientation and also receive instruction on using Class Live Pro, the synchronous chat technology used to communicate with the faculty and other students in the class. In an online course, students will be able to view the syllabus and assignments, participate in threaded discussions, ask questions of the instructor and view their exam and assignment grades. Course materials and digital learning modules will be presented. Faculty may use the online chat feature for lectures and question/answer sessions. Students are provided access to online courses beginning on the Sunday before the term begins through three weeks after the term ends.

Onsite classes may make use of an e-companion which is an online resource where students can view course materials and assignments.

As of May 2013, the following are the minimum system requirements that are needed to successfully access your courses on the eCollege platform.

## TECHNICAL REQUIREMENTS

### Windows Users

- Windows 7, XP or Vista
- Pentium III 1 GHz processor
- 256 MB RAM
- High-speed Internet connection (e.g.: DSL, cable, etc.)
- Note: Dial-up Internet connection is supported
- Sound card and speakers
- Headset with microphone using a USB connection
- Browser:
  - » eCollege supports Microsoft Internet Explorer 9 and the most recent releases of Mozilla Firefox and Google Chrome.
  - » Those using Windows XP or Vista are encouraged to use Mozilla Firefox or Google Chrome. Those using Windows 7 are encouraged to upgrade to Internet Explorer 9.

### Mac OS Users

- Mac OS X
- G4, G5 or Intel Processor
- 256 MB RAM
- High-speed Internet connection (e.g.: DSL, cable, etc.)
- Note: Dial-up Internet connection is supported
- Sound card and speakers
- Headset with microphone using a USB connection
- Browser:
  - » eCollege supports the most recent releases of Apple Safari, Mozilla Firefox and Google Chrome.

### Notes:

- Browsers listed have been validated with the course platform. A student risks running into problems with the course software if they choose to use a non-supported browser.
- eCollege maintains a Technical Requirements web page that is updated frequently with Windows and Macintosh hardware and software requirements, including both recommended and supported web browser software. For further information, please check <http://myonlinelogin.com/index.learn?action=technical>.

## WRITING ACROSS THE CURRICULUM

Writing Across the Curriculum is a University-wide program designed to enhance the development of students' writing and critical thinking skills throughout their studies at National University.

Strong writing skills are in demand in nearly every profession and give students a competitive edge in job searches and career advancement. The University is dedicated to providing students and faculty with a full range of conceptual material, instructional resources, and support systems.

The goals of the Writing Across the Curriculum program are:

- To make writing and the complementary skills of reading, critical thinking, and research a regular part of coursework at National University
- To facilitate the acquisition of writing and communication skills that are vital to personal and professional success
- To distinguish graduates of National University in the eyes of employers and the general public through their professional and technical excellence in language and communication skills

Writing Across the Curriculum promotes writing and reading enhancement throughout all schools of study through a variety of publications and activities, including:

- Workshops for faculty
- Writing Center

- Professional forums for self-expression, such as The Gnu, a student literary journal, and WHACK, a faculty newsletter

## WRITING CENTER

National University students have the opportunity to work one-on-one with writing consultants to develop their writing and critical thinking skills via synchronous appointments with the Online Writing Center. The Writing Center welcomes the opportunity to help students at all levels to improve—from outlining a first year composition essay, to drafting a graduate level research paper. The Writing Center staff, comprised of experienced writing instructors, are eager to work with students to help them develop strategies for improving their writing. For more information about writing center services and how to make an appointment, go to [www.nu.edu/OurPrograms/StudentServices/WritingCenter.html](http://www.nu.edu/OurPrograms/StudentServices/WritingCenter.html)

## BOOKSTORE

The University contracts with an external vendor for the sale and buyback of textbooks. Textbooks are available for purchase two weeks prior to the first night of class. The cost of books varies with each course. Students must purchase all books and supplies necessary for the course in which they are enrolled. Textbooks may be purchased online, by phone, or by fax. Online access to the vendor is provided through the student portal on the University's website.

## ENGLISH LANGUAGE PROGRAMS

English Language Programs (ELP) offer English language instruction and a variety of cultural experiences to international students, visitors, and professionals. Programs include: University Preparation, intensive courses designed to prepare students for the academic environment; and English Communication, courses designed to help students improve their English communication skills while learning more about American culture. TOEFL is waived for ELP students who complete level 1650 of the University Preparation Program.

English Language Programs also offer customized programs for executives and professionals, Business English courses, communication courses, Pre-MBA, English Camp, Accent Reduction workshops, and TOEFL preparation workshops.

## TRANSFER OF CREDITS TO OTHER INSTITUTIONS

Each institution has policies that govern the acceptance of credit from other institutions. Accreditation by one of six regionally accrediting associations is the normal and primary criterion for making such determinations. National University is accredited by the Western Association of Schools and Colleges (WASC). Generally, credits and degrees from National University have been accepted by transfer institutions. Students who are anticipating a transfer, or advanced studies, are encouraged to contact such institutions directly to determine how National University credits will relate to the requirements of those institutions.

## INTERNET AND WIRELESS STUDENT ACCESS

All National University students can access the Internet from any of the computers found in the University's computer classrooms and open computer labs.

National University has wireless Internet access at most campuses. At the applicable campuses, wireless access is available within most student areas, such as classrooms and lounges. The student should contact the site Center Assistant to determine if a site has wireless access or to get logon information to access the wireless network.

National University's programs and courses make frequent use of Internet resources, allowing students to learn the skills required to gain information through such electronic media.

## SOAR STUDENT PORTAL

National University offers all students online real-time access to their academic, financial and personal records and other pertinent information. Through the SOAR student portal, accessible from the University's home page, students can access their online classes, grades, Academic Advisement Report (AAR), textbook requirements, online bookstore, financial aid checklists, and student accounts, as well as add courses to their schedules.

## STUDENT CONCIERGE SERVICES

National University's Student Concierge Services is students' one-stop center for student service. Student Services Advocates are trained in a range of areas such

as Financial Aid, Credentials, Admissions, and Graduations. Student Concierge Services is dedicated to providing innovative and individualized solutions for students. Student Concierge Services recognizes that National University students may not be available to contact us during normal business hours. That is why Student Concierge Services is available Monday through Friday from 7 a.m. to midnight (Pacific) at (866) 628-8988 or [scs@nu.edu](mailto:scs@nu.edu).

## STUDENTS WITH DISABILITIES

It is the policy of National University, in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, as amended, and other federal and state disability nondiscrimination laws, that no student shall, on the basis of his/her disability, be excluded from participation in, be denied the benefits of, or otherwise be subject to discrimination under any University program or activity.

National University is committed to providing qualified students with disabilities an equal opportunity to access the benefits, rights, and privileges of University services, programs, and activities, in the most integrated setting appropriate to the students' needs. National University is committed to providing reasonable accommodations to qualified students with disabilities in order to ensure that all students have an equal opportunity to benefit from and have access to programs and services. "Reasonable accommodation" means a reasonable modification or adjustment that enables qualified students with disabilities to have equal access to programs and services. Under the law, "reasonable accommodation" may include, but is not limited to, removal of barriers of access of the physical facilities or programs, "academic adjustments" such as modification of academic requirements, policies and procedures, and "auxiliary aids" such as taped texts, interpreters, readers and other similar services and actions.

The Office of Special Services provides disability consultation and coordination of support services and accommodations for all qualified students with disabilities.

### Requesting Special Accommodations

Students with disabilities have the right to obtain reasonable accommodations. National University will make such modifications to its academic requirements that are necessary to ensure such requirements do not discriminate or have the effect of discriminating on the basis of disability against a qualified applicant or student with a disability. Modifications may include changes in the length of time permitted for the completion of the degree requirements, substitution of specific courses required for the completion of degree requirements, and adaptation of the manner in which specific courses are conducted. In course examinations or other procedures for evaluating students' academic achievement, the University shall provide methods for evaluating the achievement of students with disabilities that impair sensory, manual, or speaking skills as will best ensure that the results of the evaluation represent the student's achievement in the course, rather than reflecting the students' impaired sensory, manual, or speaking skills, except where such skills are the factors that the test purports to measure.

The University will take necessary steps to ensure that no qualified student with a disability is denied the benefits of, excluded from participation in, or otherwise subjected to discrimination because of the absence of educational auxiliary aids. Auxiliary aids may include taped texts, interpreters or other effective methods of making orally delivered materials available to students with hearing impairments, readers in libraries for students with visual impairments, classroom equipment adapted for use by students with manual impairments, and other similar services and actions. Accommodations cannot be provided which would fundamentally alter the nature of the program, cause undue hardship on the University, or jeopardize the health or safety of others. Reasonable accommodations must specifically address the fundamental limitations of the student's specific disability.

### Registration

Students seeking special accommodations due to a disability should contact the Office of Special Services in order to complete the required application form. The Office of Special Services will discuss potential accommodations and required documentation with the student. Students are encouraged to make accommodation requests as far in advance as possible. Accommodations are not retroactive. Accommodations for students with disabilities do not take effect until the student has self-identified themselves to the Office of Special Services, submitted an application, provided appropriate documentation, and received a letter identifying what accommodations have been approved.

## Documentation

Disability documentation must be signed by a licensed physician, psychologist, audiologist, speech pathologist, physical therapist, occupational therapist, or other professional health care provider. Documentation should indicate the student's current level of functioning with respect to the major life activity impacted by the disability. The diagnostic report should include, where appropriate, recommendations for specific accommodations and an explanation of the reason the accommodation is recommended. In some situations, the University may request additional documentation. The cost of obtaining professional documentation of a disability is the responsibility of the student.

## Accommodation Determination

The Committee for Students with Disabilities will consider all materials, consult with relevant faculty where necessary, and afford qualifying individuals with appropriate accommodation. The student may provide additional input from an appropriate professional at the student's expense if the student deems such input to be necessary. A decision will be rendered within seven business days from the date of the reasonable accommodation request.

Once a student is approved to receive special accommodation(s), the Accessibility Services Coordinator will provide an accommodation letter to the student. It is the student's responsibility to present this letter to his/her instructor on the first night of class. A student may or may not elect to use the accommodation.

A letter is also sent to the instructor telling him/her that a student enrolled in his/her class may approach them with an approved accommodation(s). The letter will not identify the student. If a student does not approach the faculty member, that student will be deemed to have elected to not request the accommodation(s). Again, a student may elect not to use the accommodation. This happens regularly as students often decide if they think they will need a given accommodation after reviewing the syllabus.

If there is a physical accommodation required (like a separate testing room for an onsite class or a special seat) a letter will also be sent to the campus. The student is responsible for arranging this with the campus. The Office of Special Services will provide a proctor (when approved as an accommodation) for an exam.

Under no circumstances should a faculty member allow a student any type of accommodations without a letter from the Accessibility Services Coordinator. Any information that a student gives to the faculty member is to be used only for arranging accommodations for the course of study and may not be disclosed.

Instructors are not authorized to unilaterally deny a student an approved accommodation.

## Denial or Insufficiency of Accommodation

If a student is denied accommodation or believes that the accommodation afforded is insufficient, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipt of the appeal or prior to the start date of the next course, depending on which occurs first. The decision of the Vice President is final.

Students have the right to appeal any decision by the University denying a requested reasonable accommodation to outside enforcement agencies, such as the Office for Civil Rights of the United States Department of Education or the California Department of Fair Employment and Housing. See "Appellate Procedures for Civil Rights Issues" in the Policies and Procedures section of the General Catalog. Any complaint must be filed with the Office for Civil Rights within 180 calendar days of the University's final decision, or with the California Department of Fair Employment and Housing within one year of the University's final decision. Students need not exhaust the University's appeal procedures in order to file an appeal with an outside agency.

## Problems in Receiving Approved Accommodations

In the event that a student believes he/she is not receiving an accommodation that is specified in their accommodation letter, the student should immediately contact the Accessibility Services Coordinator, who will take necessary action to see that the approved accommodation is furnished.

## Confidentiality

Information concerning a student's disability and any accommodations provided is confidential, and will be disclosed only as necessary to establish a student's

eligibility for accommodations and to provide those accommodations. Information will be shared with the instructor only to the extent necessary to provide a reasonable accommodation.

## Contact Person for Accommodation Matters

Contact the Accessibility Services Coordinator at (858) 642-8058 or e-mail [specialservices@nu.edu](mailto:specialservices@nu.edu) if you have any questions or if you require further assistance.

Applications for accommodations for a disability may be sent to:

The Office of Special Services  
National University  
11255 North Torrey Pines Road  
La Jolla, CA 92037-1011  
Phone: (858) 642-8058  
The California Relay Operator can be reached at 711.

## THE STUDENT RELATIONS COORDINATOR

The Office of Student Affairs serves the National University community by advocating for accepted norms of fairness, decency and ethical behavior, adherence to the letter and spirit of National University policies, and prevention of delay, complication, and unresponsiveness in the application of University rules and processes. The Student Relations Coordinator (SRC) works to fulfill the mission of the University by serving as an informal and impartial resource for the National University community and by acting in the following ways:

- Serving as an advisor who listens and identifies options to address the student's problem;
- Encouraging and assisting people to resolve their own conflicts. When requested, the SRC will intervene and work with all parties to resolve a dispute;
- Identifying personnel appropriate to handle a given problem, explain National University policies, connect people with University resources, and explain how the University system works;
- Assisting when normal channels have failed to resolve students' problems or when there is not a well-defined channel to address the concern;
- Providing a confidential way to raise sensitive or very private concerns; and
- Providing feedback to the President, Board of Trustees, deans, and other University officers about policies, practices, and structures that regularly produce conflicts, problems, and complaints.

In deciding whether to initiate contact with the SRC, it is best to view this step as a last resort to be taken only when other approaches have failed. For many problems, a normal procedure or route of appeal can be found in the General Catalog. Academic advisors, student concierge services, department chairpersons, deans, and directors are all, by virtue of their office, experts at handling specific types of problems and should normally be consulted first. The SRC does not take sides, but considers the rights and interests of all parties to a dispute with the aim of achieving a fair outcome. The SRC does not make, change, or set aside policies or decisions, but advocates for fairness. The SRC will not identify students or reveal their confidences without permission except when required by law. Information provided by the student to the SRC may not be used in grievance or other formal proceedings. For help identifying alternative courses of action please contact the Student Relations Coordinator:

Student Relations Coordinator, National University  
11255 North Torrey Pines Road, La Jolla, CA 92037-1011  
Phone: (858) 642-8035, [src@nu.edu](mailto:src@nu.edu)

## CAREER CENTER

The Career Center of National University is committed to providing professional career and employment related services to National University's current students and alumni. Regardless of the geographical location of students, the Career Center provides online assistance in the following areas: resume review and development, job search assistance, interviewing and negotiating techniques, career management assistance and career exploration through online assessments for those seeking additional support. The Center also offers an online portal that enables students and alumni to search for jobs and post resumes. The portal contains additional career-related resources as well.

For more information about the Career Center and its services, please call (858) 541-7950 or 1-866-NU-ACCESS, ext. 7950 or e-mail: [careerservices@nu.edu](mailto:careerservices@nu.edu).

## TESTING SERVICES

Testing services include ACCUPLACER Testing, CLEP, and Credit by Exam/Challenge Exam. For more information about National University's testing services, please call (858) 541-7951 or 1-866-NU-ACCESS, ext. 7951 or via e-mail: [testingservices@nu.edu](mailto:testingservices@nu.edu).

## DEVELOPMENT AND ALUMNI RELATIONS

### National University Alumni Relations

The Office of Development and Alumni Relations seeks to identify and promote the successes of our graduates. It also provides alumni with lifelong connections, resources, career services and other benefits, while fostering and facilitating opportunities for personal and professional growth and continued participation within the University community. National University strives to grow and broaden the array of programs and services available to alumni through the Office of Development and Alumni Relations. It maintains open communication with the alumni community through its website, e-mail, and mail; through its alumni e-newsletter Newswire, which is circulated regularly to alumni; and through an annual alumni magazine Vision. To subscribe, contact (866) 682-2237, ext. 8111 or visit [www.nu.edu/Community/AlumniandFriends.html](http://www.nu.edu/Community/AlumniandFriends.html).

The alumni relations website provides up-to-date information on initiatives being offered. Alumni may also access National University's free Online Alumni Community, a network created exclusively for National University alumni, accessible via the alumni website or at [www.alumni.nu.edu](http://www.alumni.nu.edu). This community features an alumni directory, links to social media, access to Vision magazine and Newswire, consumer services and discounts, and more. Alumni are also encouraged to visit the online National University Store, where they can purchase University apparel and show their pride as alumni. To purchase alumni National University merchandise, please visit [www.nationaluniversitystore.com](http://www.nationaluniversitystore.com).

One of the most popular benefits available to Alumni is membership to the National University Online Library, which includes access to e-Books on EBSCOhost and the Academic Search Premier Alumni Edition database. To purchase a one-year membership, please visit <http://www.nu.edu/Community/AlumniandFriends/AlumniServices/OnlineLibrary.html>.

### Development

As a nonprofit institution, the University relies to a large extent on contributions and partnerships to provide nontraditional learners with an affordable, accessible, and relevant education. The development office is responsible for securing annual gifts, corporate and foundation relations, planned giving, and major donor relations.

Charitable gifts help to fund scholarships and endowments that make a college degree affordable to underserved students. Partnerships with corporations and foundations launch new programs that are relevant and leading-edge. The development office fosters interaction with the University among corporations and other organizations to serve mutually beneficial community needs. For further information, please visit [www.nu.edu/Community/Development.html](http://www.nu.edu/Community/Development.html) or contact the Office of Development and Alumni Relations at (858) 642-8111 or e-mail [development@nu.edu](mailto:development@nu.edu).

## CALIFORNIA COMMUNITY COLLEGE TRANSFER STUDENT SUPPORT SERVICES

### Articulation

National University is one of the top choices in California for community college students interested in transferring to a private school. New courses begin each month, so you can enroll at any time.

National University has articulated coursework from all California Community Colleges for a seamless transfer experience. The articulation agreements can be found at: <http://www.nu.edu/Admissions/Undergraduate/TransferInformation.cfm>

Students can obtain transfer information from the Transfer Center at the college or from National University's Community Education Specialists that visit each community college.

COMMUNITY EDUCATION SPECIALISTS: Northern California, Southern California (excluding San Diego and Imperial Counties), San Diego and Imperial Counties. You may ask your Transfer Center for the e-contact information or call 1-866-NU-ACCESS for additional information.

## CSU GENERAL EDUCATION CERTIFICATIONS AND IGETC

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certification are typically required to take one to three upper-division general education National University courses in order to fulfill the unit requirements. Students must provide an official transcript with the certification included or a separate certification form from the community college attended.

## CALIFORNIA COMMUNITY COLLEGE SCHOLARSHIPS

### Transfer to Triumph Scholarship

Students who are transferring from a California Community College may be eligible for the Transfer to Triumph program. To be eligible a student must meet the following requirements:

- Be in good academic standing at the time of application to National University.
- Have completed at least 30 semester units at a California Community College or combination of California Community Colleges.
- Their last semester of attendance was at a California Community College and is within 24 months of their application date to National University.

If students believe that they qualify for this scholarship, they must initiate it through their admissions advisor who will make a preliminary eligibility determination. The admissions advisor will enter the preliminary eligibility into the system. Once the student's entire file is complete, the Registrar's Office will evaluate the student and determine official eligibility for the scholarship. Students will be sent an e-mail indicating whether they have been approved or denied for the scholarship based on official eligibility determination. If a student is approved for the scholarship, the admission fee will be waived by the Student Accounts Office. The student must notify the scholarship coordinator once they are within three courses of completion of their program:

National University,  
Attn: Scholarships  
11255 North Torrey Pines Road,  
La Jolla, CA 92037, (858) 642-8185

The scholarship coordinator will verify this information and issue the award. Tuition for the final two courses will be billed and waived, and the student will receive an adjusted accounting. This award applies only to courses governed by the University's standard tuition rate.

### Promising Scholar Award

This scholarship award is intended for students who are enrolling into National University directly from a California Community College.

To be eligible for this award, students must meet the following qualifications:

- Be in good academic standing at the Community College at the time of application to National University.
- The last semester of college attendance was at a California community college and is within 12 months of application to National University.

If students believe that they qualify for this scholarship, they can initiate it by requesting an application through the National University Community Education Specialist, Transfer Center at their school, or through a National University Admissions Advisor.

Students must complete the Promising Scholar Award application form, have this form signed by the Transfer Director of the community college to verify attendance at the community college within the last 12 months and submit the form along with an unofficial transcript, within 90 days of application date to National University.



If you will not be attending National University within the next six months, please do the following: Complete this form and retain a copy for yourself. Present this form to the National University Community Education Specialist or submit it to the National University Scholarships Coordinator. Upon enrollment to National University, contact the Scholarship Coordinator to activate the award application previously submitted. You must enroll within 12 months of submitting the original award application.

Students who apply for this Promising Scholar Award may also be eligible for the Transfer to Triumph Scholarship provided they meet the scholarship criteria stated above under Transfer to Triumph. You will automatically be considered for the Transfer to Triumph Scholarship upon submission of your Promising Scholar Award application.

## INTERNATIONAL STUDENTS SUPPORT SERVICES

### Admission

Applicants who require a Certificate of Eligibility for Nonimmigrant (F-1) Student Status, should contact the International Admissions Office-Spectrum Center (858) 541-7747 or isa@nu.edu. A non-refundable application fee of \$65 is required for all international students. Prospective international students must establish means of financial support, provide official transcripts of previous education in order to establish academic eligibility, and fulfill an English Language Proficiency requirement

Note: The University is required to maintain student records and to furnish the information to appropriate U.S. federal agencies upon request.

### English Language Proficiency for Online International Students

Online International students from a country where English is not the primary language will be required to fulfill the University's English Language Proficiency requirement prior to beginning their degree program. Further information on the English Language Proficiency requirement can be found in the University catalog on page xx.

### International Student Prepayment and Refund

International students admitted to National University with F-1 visas are required to pay their first three classes in advance upon arrival at the University. Tuition for the first class is non-refundable. Tuition refunds for the second and third months will be in accordance with National University refund policies.

### Transcript Evaluation

Official documents (e.g. transcripts, mark sheets, diplomas) are required for admission. Transcripts from international institutions of higher education may require a credit recommendation by a recognized evaluation service selected by National University. Applicants are responsible for any required evaluation fees. The final decision on awarding credit is made by National University, which carefully considers the evaluation service's recommendations. More information is available by e-mailing [foreignevaluations@nu.edu](mailto:foreignevaluations@nu.edu) or by contacting the Office of the Registrar in San Diego.

## LANGUAGE PROFICIENCY

Verification of English Language Proficiency helps to ensure that lack of facility in English will not hinder academic performance at National University.

Applicants from the following countries are not required to submit English Language Proficiency:

- Anguilla
- Antigua
- Australia
- Barbados
- Belize
- Bermuda
- British Virgin Islands
- Canada (*except for the Province of Quebec*)
- Cayman Islands
- Commonwealth of Caribbean Countries
- Dominica
- Grenada
- Guyana
- Jamaica
- Liberia
- Montserrat
- New Zealand
- Norway\*

- Republic of Ireland
- St. Kitts and Nevis
- St. Lucia
- St. Vincent
- The Bahamas
- Trinidad and Tobago
- Turks and Caicos Islands
- United Kingdom (*England, Scotland, Northern Ireland, Wales*)

### \*Specific grades required

Applicants who have obtained a California Teaching Credential from the CTC are exempt from the English Language Proficiency requirement.

The English Language Proficiency requirement can be fulfilled with one of the following:

- Providing proof of an associate, bachelor or master's degree from a regionally accredited United States college or university. \*Note: Students who have an Associate degree only MUST provide verification they have met the course equivalency for ENG100/101 with a grade of "C" or better in order to be eligible to waive the English Language Proficiency requirement.
- Providing proof of satisfactory completion of two full years (equivalent of 60 semester units or 90 quarter units) of transferable degree study in an English language school system at a recognized college or university located in a country where the dominant language is English.
- Provide proof of a minimum of 3 years of study at a United States high school culminating in the award of a high school diploma (graduation)
- Test of English as a Foreign Language (TOEFL) taken within 24 months before beginning coursework.
- International English Language Testing System (IELTS). Undergraduates must score 5.5 and graduates must score 6, with no band lower than a 5.
- DAAD all from Level A or all from Level B, or a combination of Level A and B only.

### English Language Test Requirements

	UNDERGRADUATE	GRADUATE
TOEFL Paper-based Test	525	550
TOEFL Computer-based Test	197	213
TOEFL Internet-based Test	70	79
IELTS	5.5	6
DAAD: All from Level A or all from Level B, or a combination of Level A and B only		

- Certificate of Proficiency in English (CPE) by University of Cambridge English for Speakers of Other Languages (ESOL). The minimum requirement is a grade of 'C'.
- Certificate of Advanced English (CAE) by University of Cambridge English for Speakers of other Languages (ESOL). The minimum requirement is a grade of 'C'.
- GCSE/IGCSE/GCE O' Level English, English Language, or English as a Second Language with minimum grade of 'B'.
- GCE A/AS/AICE Level English or English Language with minimum grade of 'C'
- International Baccalaureate English A1 or A2 Higher Level passed with minimum grade 4
- London Tests of English, Level 5 (Proficient) by Ed Excel International. The minimum requirement is "Pass".
- London Tests of English, Level 4 (Advanced) by Ed Excel International. The minimum requirement is 'Merit'.
- Completing an English Language Program (ELP) through a language school approved by National University. Students can meet the English Language Proficiency requirements by satisfactorily completing the highest level of study at the following language training institutions:

1. English Language Systems (ELS) in locations throughout the United States and abroad (in California, ELS centers are in San Diego, Orange County, Santa Monica, San Francisco, and Oakland). Students must complete level 109 for undergraduate studies and level 112 for graduate studies.
2. San Diego State University's American Language Institute (ALI) – level 106 or pre-MBA program.
3. San Jose State University's Studies in American Language – advanced level.
4. University of California at Davis's International Training and Education Center – advanced level.
5. Fresno International English Institute
6. EC English in locations throughout the United States and abroad. Students must complete the Advanced Level in the University Preparation Program.

Assistance with purchasing an acceptable health insurance plan is available upon arrival at National University during orientation. We estimate that one full year of health insurance will cost approximately \$700 – \$1,000 USD (single coverage). Students will need to show proof of medical insurance prior to the first day of class. If you do not show proof of medical insurance, you may not be able to enroll in classes.

Students may also satisfy the English Language Requirement by completing National University's English Language Program.

- International students who need English Proficiency take a placement exam which will allow for placement in the appropriate class level.
- English Language classes follow the University calendar and provide 96 hours of instruction per month.
- Levels range from beginning to advanced.
- At the end of each month, the students are evaluated for advancement.
- TOEFL and IELTS scores are not required for students who have completed National University's English Language University Preparation Program.
- At the end of each month, the students are evaluated for advancement.

For additional information regarding National University's English Language Program students should contact the English Language Program Office at 1-800-986-1036 or via e-mail at [elp@nu.edu](mailto:elp@nu.edu) or at the following address:

English Language Program  
National University  
9388 Lightwave Avenue, Suite 185A  
San Diego, CA 92123

### Orientation for International Students

Orientation is done prior to class start as a group and on an individual basis. The orientation session will cover National University's international programs, academic and immigration policies and procedures and cultural adjustments in the United States. Immigration regulations, auto and health insurance, banking, and other topics of interest are also covered.

### International Student Activity Fee

International students are required to pay a student activity fee of \$50 upon arrival at the University. Activity fees are non-refundable.

International students who enroll in a second degree program at the University will be required to pay an additional activity fee, upon the start of that program.

### International Student Responsibilities

Under the Student and Exchange Visitor Program (SEVP), that implement the Student and Exchange Visitor Information System (SEVIS), it is critical that all F-1 international students take responsibility for maintaining their legal status in the United States. If you have any questions regarding SEVIS rules and regulations, please contact the International Programs Office ([ipo@nu.edu](mailto:ipo@nu.edu)).

### Mandatory Medical Insurance

International students holding F-1 or J-1 non-immigrant visas at National University must provide proof of medical health insurance. Students have two options to show proof of medical insurance:

1. Purchase health insurance in their home country, or
2. Purchase health insurance in the United States, after arrival.

### Minimum Health Insurance Requirements:

1. Benefit – \$250,000 (for each injury or sickness)
2. Deductible – \$50 (for each injury or sickness)



## **FINANCIAL AID AND SCHOLARSHIPS**

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- 32 How to Apply**
- 33 Scholarship Programs**
- 34 Veterans Affairs (VA) Educational Benefits**
- 36 Military Tuition Assistance**
- 36 Financial Aid Calendar**
- 37 Financial Aid Program Charts**



# FINANCIAL AID AND SCHOLARSHIPS

## STUDENT FINANCIAL AID

There are many types of financial aid available to assist students who qualify. For specific information regarding financial aid programs and the University's Financial Aid policies and procedures, please visit the Financial Aid website at [www.nu.edu](http://www.nu.edu) or visit a financial aid advisor on-campus.

### How to Apply for Financial Aid

Planning ahead and applying for financial aid can help students obtain an education, which might otherwise be outside their financial reach.

To be considered for federal and state financial aid, students must complete the process of "need analysis." Need analysis is the method used to estimate the amount of money students and their families can reasonably contribute toward the cost of education. For the current school year, a student's awards will be determined using the previous year's income (taxed and untaxed) and current assets. Other factors that are considered include the student's marital status and the number of dependents.

The data to complete a "need analysis" is collected when a student completes the Free Application for Federal Student Aid (FAFSA). Information on completing the FAFSA is available in the Financial Aid Guide, available from a financial aid or admissions advisor at all campuses or online at [www.nu.edu](http://www.nu.edu). The Financial Aid Guide explains how to submit a FAFSA, which students must complete and sign with the federal processor for evaluation. To expedite the application process, students are encouraged to apply online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). National University computer labs are available for students' use.

**Important Note:** If a student (and parent, if required) has a personal identification number (PIN), the application can be signed electronically. Sign up for a PIN at: [www.pin.ed.gov](http://www.pin.ed.gov)

### Apply Faster—Sign your FAFSA with a Federal Student Aid PIN.

Your PIN allows you to electronically sign when you submit your FAFSA. If you are providing parent information, one parent must also sign your FAFSA. To sign electronically, your parent should also apply for a PIN.

You do not have to pay to get help or submit your FAFSA. Submit your FAFSA for free online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Federal Student Aid provides free help online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) or you can call 1-800-4-FED-AID. TTY users (hearing impaired) may call 1-800-730-8913.

### Student Eligibility Requirements

To receive financial aid, students must meet all of the federal eligibility requirements. Students must:

- have a high school diploma or a General Education Development (GED) certificate
- be a U.S. citizen or an eligible non-citizen
- be enrolled in an eligible program (programs less than 36 units and 32 weeks of instruction are not eligible) and have their records evaluated by the Office of the Registrar (excludes non-degree studies and continuing education programs, which do not qualify for federal or state aid)
- demonstrate financial need as determined by the federal methodology (excludes the federal unsubsidized Stafford Loan Program, Grad PLUS Program and Parent PLUS program)
- have a valid social security number
- maintain satisfactory academic progress, as defined by the university Financial Aid Office
- sign a Statement of Educational Purpose/Certification Statement
- not owe an overpayment on any Title IV educational grant or be in default on a Title IV educational loan unless satisfactory payment arrangements are made to repay or otherwise resolve the overpayment or default
- register with the Selective Service, if required to do so
- complete the verification process, if selected to do so, by submitting a signed copy of federal tax forms and any other required documents

Note: A student's eligibility for any of the federal aid programs may be suspended or terminated by a court as part of a conviction for possessing or selling drugs.

### Dependency Status

Students who apply for financial aid must determine whether they qualify as independent (self-supporting) students or as dependent students. Determination of a student's dependency status is made in the student status section on the Free Application for Federal Student Aid (FAFSA).

If you can meet ANY of the following, you are an Independent student; you will not have to provide parental information. If you meet NONE of the following, you will be asked to provide parental information.

- I was born before January 1, 1990
- I am married
- I will be working on a master's or doctorate program (this does not include students who are enrolled in a credential only program)
- I am serving on active duty in the U.S. Armed Forces
- I am a veteran of the U.S. Armed Forces
- I have children and I provide more than half of their support
- Since I turned age 13, both of my parents were deceased
- I have dependents (other than children or my spouse) who live with me and I provide more than half of their support
- I was in foster care since turning age 13
- I was a dependent or ward of the court since turning age 13
- I am currently or I was in legal guardianship
- I am currently or I was an emancipated minor
- I am homeless or I am at risk of being homeless

Students who claim to be independent may be asked to provide documentation to verify their dependency status prior to receiving financial aid. Students who want to be considered independent due to circumstances other than those listed should contact a financial aid advisor prior to completing the FAFSA.

### Financial Aid Satisfactory Academic Progress (SAP) Policy

In accordance with federal and state student aid regulations, a student must maintain satisfactory academic progress to qualify for financial aid. There are three standards—one qualitative and two quantitative.

The Financial Aid qualitative standard measures cumulative Grade Point Average (GPA) and adheres to National University's Satisfactory Academic Progress policies, one for undergraduates and the other for graduates. For complete explanations, read the Satisfactory Academic Progress sections under Academic Information for Undergraduate Degrees and Academic Information for Graduate Degrees. The policy statements include the minimum cumulative GPA requirements and provisions for probationary periods, disqualification, and reinstatement. The Financial Aid Office abides by the University's decisions enforcing its policies.

The two Financial Aid quantitative and qualitative standards measure progression toward the completion of a declared program of study. A maximum time frame is required, and it cannot exceed 150% of the program length for undergraduate programs. In addition, the Financial Aid Office has established the following requirements for minimum successful completion of credits at the end of an academic year defined as a period of 32 weeks of instructional time.

The units include coursework taken at National University and transfer credits. Progress will be reviewed when a student completes 32 weeks of instruction. If a student fails to meet the minimum credits required for an academic year, i.e., the 32 weeks of instruction and/or exceeds the maximum time frame for number of academic years of eligibility for pursuing a program, the student is ineligible for aid.

To appeal the disqualification a student must file a Request for Review – Satisfactory Academic Progress form available from any Financial Aid Office and online at National University's website [www.nu.edu](http://www.nu.edu).

### Student Loan Deferment

Federal subsidized Stafford loan borrowers are eligible for a federal interest subsidy whereby the federal government, rather than the student, pays the interest on

a student's outstanding loan during the time the student is in school. During an authorized deferment of repayment, unsubsidized Stafford borrowers are eligible for the same deferment as subsidized Stafford borrowers. However, a deferment for an unsubsidized Stafford borrower only applies to the principal loan amount.

Deferments for Grad and Parent PLUS applicants vary. See the Financial Aid Guide for details.

**Loan Deferment Procedures**

Once a month, the University submits student enrollment data to the National Student Loan Clearinghouse, which reduces the number of deferment forms students need to complete. Students who receive a letter, statement, or a deferment form from a lender must complete and submit the form as instructed. To be eligible for loan deferment, students must be in attendance at least half-time and meet one of the following:

1. Have completed at least the first class in their enrollment OR
2. Be in attendance in the first class of their enrollment and the ninth day of the session must have passed.

\*Deferment forms cannot be processed until students have started their program of study. The University cannot accommodate students who request deferment forms prior to beginning their program.

Deferment forms are only certified for the official class dates of enrollment and are based on unit load per quarter, regardless of the length of the class. The University provides lenders with data on student status but does not grant or deny deferment. The Clearinghouse only reports enrollment status to the National Student Loan Data System (NSLDS) for Stafford/PLUS borrowers. This reporting does not apply to Perkins or NU-HELP borrowers, who should file paper deferment forms to notify the University of their loan status. For further clarification of enrollment status and certification, please see "Definition of Student Status" in the Policies and Procedures section of this catalog.

UNDERGRADUATE STUDENTS UNIT REQUIREMENTS		
Number of Months	Half	Full
1	—	—
2	6.0	—
3	6.0	12.0
4	9.0	18.0
5	9.0	18.0
6	9.0	18.0

GRADUATE & CREDENTIAL STUDENTS UNIT REQUIREMENTS		
Number of Months	Half	Full
1	4.5	—
2	4.5	9.0
3	4.5	9.0
4	7.0	13.5
5	7.0	13.5
6	7.0	13.5

**Financial Aid Refund Policy**

As part of the Higher Education Amendments of 1998, Congress passed new provisions regarding refund policies and procedures for students who have received federal student aid and are considered withdrawn from school. Based on National University policies, which are made in accordance with federal regulations, a student is considered "withdrawn" if not in attendance for 45 consecutive days.

The Federal Return of Title IV Funds (R2T4) policy was effective October 29, 2010, and governs all federal grant and loan programs, including Federal Pell Grant, SEOG, TEACH Grant, Perkins Loan, Stafford/Direct Loans (subsidized and unsubsidized,) and PLUS loans.

For more information, please read the Policies and Procedures section of this catalog.

**Assumption Program of Loans for Education (APLE)**

The APLE program is a competitive teacher incentive program designed to attract outstanding students into the teaching profession. For those selected, the APLE program assumes up to \$11,000 in outstanding educational loans. Students must be California residents and enrolled in a course of study or a teacher preparation program leading to an initial teaching credential or a specialist credential in special education or reading. To receive the full benefit of the program, selected APLE recipients must agree to teach for four consecutive years in a California public school in a subject matter shortage area (math, science, foreign language, or special education) or in schools that serve a high proportion of students from low-income areas, low-performing schools, schools with a high percentage of emergency permit teachers, or rural schools. For those applicants selected, the program will assume up to \$2,000 in educational loan debt for the first year of eligible teaching service and up to \$3,000 for each of the second, third, and fourth years of eligible teaching service. The application period is from May through September. Interested students should talk to a financial aid advisor for current deadlines.

\*APLE participants who provide the designated teaching service in the areas of math, science, or education specialist teaching service in a California public school that is ranked in the lowest 60 percentile of the Academic Performance Index are eligible to receive an additional \$1,000 per year in loan assumption benefits. APLE participants who provide the designated teaching service in the areas of math, science, or education specialist teaching service in a California public school that is ranked in the lowest 20 percentile of the Academic Performance Index are eligible to receive an additional \$1,000 per year for a possible total loan assumption benefit of up to \$19,000.

**SCHOLARSHIP PROGRAMS**

**University Scholarships and Grants**

Each year, National University awards tuition scholarships or grants to students in the following categories: those who demonstrate exceptional scholastic achievement; those who are educationally and economically disadvantaged in underrepresented categories; those with disabilities and demonstrated financial need; and those who are single-parents with demonstrated financial need. All scholarships or grants are based on the eligibility rules that apply to the particular award. The University's goal is to attract and retain quality students by providing scholarships that are based upon merit and financial need.

The University may, at its discretion, target certain campuses and/or certain academic programs for the awarding of scholarships. This prioritization will then constitute the first criterion for selection. The secondary criterion will be those specified for each type of scholarship as described below.

National University's scholarships are considered "last money" tuition scholarships. These scholarships are designed to supplement, but not replace, federal and state financial aid, employer tuition assistance, and student income. Awards are credited directly to the recipient's financial accounts. The number of scholarships depends on the availability of allocated funds. As a nonprofit institution, the University tries to provide as many scholarship and grant opportunities as possible.

The scholarship application process is available online through the student portal. Students are responsible for reading and complying with the policies and procedures contained in this catalog prior to applying for a scholarship.

**Types of Awards**

**Collegiate Honor Award**

Tuition scholarships of up to \$2,000 are available to students who have demonstrated exceptional scholastic achievement and are in need of financial assistance. To be eligible for this award, applicants must have completed 54 semester units at a U.S. regionally accredited community college or four-year college with an undergraduate grade point average of at least 3.5 on a scale of 4.0. Awards will be credited to students' accounts in increments, up to the maximum of \$500 per course. The application form is available online through the student portal.

**Presidential Tuition Scholarship**

Presidential Tuition Scholarships of up to \$2,500 are available each fiscal year to undergraduate transfer students in at least one of the following categories:

- Educationally and economically disadvantaged persons who have been historically underrepresented at higher educational institutions (African Americans, Hispanics and Native Americans)

- Single parents with demonstrated financial need
- Persons with a verified disability and financial need

Applicants must also meet all of the eligibility criteria listed below. They must:

- Have an annual income below \$18,000 for single applicants or \$25,000 for a family of two or more
- Demonstrate a cumulative college grade point average of 2.30 on a 4.00 scale
- Have at least 56 semester hours of credit from an accredited college or university
- Apply for federal and state financial aid
- Be an undergraduate student working toward a first bachelor's degree
- Be a U.S. citizen or eligible non-citizen

Awards will be credited to students' accounts in increments, up to the maximum of the full cost of tuition per course. The application form is available online through the student portal.

### **Military Tuition Scholarship**

Military Tuition Scholarships of up to \$2,500 are available to military personnel, including active duty, reservists, national guardsmen/ women, their spouses, and their dependents. The scholarship is intended to benefit educationally and economically disadvantaged personnel and their family members who have demonstrated financial need. For active duty personnel to qualify, they must have exhausted the aggregate amount of their military tuition assistance. In order to determine financial need, an applicant must file a Free Application for Federal Student Aid (FAFSA), which can be done online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). The applicant must also submit a letter describing personal circumstances that make earning an education important. In making the awards, preference will be given to applicants seeking undergraduate degrees. Awards will be credited to a student's account in increments up to a maximum of \$500 per course toward tuition. The application is available online through the student self-service portal. The letter describing personal circumstances should be sent to:

The Office of Scholarships  
National University  
11255 North Torrey Pines Road,  
La Jolla, CA 92037-1011

### **Community Scholarship**

The purpose of the community scholarship is to recognize outstanding performance in the workplace, professional organizations, and community colleges. The Community Scholarship program for employers and organizations is designed to augment such recognition programs as employee of the quarter/year, etc. For community colleges, the scholarship is designed to recognize outstanding academic performance for undergraduate transfer students.

Employers, professional organizations, and community colleges interested in participating in the National University Community Scholarship program should contact the Coordinator of Scholarships at (858) 642-8185 or via e-mail at [scholarships@nu.edu](mailto:scholarships@nu.edu). The request should include a brief description of the employer/ organization's current recognition program selection procedures and the number of employees/members eligible to participate.

### **Transfer to Triumph Scholarship**

Students who are transferring from a California Community College or another community college which has signed an agreement with National University may be eligible for the Transfer to Triumph program. To be eligible a student must meet the following requirements:

- Be in good academic standing at the time of application to National University
- Have completed at least 30 semester units at a California Community College or combination of California Community Colleges or at another approved college
- Their last semester of attendance was at a California Community College or another approved community college and is within 24 months of their application date to National University

### **Promising Scholar Award**

This scholarship award is intended for students who are enrolling into National University directly from a California Community College. To be eligible for this award, students must meet the following criteria:

- Be in good academic standing at the Community College at the time of application to National University.

- The last semester of college attendance was at a California community college and is within 12 months of application to National University.

If students believe that they qualify for this scholarship, they can initiate it by requesting an application through the National University Community College Transfer Specialist, Transfer Center at their school, or through a National University Admissions Advisor.

Complete the Promising Scholar Award application form and have the form signed by the Transfer Director of your community college to verify that you have attended the community college within the last 12 months and submit the form along with an unofficial transcript, within 90 days of application date to National University.

Upon enrollment to National University, contact the Scholarship Coordinator to activate the scholarship application previously submitted.

Students who apply for the Promising Scholar Award may also be eligible for the Transfer to Triumph Scholarship provided they meet the scholarship criteria stated above under Transfer to Triumph. You will automatically be considered for the scholarship upon submission of your Promising Scholar Award application.

### **Scholarship Rules and Policies**

Rules and policies that govern National University funded awards are as follows:

- To be considered for an award, students must apply and begin attending courses within the first three months of admission. Award recipients have twelve (12) months from the date of notification of the award to use funds, after which, all unused funds will be revoked.
- Funds will not be applied toward non-degree or certificate courses.
- Funds will only be applied toward courses the student has not yet attended.
- Funds will not be applied to past due balances.
- Funds are credited to a student's account in maximum increments of \$500 per 4.5 unit course per month for the Collegiate Honor Award; \$500 per 4.5 unit course per month for the Military Tuition Scholarship; up to the full cost of tuition per month for the Presidential Tuition Scholarship (up to \$2500 total).
- Award funds will only be applied toward the tuition cost for academic coursework toward an intended degree objective.
- Awards are not transferable. Only one award can be received and used per degree objective, except for eligible Presidential Tuition applicants who may re-apply and may receive a new award each Fiscal Year while pursuing their first bachelor's degree.
- Awards are made to students for their intended degree objective at the time of application.
- Students who receive other educational assistance in excess of 90 percent of the cost of tuition for a course are not eligible to receive award funds for the course.
- Recipients must maintain good standing with the Student Accounts Office to ensure continuation of their award.
- This award may affect the amount of other financial aid for which a student may qualify, or the award may be reduced or nullified by other educational assistance and aid the student receives.
- Application of award funds toward a withdrawn course will be based on the charge incurred. If there is no charge, there will be no application of funds.

### **Externally Funded Scholarships**

There are many corporations, organizations, and foundations that provide scholarships to students seeking undergraduate and graduate degrees. For application procedures and scholarship criteria, students should consult reference books in National University's Library Catalog <http://nu.aquabrowser.com/> or on the University's Financial Aid website.

### **VETERANS AFFAIRS (VA) EDUCATIONAL BENEFITS**

Many active duty military personnel, veterans, family members of active duty personnel, family members of deceased or disabled veterans, and reservists are eligible for US Department of Veterans Affairs' educational benefits and programs ([www.gibill.va.gov](http://www.gibill.va.gov)). These programs and benefits are administered by the Veterans Affairs Department at National University, email [veteransaffairs@nu.edu](mailto:veteransaffairs@nu.edu) and include:

#### **Chapter 32, Post Vietnam Veterans' Educational Assistance Program (VEAP)**

For veterans who entered active duty between January 1, 1977 and June 30, 1985 and who contributed to the program while on active duty.

### Chapter 30, Montgomery GI Bill Active Duty (MGIB-AD)

For veterans who entered active duty beginning July 1, 1985 and who participated in the 12-month pay reduction program while on active duty; remaining entitlement under the Vietnam Era GI Bill (Chapter 34); involuntarily separated for certain reasons or separated under the VSI (Voluntary Separation Incentive) or SSB (Special Separation Benefit) program; Chapter 32 active duty persons with eligibility as of October 9, 1996 who elected to participate in the Montgomery GI Bill.

### Chapter 1606, Montgomery GI Bill (Selected Reserve Program)

For undergraduates and graduates who enlisted in the reserves and who have made a six-year commitment to the selected reserves.

### Chapter 1607, Reserve Educational Assistance Program (REAP)

For undergraduate and graduate students of the reserves personnel who were recalled for active duty. Eligibility is determined by the Department of Defense.

### Chapter 35, Dependents' Educational Assistance Program (DEA)

For spouses or children of veterans who died on active duty, whose death was caused by a service-connected disability, or who are rated 100 percent permanently disabled according to the US Department of Veterans Affairs.

### Chapter 31, Vocational Rehabilitation and Employment (VetSuccess) Program

Veterans are eligible if they have a service-connected disability rating of at least 10 percent or a memorandum rating of 20 percent or more from the US Department of Veterans Affairs. A Veteran who is eligible for an evaluation under Chapter 31 must first apply for services and receive an appointment with a Vocational Rehabilitation Counselor (VRC). The VRC will work with the Veteran to determine if an employment handicap exists as a result of a service connected disability. The VRC and the Veteran will work together to implement a plan to assist the Veteran to achieve employment and/or independent living goals. See additional information below.

### Chapter 34, Vietnam Era GI Bill

For veterans who served on active duty after January 31, 1955 and prior to January 1, 1977.

### Chapter 33, Post-9/11 GI Bill

The Post-9/11 GI Bill is for individuals with at least 90 days of aggregate service after September 10, 2001, or individuals discharged with a service-connected disability after 30 days and must have received an honorable discharge to be eligible for the Post-9/11 GI Bill. The Post-9/11 GI Bill is effective for training on or after August 1, 2009. Eligibility is determined by the US Department of Veterans Affairs. Depending on each individual's situation benefits could include tuition and fees, a monthly housing allowance, and stipend. Post 9/11 benefits differ from other education assistance programs in that each type of payment is issued separately, with tuition and fee payments made directly to the school while monthly housing allowance and stipend are paid to the individual.

### Transfer of Post-9/11 GI Bill Benefits to Dependents (TEB)

Effective August 1, 2009, eligible service members enrolled in the Post 9/11 GI Bill program may transfer unused educational benefits to their spouses or children. See the official DoD TEB website to begin the transferability process of Education Benefits (TEB) Milconnect Web application: <https://www.dmdc.osd.mil/milconnect>.

### The Yellow Ribbon Program for Post 9/11 Chapter 33 Students

National University participates in the Yellow Ribbon Program (YRP), where the Department of Veterans Affairs and National University have agreed to fund the tuition and fees that exceed the basic tuition and fees national annual cap per academic year for a private institution of higher learning (IHL). The academic year is from August 1, YYYY to July 31, YYYY.

Application for Yellow Ribbon Program (Post 9/11 Chapter 33) is on a first-come, first-served basis. A student will provide NU Veterans Affairs Department a copy of their most recent Letter of Entitlement indicating balance of Post 9/11 entitlements for the academic year.

Veterans, spouses of veterans and dependents under the Transfer of Entitlement provision must be eligible at the 100% benefit level.

1. Active duty members are not eligible for Yellow Ribbon Program.
2. Spouses of active duty members are not eligible for Yellow Ribbon Program.
3. Recipients of Marine Gunnery Sergeant John David Fry Scholarship are not

eligible for Yellow Ribbon Program.

4. Students who exhaust their Chapter 33 entitlements prior to exceeding the annual cap are not eligible for Yellow Ribbon Program.

Eligible students will receive matching funds from National University and the US Department of Veterans Affairs per academic year and all subsequent academic years in which National University is participating in the Yellow Ribbon Program; and the student maintains satisfactory progress, conduct and continuous enrollment.

National University will make financial contributions that exceed the tuition and fees cap for the academic year on behalf of the student in the form of a "Yellow Ribbon Program Tuition Waiver" and the US Department of Veterans Affairs will match that contribution.

Students repeating a course, who had previously received credit and an appropriate letter grade, will not receive Yellow Ribbon Program Tuition Waiver for repeating the course.

Students should be aware that the US Department of Veterans Affairs pays educational benefits only for those courses that are part of an approved degree or certificate program and that have not been previously and successfully completed. Students are required to attend classes regularly and maintain satisfactory grades.

### Using VA Benefits for Remedial Courses

Remedial courses such as MTH 12A Algebra I, MTH 12B Algebra II and ENG 013 Strategies for Writing are designed to correct deficiencies in basic Mathematics, English and Reading. These courses - MTH 12A Algebra I, MTH 12B Algebra II and ENG 013 Strategies for Writing can be certified as part of an approved program for students whose needs have been established.

Only Residential (classroom setting or onsite) Remedial courses can be certified for VA benefits. Online Remedial Courses (including online independent study) cannot be approved and cannot be certified to VA.

Chapter 30, 33, 1606 and 1607: Entitlement is charged for remedial training.

Chapter 35: Entitlement is not charged up to 5 months of full-time Remedial training.

### Non-Matriculated Veteran Students

VA defines matriculated as having been formally admitted to a college or university as a degree-seeking student. VA educational benefits cannot be paid to non-matriculated college or university students unless they are pending admission to National University. In that case, veteran students can be certified for two terms. A student can be certified beyond this two term limit once the student is formally admitted to National University as a degree seeking student, irrespective of the number of credits taken.

### Course Applicability for Veteran Students Using VA Benefits (Applies to all GI Bill Educational Programs)

Only courses that satisfy the minimum requirements outlined by the curriculum guide or graduation evaluation form can be certified for VA purposes. A curriculum guide or graduation evaluation form should be kept in the student's file. When a student takes a course that does not fulfill a program requirement, it cannot be certified for VA purposes. Excessive free electives, for example, cannot be certified.

### Vocational Rehabilitation Eligibility Procedures

Vocational Rehabilitation is a state-supported program of services funded under Title I of the Rehabilitation Act of 1973 that assists individuals with disabilities who are pursuing meaningful careers. Vocational Rehabilitation can also be sponsored by the US Department of Veterans Affairs.

Prospective students eligible for Vocational Rehabilitation must work with an Admissions Advisor to prepare the documents required below. The Admissions Advisor will send an email to [militaryevaluations@nu.edu](mailto:militaryevaluations@nu.edu) with the following information:

1. Student name
2. Student ID
3. Program of interest
4. Name of company or organization providing sponsorship for Vocational Rehabilitation
5. Name and contact information of Vocational Rehabilitation Counselor assigned to the student



In order to make an accurate assessment of the course work remaining under the desired degree program, students must provide transcripts from all previously attended postsecondary institutions, including any military transcripts such as a JST. Unofficial transcripts are acceptable in this pre-evaluation.

Once eligibility is determined a letter will be sent to the sponsor(s) listing the courses that the recipient still needs to complete the requested degree program. This letter, which will be submitted on letterhead and faxed as well as mailed to the sponsor, will furnish a cost estimate. National University will provide up to three different program estimates for each recipient. Students must have a pre-evaluation and Vocational Rehabilitation sponsor approval before enrolling in any classes. The recipient will have exactly one year from the date of the pre-evaluation to take advantage of this contract and retain the catalog rights as stated in the contract. For questions or additional information please contact [militaryevaluations@nu.edu](mailto:militaryevaluations@nu.edu)

## MILITARY TUITION ASSISTANCE

Tuition Assistance is an educational financial assistance program that provides up to 100% of tuition and fees for courses taken by active duty military personnel. It provides funding to eligible members of the Army, Navy, Marine Corps, Coast Guard, National Guard and Air Force. Each service has its own criteria for eligibility, obligated service, application process and restrictions. Students are to apply for tuition assistance through their Education Offices on-base. Send a copy of approved tuition assistance voucher with your student ID number to [veteransaffairs@nu.edu](mailto:veteransaffairs@nu.edu) or fax it to (858) 541-7975.

Students who want to apply for programs administered by the US Department of Veterans Affairs can obtain information on how to apply for their benefits at <http://www.gibill.va.gov/apply-for-benefits/application/> or by calling or visiting the National University Veterans Affairs Department located at the Spectrum Business Park campus. Veterans who enroll at National University are encouraged to call or visit the veterans representative for instructions prior to signing up for benefits. The National University Veterans Affairs Department telephone number is (858) 541-7970 and email is [veteransaffairs@nu.edu](mailto:veteransaffairs@nu.edu).

Nevada students should contact National University Veteran Affairs Office at 2850 W. Horizon Ridge Parkway, Suite 300, Henderson, Nevada, 89052, or call (702) 531-7800.

## Alternative Educational Funding

### Reserve Officers' Training Program (ROTC) Army and Air Force

Students can enroll in the ROTC program while attending classes at National University. There is a continuing need for scientific, computer, engineering, medical, and management personnel as well as pilots and navigators in both the Army and Air Force.

ROTC offers scholarships on a competitive basis for students already enrolled in college. Scholarship programs vary slightly each year. Generally, scholarships exist at the two-, three-and one-half- and four-year college levels. Applicants for ROTC scholarships are selected on the basis of the "whole-person" concept that includes both objective (e.g., grade point average) and subjective (e.g., interview evaluation) factors.

National University students can enroll in ROTC by contacting the local ROTC Recruiting Office. Veterans who complete their studies and are commissioned by age thirty-five (35) may also be eligible for the ROTC.

### Corporate Tuition Assistance

Many companies and government agencies award tuition reimbursement to employees. Students should check with their employer for information on how to apply for this employee-development fringe benefit.

### Aid for Native Americans

Native American students who can prove membership in a federally recognized tribe may receive educational grants from the federal Bureau of Indian Affairs (BIA).

Applications for BIA grants for California tribes are available by writing the Bureau's Office of Indian Education, 2800 Cottage Way, Sacramento, CA 95825 or by calling (916) 978-4680.

### California State Rehabilitation

The Department of Rehabilitation is a state agency that helps men and women with disabilities enter or return to work. It also has programs that ensure the rights of people with disabilities. Persons with a disability who need help living more independently or who need training to get a job should contact the regional office of this state agency.

### Private Lenders

There are several privately funded education loan programs available to assist students who do not qualify or have limited eligibility for government or institutional financial aid. Additional private lenders can be found at [www.elmsselect.com](http://www.elmsselect.com)

FINANCIAL AID CALENDAR		
A calendar of deadlines and critical dates for students applying for financial aid at the University.		
2013-2014	2014-2015	
January 1, 2013	January 1, 2014	<ul style="list-style-type: none"> <li>Apply for financial aid. Students must file a new Free Application for Federal Student Aid (FAFSA) annually.</li> </ul>
March 2, 2013	March 2, 2014	<ul style="list-style-type: none"> <li>Deadline for new Cal Grant A and B applications.</li> <li>National University Financial Aid priority filing date for FSEOG and Federal Perkins Loans. Note: The Financial Aid Office will continue to make awards after this date as long as funds remain.</li> </ul>
April 2013	April 2014	<ul style="list-style-type: none"> <li>National University begins processing student awards. Financial Aid Packets containing the IAFFA and other verification documents will be mailed to aid applicants.</li> </ul>
June 2013	June 2014	<ul style="list-style-type: none"> <li>Announcements of Cal Grant A and B Awards.</li> </ul>
July 2013	July 2014	<ul style="list-style-type: none"> <li>The funding period begins for the Federal Pell Grant and Campus-Based programs (FSEOG, Federal Perkins).</li> </ul>
October 2013	October 2015	<ul style="list-style-type: none"> <li>The funding period begins for the Cal Grant programs.</li> </ul>
June 30, 2014	June 30, 2015	<ul style="list-style-type: none"> <li>Federal Pell Grant deadline.</li> <li>Last day to file the FAFSA.</li> <li>Note: The Federal Student Aid Center must receive the student's FAFSA by this date (June 30th). Applications post-marked June 30th and received by the processor after June 30th will not be accepted for processing.</li> </ul>
June 30, 2014	June 30, 2015	<ul style="list-style-type: none"> <li>National University Verification/Processing deadline. Students must submit all requested forms by this date in order to receive financial aid for the school year.</li> </ul>
Completion of Student's Academic Year		<ul style="list-style-type: none"> <li>Applying for an additional loan (Stafford and/or PLUS): Because students apply for and are awarded aid during different times of the year, each student's academic year will vary. Generally, students are eligible to reapply after they successfully complete all courses in the previous loan period. In addition, 32 weeks of in-class instruction (8 months) must be completed. To submit a new loan application, students must have at least three months remaining in their academic year.</li> </ul>

## ADDITIONAL INFORMATION SOURCES

### California Student Aid Commission

[www.csac.ca.gov](http://www.csac.ca.gov)

### U.S. Department of Veterans Affairs

[www.gibill.va.gov](http://www.gibill.va.gov)

### Gateway to Veterans Benefits Information eBenefits

[www.ebenefits.va.gov](http://www.ebenefits.va.gov)

### Military Community Financial Aid search

[www.mcsfex.net](http://www.mcsfex.net)

### U.S. Department of Education

[www.ed.gov/finaid.html](http://www.ed.gov/finaid.html)

### College is Possible

[www.collegeispossible.org](http://www.collegeispossible.org)

### Scholarship Search and Financial Aid Calculator

[www.fastweb.com](http://www.fastweb.com)

The U.S. Department of Education has created the Student Financial Aid Ombudsman to work with student loan borrowers to informally resolve loan disputes and problems with the following federal loans:

- William D. Ford Federal Direct Stafford Loans: Subsidized and Unsubsidized Direct Stafford Loans, Direct PLUS Loans (for parents and grad students) and Direct Consolidation Loans
- Consolidation Loans
- Guaranteed Student Loans, SLS Loans and Perkins Loans
- Ombudsman Customer Service Line (877) 557-2575 or at [www.fsahelp.ed.gov/](http://www.fsahelp.ed.gov/)

GRANT	LOAN	UNDERGRADUATE	GRADUATE	CRED - 1	CERT - 2	NEED-BASED	FINANCIAL AID PROGRAMS 2013-2014		APPLICATION DEADLINE	DATE FUNDING BEGINS
							<p><b>FEDERAL PELL GRANT</b> is a grant program to help students with tuition cost. This program assists students who are working towards a first bachelor's degree.</p> <ul style="list-style-type: none"> <li>• Award Range: \$302 to \$5,645</li> <li>• Applications: FAFSA, IAFFA</li> </ul>	June 30, 2014	July 2013	
							<p><b>FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)</b> is a grant program to assist with tuition cost. Like Pell Grant, a student must be enrolled in a first bachelor's degree. Awards are made on a limited basis to students with an exceptional financial need.</p> <ul style="list-style-type: none"> <li>• Award: \$3,000 maximum per year</li> <li>• Applications: FAFSA, IAFFA</li> </ul>	Priority filing date: March 2, 2013	July 2013	
							<p><b>CAL GRANT A</b> is a state funded grant program to help students with tuition cost. Grant recipients are selected on the basis of financial need and grade point average. Students must be California residents working towards a first bachelor's degree. Recipients of this award will be notified by the California Student Aid Commission in June.</p> <ul style="list-style-type: none"> <li>• Award: \$3,074 per quarter</li> <li>• Applications: FAFSA, GPA verification</li> </ul>	March 2, 2013	Oct. 2013	
							<p><b>CAL GRANT B</b> is a state funded grant program to help students with tuition cost. This program is intended to assist students with high-potential from disadvantaged/low-income families. Students must be California residents who have completed less than one semester of undergraduate studies. Recipients of this award will be notified by the California Student Aid Commission in June.</p> <ul style="list-style-type: none"> <li>• Tuition Award: \$3,074 per quarter</li> <li>• Access: \$491 per quarter</li> <li>• Applications: FAFSA, GPA verification</li> </ul>	March 2, 2013	Oct. 2013	
<p><b>FAFSA:</b> Free Application for Federal Student Aid</p> <p><b>IAFFA:</b> Institutional Application for Financial Aid</p> <p><b>GPA:</b> Grade Point Average</p> <p><i>Note: Award ranges and aid types are tentative.</i></p>							<p><b>1. Credential Program</b> Students must complete the program residency requirement at National (except for recipients of NU Scholarships) and may only apply for financial aid as a fifth year undergraduate.</p> <p><b>2. Certificate Program</b> These programs must consist of 36 units in length (except for recipients of NU Scholarships). Students are not eligible to reapply for an additional Stafford or PLUS Loan in the Certificate Program.</p>			

FINANCIAL AID PROGRAMS 2013-2014							APPLICATION DEADLINE	DATE FUNDING BEGINS
GRANT	LOAN	UNDERGRADUATE	GRADUATE	CRED - 1	CERT - 2	NEED-BASED		
						<p><b>TEACH GRANT PROGRAM</b> was created by Congress through the College Cost Reduction Act of 2007. The Teacher Education Assistance for College and Higher Education Grant Program (TEACH) provides grants of up to \$4,000 per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. <a href="http://studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.jsp">http://studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.jsp</a></p> <p><a href="https://teach-ats.ed.gov/ats/index.action">https://teach-ats.ed.gov/ats/index.action</a></p> <ul style="list-style-type: none"> <li>• Award Range: \$100 to \$4,000</li> <li>• Applications: FAFSA, IAFFA</li> </ul>	June 30, 2014	July 2013
						<p><b>FEDERAL PERKINS LOAN</b> is a low-interest (5%) loan program. This program assists students with tuition cost and is funded on a limited basis to students with exceptional need. The major advantage for Perkins recipients is that the government pays the interest during at least half-time attendance and for nine months after the student's last date of attendance. In addition, students are not required to make payments during that time.</p> <ul style="list-style-type: none"> <li>• Award Range: \$300 to \$3,600</li> <li>• Cumulative Totals: <ul style="list-style-type: none"> <li>» Up to \$20,000 for undergraduate study</li> <li>» Up to \$40,000 for graduate or professional study</li> </ul> </li> <li>• Applications: IAFFA, FAFSA</li> </ul>	Priority filing date March 2, 2013	July 2013
						<p><b>FEDERAL PLUS PARENT LOANS FOR STUDENTS</b> is a loan program to assist parents of undergraduate dependent students with educational costs. The interest rate is fixed at 7.90% for loans. Like the unsubsidized Stafford Loan, the interest is not subsidized by the government. Repayment begins 60 days after the loan is made.</p> <p>Loan Amount: For each academic year, a parent may borrow up to the student's cost of attendance minus other aid, per undergraduate dependent student.</p> <p>Fees: Origination and Federal Default fees vary per lender.</p> <p>Applications: Parent IAFFA, FAFSA, Loan Request</p>	Three months prior to the student's last course of the academic year	Based on each student's individual course schedule
						<p><b>FEDERAL PLUS LOANS FOR GRADUATE STUDENTS (GRAD PLUS)</b> is a loan program to assist graduate students with educational costs. This loan requires the borrower to demonstrate credit-worthiness, has a fixed interest rate of 7.90%, and fees up to 4% may be charged. Like the unsubsidized Stafford loan, the interest is not subsidized by the government. Contact your lender for information regarding payment deferment, if applicable.</p> <p>Loan Amount: For each academic year, the student may borrow up to the cost of attendance minus other aid.</p> <p>Fees: (same as the PLUS Loan Program)</p> <p>Applications: IAFFA, FAFSA, Loan Application</p>	Three months prior to the student's last course of the academic year	Based on each student's individual course schedule
						<p><b>SUBSIDIZED FEDERAL STAFFORD STUDENT LOAN</b> is a loan program to assist students with educational expenses. The undergraduate interest rate is capped at 8.25% and is adjusted July 1 of each year. The 2013-2014 rate is 6.8%. Stafford recipients are not required to make payments or pay the interest during full-time attendance or the first six months after the student's last date of attendance.</p> <p>Loan Amount: For each academic year, a dependent student may borrow:</p> <ul style="list-style-type: none"> <li>• up to \$3,500 as a first year undergraduate</li> <li>• up to \$4,500 as a second year undergraduate</li> <li>• up to \$5,500 as a third, fourth, or fifth year undergraduate</li> </ul> <p>Dependent students may receive both an unsubsidized and subsidized Stafford up to the amounts listed above.</p> <p>Applications: FAFSA, IAFFA, Loan Application</p>	Three months prior to the student's last course of the academic year	Based on each student's individual course schedule

FINANCIAL AID PROGRAMS 2013-2014							APPLICATION DEADLINE	DATE FUNDING BEGINS
GRANT	LOAN	UNDERGRADUATE	GRADUATE	CRED - 1	CERT - 2	NEED-BASED		
						<p><b>UNSUBSIDIZED FEDERAL STAFFORD LOAN</b> is a program available to students who may not qualify for a subsidized Stafford Loan or for students who may qualify for only a partial subsidized Stafford Loan. This loan has a variable interest rate capped at 8.25% adjusted July 1 of each year. The 2013-2014 rate is 6.80%. The terms and conditions are the same as the subsidized Stafford Loan, except that the borrower is responsible for the interest that accrues while the student is in school and during the grace period.</p> <p>Loan Amount: Students may receive both subsidized and unsubsidized Stafford Loans totaling up to the applicable Stafford limit (based on grade level). Applications: FAFSA, IAFFA, Loan Application</p> <p>Loan Amount: For each academic year, an independent student may borrow:</p> <ul style="list-style-type: none"> <li>• up to \$9,500 as a first year undergraduate <i>(at least \$6,000 of this amount must be in unsubsidized Stafford)</i></li> <li>• up to \$10,500 as a second year undergraduate <i>(at least \$6,000 of this amount must be in unsubsidized Stafford)</i></li> <li>• up to \$12,500 as a third, fourth, or fifth year undergraduate <i>(at least \$7,000 of this amount must be in unsubsidized Stafford)</i></li> <li>• up to \$12,500 for a credential <i>(at least \$7,000 of this amount must be in unsubsidized Stafford)</i></li> <li>• up to \$20,500 as a graduate</li> </ul> <p><i>Note: Students enrolled in an academic year requiring less than 36 units will be subject to a pro-rated loan.</i></p> <p><b>Aggregate Stafford Loan Limits</b></p> <p>Dependent Undergraduate: \$31,000 Independent Undergraduate: \$57,500 Graduate: \$138,500</p> <p>(\$65,500 in subsidized Stafford and \$73,000 in unsubsidized Stafford) <i>Note: The graduate debt limit includes any Stafford Loans received as an undergraduate.</i></p> <p>Fees:</p> <ul style="list-style-type: none"> <li>• Loan Origination Fee: A loan origination fee of up to 1% of the loan principal is deducted proportionately from each loan disbursement.</li> <li>• Insurance Premium: An insurance premium of up to 1% of the loan principal, called the Federal Default fee, may also be deducted proportionately from each loan disbursement.</li> </ul>	Three months prior to the student's last course of the academic year	Based on each student's individual course schedule
						<p><b>NATIONAL UNIVERSITY SCHOLARSHIP PROGRAM</b> consists of the Collegiate Honor Award, the NU Presidential Scholarship, and the Military Tuition Scholarship. These awards are designed to recognize students for outstanding leadership, superior job performance and exceptional scholastic achievement. The NU Presidential Tuition Scholarship is also designed to recruit and retain underrepresented educationally and economically disadvantaged students, single parents with financial need and handicapped students.</p> <p>Awards:</p> <ul style="list-style-type: none"> <li>• Collegiate Honor up to \$2,000</li> <li>• Presidential Tuition Scholarship up to \$2,500</li> <li>• Military Tuition Scholarship up to \$2,500</li> </ul> <p>Application: Scholarship Application</p>	Open, but subject to available funds	Funding will begin upon receipt of the signed scholarship acceptance letter by the Fin. Aid Dept..
						<p><b>NATIONAL UNIVERSITY HIGHER EDUCATION LOAN PROGRAM (NU-HELP)</b> is a low-interest (6.75%) loan established by National University. This loan program is designed to supplement other resources the student may receive. Applicants are selected on the basis of financial need and credit history. Repayment begins six months after the student's last date of attendance. The maximum repayment term is 10 years. Funds are awarded to assist students with tuition cost, on a limited basis.</p> <p>Award Range: up to full tuition for 12 months</p>	Open, but subject to available funds	July 2013



## **POLICIES AND PROCEDURES**

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- 42 General Policies and Procedures**
- 47 Academic Policies and Procedures**
- 50 Civil Rights Policies and Procedures**
- 51 Student Discipline**



# POLICIES AND PROCEDURES

## GENERAL POLICIES AND PROCEDURES

### Attendance Procedures

All students must be officially enrolled in order to attend class and to receive a grade. This means that the course must be added to the student's schedule prior to the ninth (9th) day of the session. University instructors will not permit non-enrolled students to attend a class or be issued a grade. The Office of the Registrar will not post grades for students who are not enrolled.

Typically, the start-date of a session is the first Monday of the new course month or term. If the first Monday is a holiday, the start-date will be the first Tuesday. For example, if the first course offered in the October session meets on Mondays and Wednesdays, then that first Monday is the start-date for the session. The session start date (whether that is a Monday or Tuesday) stays the same regardless of the day students actually meet for their first class. Students are considered officially enrolled in a class at midnight (PST) of the ninth (9th) day of the session.

Students are expected to attend all class periods of a course. An absence is assessed each time a student does not attend a regularly scheduled class, whether or not it is an excused absence. Students who have more than three (3) absences and who are still enrolled as of midnight (PST) of the twenty-first (21st) day of the session will be issued a letter grade of "F" or "U" as appropriate for the grading criteria of the class. Tardiness and early departures from classes accrue and have the potential to cumulatively affect absences.

Lack of participation for students taking online classes does not qualify the student for a refund or consideration for a drop or withdrawal from the class unless the student submits the request within the established timeframe. Students, whether onsite or online, are responsible for following the published policy on deadlines for drop and withdrawal.

With instructor approval, students may be allowed to make up examinations or class assignments missed due to absence or tardiness. Students must arrange to complete any make-up work with the instructor in advance. Work must be completed prior to the final class session. A grade of incomplete may be issued if the student has attended two-thirds of the course and coursework is not completed by the final class session. Instructors may use their discretion when issuing approval of, and assigning, an incomplete grade.

Any dispute about attendance must be addressed by the student in writing and submitted to the Office of the Registrar within ninety (90) days of when grades were posted. If extenuating circumstances prevent the submission of the dispute within that time frame, the Office of the Registrar will make a determination about whether the circumstances warrant further consideration. The Office of the Registrar will not consider a dispute that is more than one year old.

Once grades have been issued and credit awarded, neither the coursework nor the grade can be expunged from the student's record. Tuition will not be refunded without extenuating circumstances and approval of the Finance Committee.

### Refund Policy

Students are accepted and enrolled in classes with the understanding they will attend the entire course. Faculty contracts, commitment of space, and other University resources are made on that assumption, creating financial obligations that students who withdraw must share. The University's refund policy reflects this position. Students may drop a course prior to midnight (PST) of the ninth (9th) day of the session, by contacting 1-866-NU-ACCESS (1-866-682-2237) or [scs@nu.edu](mailto:scs@nu.edu). The student is responsible for ensuring that the drop or withdraw is reflected in their record appropriately by viewing their schedule on the student web portal.

To accurately count session days, note that the first day of a session — and not the actual day a student attends class — counts as day one. The University counts calendar days rather than business days for determining refunds. As such, if the first day of the session is a Monday, the student would need to drop prior to midnight (PST) of the following Tuesday, the ninth day of that session.

If a student does not complete a course, tuition refunds are made according to the schedule below. The refund policy is the same for onsite and online classes. Students who drop or withdraw from a course:

- prior to midnight (PST) of the ninth (9th) day of the session receive a 100 percent refund;
- prior to midnight (PST) of the tenth (10th) day of the session receive a 50 percent refund; and
- after midnight (PST) of the tenth (10th) day receive no refund.

To receive a refund, students must submit a written request to the nearest Student Accounts Office as the University does not disburse refunds automatically. Students must have a credit balance on their account to receive a refund. Most refunds are processed and mailed within ten (10) working days from the receipt of the request depending on the verification of funds. All refunds are processed via EFT to the bank information as provided or mailed to the student's home address. If payment was made by credit card, refunds will be issued back to the original credit card used and as provided on the refund request form. Refund request forms are available at all Student Accounts Offices.

### International Student Prepayment and Refund

International students admitted to National University with F-1 visas are required to pay their first three classes in advance upon arrival at the University. Tuition for the first class is non-refundable. Tuition refunds for the second and third months will be in accordance with National University refund policies.

### Financial Aid Refund Policy

As part of the Higher Education Amendments of 1998, Congress passed new provisions on October 29, 2010 regarding refund policies and procedures for students who have received Federal Student Assistance and are considered withdrawn from school. Based on National University policies, which are made in accordance with federal regulations, a student is considered "withdrawn" if not in attendance for 45 consecutive days.

The Federal Return of Title IV Funds (R2T4) policy was effective October 29, 2010, and governs all federal grant and loan programs, including Federal Pell Grant, SEOG, TEACH Grant, Perkins Loan, Stafford/Direct Loans (subsidized and unsubsidized,) and PLUS loans.

This federal regulation assumes that awards of Federal Student Aid funds are earned in proportion to the number of days attended for the period funded. If a student is considered withdrawn from the University, a calculation is then performed to identify the total scheduled financial assistance the student earned and is therefore entitled to receive. If the student receives (or the University receives on the student's behalf) more financial aid than is earned, the unearned funds must be returned to the Department of Education. If the student receives (or the University receives on the student's behalf) less financial aid than the amount earned, the student may be able to receive those additional funds.

The portion of federal grants and loans that a student is entitled to receive is calculated on a percentage basis. The percentage is determined by comparing the total number of days in the specified payment period to the number of days completed before withdrawing from the University.

For example, if a student completes 30 percent of the payment period, the student earns 30 percent of the financial aid he/she was originally scheduled to receive. This means that 70 percent of the scheduled award received at the beginning of the payment period becomes unearned and must be returned.

In general, loan disbursements and grants cover a specific period of time and number of units called the payment period. Once more than 60 percent of the payment period has been completed, all (100 percent) of the financial aid award received for that period is considered earned.

**Important Note:** If a student is considered withdrawn from the University (officially or unofficially) before completing 60 percent of a payment period, the student may have to repay unearned federal monies that were already disbursed at the beginning of the payment period.

The withdrawal date will be determined as either:

- The effective date of withdrawal from the last course attempted, as documented by the University, or
- The last date of attendance at an academically related activity, as documented by the University.

If it is determined that the student received excess funds that must be returned, the University shares the responsibility of returning those funds. The University's portion of the funds to be returned is equal to the lesser of:

- The entire amount of the excess funds, or
- The total in tuition and fee charges multiplied by the percentage of unearned aid received.

If the refund calculation determines that the University is not required to return all of the excess funds, then the student must return the remaining amount. Any loan funds that a student is required to return must be repaid according to the terms of the promissory note. If any grant funds must be returned, the law allows the repayment amount to be reduced by 50 percent. This means that a student who has received too much in grant funds will only be required to return half of the excess amount.

If there is a return of any unearned financial aid by the University, the student will be billed accordingly. In such cases, the student will be required to make arrangements with the Student Business Services Office to pay the amount refunded to the Department of Education within 45 days of the date of the University's notification. In addition, the student will not be eligible for any further federal financial aid until the balance is paid to the Business Office. Effective May 1, 2011 National University began reporting student account defaults to credit reporting agencies.

### Course Drop and Withdrawal

The term "drop" means a student has dropped a course prior to midnight (PST) of the ninth (9th) day of the session, and no grade or notation appears on the student's record. The term "withdrawal" signifies that a student has withdrawn from a course after midnight (PST) of the ninth (9th) day of the session, and a "W" will appear on the student's record. Students who withdraw after midnight (PST) of the twenty-first (21st) day of the session will receive a grade of "F" or "U," as appropriate for the course. This is a permanent mark with no grade points assigned. Notifying the instructor of one's intent to withdraw is insufficient and will not constitute an official withdrawal. Students may drop a course prior to midnight (PST) of the ninth (9th) day of the session, by contacting 1-866-NU-ACCESS (1-866-682-2237) or [scs@nu.edu](mailto:scs@nu.edu). The student is responsible for ensuring that the drop or withdraw is reflected in their record appropriately by viewing their schedule on the student web portal.

Active duty, guard, and reserve military personnel (Army, Navy, Air Force, Marines and Coast Guard) who are enrolled at National University and whose academic progress is interrupted due to deployment or activation mid-month may withdraw without tuition penalty. A student currently in a course will not be charged for the course; however, the class will remain on the student's record with a grade of "W". Students must submit a copy of their military duty assignment orders verifying deployment or activation to their advisor along with their request to withdraw the course. This policy does not apply to retired military personnel or dependents.

### Leave of Absence

National University celebrates access as one of its core values. The University understands that life events may require a student to modify class enrollment and schedules. The Leave of Absence (LOA) policy is designed to provide flexibility for students who need to adjust to life events.

Students are limited to 180 leave days per 12 month period. This need not all be taken at once. A student may have multiple LOAs within a 12 month period provided that the cumulative total does not exceed the allowable amount. University scheduled breaks are included in the 180 leave day limit if a student is on an approved LOA during a scheduled break.

A student on an approved LOA will be considered enrolled at National University. In some cases, these students would be eligible for an in-school deferment for student aid loans. Federal Student Assistance (FSA) may be negatively impacted if students fail to apply for a LOA or if the application is denied.

To request a formal LOA, students will need to follow the steps outlined below. Students who receive FSA in the form of loans and grants, and who will have a break in attendance of 45 days or more, may be subject to recalculation and/or return of unearned FSA monies unless they have an approved LOA on file. Students who do not return from an approved LOA will be withdrawn from the University with regard to all financial aid consideration effective the start date of the LOA. Further information for FSA students may be obtained from their financial aid advisor. Students who are not on FSA, or who do not have a federal loan in deferment, are not required to request a LOA but may choose to do so.

Students requesting a LOA must:

1. Inform their financial aid advisor of their request and discuss financial aid implications, as appropriate.
2. Submit the e-form request for Leave of Absence located on the student portal and include the following information:
  - a. Beginning and ending dates of the LOA requested
  - b. Reason for the LOA request. The following are acceptable reasons for a LOA: military, medical, jury duty, loss of job, family emergency, employment emergency or include extenuating circumstances which will be approved by the Office of the Registrar.
  - c. Include supporting documentation
3. Submit the request prior to the last week of class in the term preceding the LOA request date. Students out of class during winter, spring, or summer breaks do not need to be approved for a LOA. Late requests during the last week of class in the term preceding the LOA request date may be considered for approval if they include an explanation of the unforeseen circumstances that prevented the earlier submission of the request.

All students are encouraged to submit requests as soon as possible to allow the University adequate time to process the request. Requests submitted the day of the requested leave start date or later will not be considered.

A LOA approval must meet the above criteria and the reason for the request must be approved by the Office of the Registrar.

All LOA requests start the day following the student's last date of attendance at National, unless otherwise requested and approved by the Student Leave of Absence Coordinator. Once approved, the LOA will be entered into the student's record and the student will be reported as an approved LOA student. It is the student's responsibility to determine how this status may affect any external institution or agency.

Students who have been academically disqualified are not eligible for a LOA. Similarly, students who are on an LOA and have been academically disqualified will be removed from their LOA status and notified of such action. Please contact the LOA coordinator for detailed information pertaining to academic disqualifications related to LOA at [studentloa@nu.edu](mailto:studentloa@nu.edu).

Requesting a LOA does not grant a drop or withdrawal from the current class of attendance. The current class remains subject to the official drop and withdrawal policies as published in the catalog.

Special notes for financial aid students regarding a LOA:

Financial aid students must contact their Financial Aid Advisor as early as possible upon determining that they would like to request a LOA to discuss the impact on student aid. Students who do not return from an approved LOA will have all future loan disbursements canceled. The loan repayment grace periods established on all previously disbursed loans will have begun as of the first day of the student's approved LOA. Therefore, if the student does not return from an approved LOA, the student may have exhausted some or all of the grace period and may be required to enter into immediate repayment on previously disbursed loans. Students will need to contact their lender(s) regarding grace period rules and requirements.

### Finance Committee

Students who wish to dispute the interpretation of a University financial policy, or who seek special consideration regarding a financial matter, can appeal their case to the Finance Committee.

Requests must be submitted in writing through the Student Accounts Office and must contain all pertinent information to support the appeal. All financial disputes must be submitted within one year of occurrence. Each case is decided upon its own merits. The decision of the committee is final and not subject to appeal, unless there is information pertinent to the outcome which was not available at the time of the initial request.

### Course Scheduling

Any course changes in a degree program must be consistent with a student's degree objective and fulfill the graduation requirements for the degree. Students should contact an admissions advisor for assistance in requesting such changes. For students receiving financial aid, changes made to their schedules after processing may



delay or cancel their aid. Students should speak to a financial aid advisor before withdrawing from a course or requesting a change of schedule or program.

Students can change the class in which they are enrolled prior to the start date of that course. To ensure that the desired course is available, students are encouraged to substitute or add a course at least one (1) week in advance of the start date.

Students may drop a course prior to midnight (PST) of the ninth (9th) day of the session, by contacting 1-866-NU-ACCESS (1-866-682-2237) or [scs@nu.edu](mailto:scs@nu.edu). A grade will not be awarded and tuition will not be charged. After midnight (PST) of the ninth (9th) day of the session, a grade will be entered and tuition will be charged according to the refund policy.

### Grade Reporting

All grades are reported electronically. Students can access their official grades as posted to their record via the student web portal on the University's website. Students who need an official printed copy of a grade report can request one through the website. The report is generated automatically and mailed out on a weekly basis. Grades are not given over the telephone, via e-mail, or by visiting the Office of the Registrar. Although it is requested that instructors submit grades within ten (10) working days, due to the varying requirements of each course, instructors are allowed a reasonable time frame. Grades are only reported for students who are officially enrolled in a class. Students should direct questions regarding the accuracy of a grade to their instructor.

### Student Records

Transcripts and other documents received by the University for the purpose of admission or recording supplemental work become the property of the University and will not be released to or copied for students. Even though California regulatory agencies require that student records be kept for only five (5) years, National University's student records are retained indefinitely.

### Transcript Request (Issuance)

National University transcripts are ordered online via the National Student Clearinghouse at [www.getmytranscript.com](http://www.getmytranscript.com). The transcript fee is \$5. An additional \$2 surcharge is required when sending official transcripts electronically.

The Office of the Registrar issues transcripts and other official documents only after students have settled all financial obligations to the University. All records and services are withheld from students who have any outstanding financial obligations to the University or who have defaulted on a federal Perkins, NU-Help, or NUTC loan. Transcripts contain only coursework completed at National University. A total unit summary of previous education is entered into the official record.

### Definition of Student Status (Full-Time, Part-Time/Half-Time)

A student's enrollment status will be determined based upon their course schedule and the number of units carried (see chart on page 33). Students who do not attend for a quarter (a three-consecutive-month period) are considered to be "Withdrawn" for that time period. Please note, students are not considered "Withdrawn" or discontinued from the University until they either request to enter that status or have a 12 month break from the last class, but are considered "Withdrawn" (for verification purposes such as loan deferment or full/half time student certification) for the time period in which there was a break of two months or more.

The number of units used in determining enrollment status differs depending on the career being pursued (undergraduate or graduate).

The units for any individual class with a "Withdrawn" status do count towards determining full or part-time status. Graduate students, who are working on project, thesis or research class in which a grade of "IP" (In Progress) or "I" (Incomplete) is issued, will receive credit towards enrollment from the official start date through the published end date of the class only. Once 90 calendar days have passed after the published end date of the class it may no longer be used to determine a full or half time student status.

Students with proper identification can verify enrollment at the reception area of the Office of the Registrar, (858) 642-8260 or obtain enrollment verification via the student portal on the University website. Verifications can also be requested through the mail with an authorized student signature.

Note: Off-campus agencies may use different definitions for determining full-time status. For example, the definition of "Full-Time Student Status" may not apply to international students who require an F-1 visa.

### Cancellation of Classes or Programs

The University reserves the right to cancel or postpone a class or a program if student enrollment is insufficient. However, every effort will be made to cancel the class or program well in advance of the intended start date allowing students to reschedule or make other arrangements.

### Bar from Attendance

Students may be barred from attending classes for failure to:

- Present official transcripts certifying degree/status from previous institutions
- Comply with admission requirements
- Respond to official University notices
- Settle financial obligations when due

Students who are barred from attendance are generally given advance notice. If a student fails to respond or has a history of failing to respond, action will be taken without further notice and the student will no longer be entitled to services of the University, except for assistance toward reinstatement. The University can drop the student from all current and future classes if appropriate. Under no circumstances may a student who has been barred from attendance attend class or receive a grade.

### Withdrawal from the University

Students who wish to withdraw permanently from National University must take one of the below two actions:

1. Complete a "University Withdrawal Form" available at each campus, online through the University's website, or via the student web portal.

Or

2. Contact the Financial Aid Office or their Admissions Advisor who will verify student information and submit the request in writing on behalf of the student to the Office of the Registrar.

Students taking one of the two above actions will be withdrawn from the University and all future classes will be deleted from their schedules. Students should be aware that the current term class remains subject to the official drop and withdrawal deadlines as published in this catalog. Federal student aid recipients should refer to the "Financial Aid Refund Policy" in this catalog.

### Non-Degree Students

A limited number of applicants are allowed to be admitted as non-degree students. Non-degree student applicants must follow the usual admission procedures, submit official transcripts from all previously attended regionally accredited postsecondary institutions, establish academic qualifications to enter the courses desired, and remit the customary tuition and fees. Admission as a non-degree student neither implies nor ensures acceptance as a degree candidate. Non-degree students are permitted to enroll in no more than six (6) courses or 27 quarter units. Students requesting an exception to the number of courses must submit a request via the e-form on the student web portal to the Committee on the Application of Standards.

### Transition Program Information

Transition programs are degree programs noted in the catalog where an undergraduate student in an approved transition program who meets certain requirements (length of time remaining in undergraduate degree as well as GPA minimum) may enroll in and take up to 3 graduate level courses to be used as upper division electives in his/her bachelor's program. As a result, when the student finishes the bachelor's degree and enrolls in the graduate transition program, the student will have those classes completed and waived in their graduate program; and will not need to replace units.

The following rules apply:

- A student may enroll in an Undergraduate to Graduate transition program when they are within six classes of completion of the Undergraduate program.
- The required Undergraduate cumulative GPA is a 3.00 minimum.
- Students must enroll in and take the first class in the Graduate program within six months after conferral date of the Undergraduate degree.
- Students must complete the Graduate program within four years with no break in enrollment of 12 months or more.
- Only classes that are identified as transition program eligible may be taken and the student must meet all prerequisite requirements for the graduate level class.
- The courses taken while part of an Undergraduate career do not transfer as graduate level classes either at National University or at any other university.

- A student must obtain a grade of B or better in a transition class in order for it to be eligible for both a waiver of content and units in the Graduate program.
- A transition course in which a student earns a grade of B-, C+, or C will qualify for a \*waiver\* only of the content in the Graduate program but the student must take another graduate level approved elective(s) to replace the graduate level units. The Graduate level unit requirement will not be lowered for grades of B- or below.
- If a student gets a grade of C-, D+, D, D-, or F neither a waiver of content or units will be granted. The student must retake the course within the Graduate program and obtain a better grade. The original grade will remain part of the Undergraduate record as it is considered to be part of an awarded degree and as such the GPA is not subject to alteration at any time.

### Transition Programs

#### College of Letters and Sciences (COLS)

- Bachelor of Arts in Global Studies to Master of Arts in History
- Bachelor of Arts in History to Master of Arts in History
- Bachelor of Arts in Political Science to Master of Public Administration
- Bachelor of Science in Biology to Master of Forensic Sciences
- Bachelor of Science in Organizational Behavior to Master of Arts in Human Behavior

#### School of Business and Management (SOBM)

- Bachelor of Arts in Management to Master of Global Management
- Bachelor of Business Administration to Master of Business Administration
- Bachelor of Science in Accountancy to Master of Business Administration

#### School of Engineering, Technology and Media (SETM)

- Bachelor of Science in Computer Science to Master of Science in Computer Science
- Bachelor of Science in Information Systems to Master of Science in Management Information Systems
- Bachelor of Science in Information Technology Management to Master of Science in Engineering Management with Specialization in Technology Management
- Bachelor of Science in Information Technology Management to Master of Science in Management Information Systems

#### School of Professional Studies (SOPS)

- Bachelor of Public Administration to Master of Public Administration
- Bachelor of Science in Criminal Justice to Master of Criminal Justice
- Bachelor of Science in Criminal Justice to Master of Forensic Sciences
- Bachelor of Science in Criminal Justice to Master of Public Administration
- Bachelor of Science in Criminal Justice to Master of Science in Juvenile Justice
- Bachelor of Science in Homeland Security and Emergency Management to Master of Public Administration
- Bachelor of Science in Homeland Security and Emergency Management to Master of Science in Homeland Security and Emergency Management

### Air Force ROTC

National University does not have an AFROTC program. Students may, however, enroll in AFROTC courses at the following institutions (where AFROTC courses are conducted) in conjunction with completing their degree programs at National University.

The Air Force Reserve Officer Training Corps (AFROTC) is a three- or four-year program designed to equip students with leadership skills and commission officers for tomorrow's Air Force.

AFROTC offers a variety of two, three and four year scholarships, many of which pay the full cost of tuition, books, and fees. These scholarships are available for qualified cadets, and may be applied towards tuition, lab fees, and other required items. In addition, scholarship students receive a non-taxable book allowance and monthly stipend.

### California State University Sacramento (CSUS AFROTC)

Further information on these programs may be obtained from the Aerospace Studies Department, (916) 278-7315, or Det088@maxwell.af.mil. The detachment website can be found at [www.csus.edu/afrotc](http://www.csus.edu/afrotc).

### Loyola Marymount University (LMU AFROTC)

Through arrangements with Loyola Marymount University (LMU) in west Los Angeles, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. Aerospace Studies classes and Leadership Laboratories are conducted at various times during the week on the main campus of LMU.

Classes consist of one hour of academics and two hours of laboratory for freshman and sophomores; three hours of academics and two hours of laboratory for juniors and seniors. No military commitment is incurred until entering the last two years of the program (Professional Officer Course) or accepting an AFROTC scholarship. Successful completion of all AFROTC academic and military training requirements will lead to a commission as a second lieutenant in the USAF.

For more information, contact the Department of Aerospace Studies (AFROTC) at Loyola Marymount University at (310) 338-2770

### San Diego State University (SDSU AFROTC)

There is no advance application needed to participate in the Freshmen or Sophomore level course; however, an orientation program, held just prior to the start of the semester, is recommended.

Required coursework includes lectures, a leadership laboratory practical component, panel discussions, dialogues, problem solving, and physical training. All coursework is completed on site at or near one of the schools, with the exception of a four-week summer Field Training encampment conducted on a military base between the second and third year. Upon successful completion of the AFROTC program and all requirements for a bachelor's Degree, cadets are commissioned as Second Lieutenants and serve a minimum of four years in the Active Duty Air Force. Interested students should contact the AFROTC Detachment 075 Unit Admissions Officer at (619) 594-5545 or see the website below for more information. AFROTC Detachment 075 Website: <http://www-rohan.sdsu.edu/dept/afrotc/>

### Auditing Courses

To audit a course, a person who is not a current student must complete an admission application with an admissions advisor. Approval to audit is given on a space-available basis. Students auditing a course must pay the regular fees and tuition and participate in class activities, but are not required to take examinations. No academic credit will be earned for any course that is taken as an audited course. University alumni are permitted to audit up to a maximum of four classes in total in any content area provided they meet the eligibility and prerequisite requirements of that given year. Alumni who subsequently enroll in a given degree program will not be eligible to transfer any previously audited course(s) to degree course status. Audited classes are not eligible for federal or University tuition assistance funding.

### Visitors

No one may visit a classroom during class hours without the prior approval of the instructor and the Director of Student Services at the site. Students may not bring children to the classroom or computer lab or leave them at any other University facility while attending class. Violations may result in disciplinary action.

### Smoking Policy

The University prohibits smoking in all National University facilities, vehicles, and outside stairways. In addition, the University prohibits the sale of all tobacco products and tobacco advertising at University facilities and in University publications.

Tobacco smoke is known in the state of California to cause cancer; it poses a significant risk to the smoker. Second-hand smoke can be harmful and annoying to non-smokers.

Individuals who smoke outside a University facility should smoke a minimum of 25 feet away from the building and must properly dispose of smoking materials in appropriate designated receptacles.

### Animals on Campus

Animals, other than trained service animals for persons with disabilities, are not permitted in a University facility. Violations may result in disciplinary action.

National University has service animals on its campuses and in its classrooms. Questions regarding the appropriateness of the presence of an animal being in a classroom or on University property accompanying a student should be directed to National University's Office of Special Services.

### Library Borrowing Privileges and Fines

All current National University students, faculty, and staff are eligible to borrow Library materials. A maximum of 15 books may be checked out at one time. The loan period is four weeks. Periodicals, microforms, reference books, reserve materials, and Special Collection items do not circulate.

Late fees for overdue books and CDs is \$.20 per day, per item with a \$10 maximum late fee. Once the fine reaches \$5 a block will be placed on student accounts until the fine is paid. Materials not returned to the Library are considered lost. For lost items, the borrower is responsible for \$30 replacement cost plus the \$10 maximum late fee. If the material is returned, only the \$30.00 replacement fee is refunded. For more information, see the Research Guide: Circulation available from the Library Website.

### Computer Lab Regulations

Computer labs are available at many University locations for use by students, faculty, and staff. Lab assistants or other authorized staff is available at each location to ensure availability and operability of computing resources and to ensure that the resources are used appropriately. By using any National University Computer Lab, students agree to comply with the computer and Internet access policy, and additionally agree to follow the following regulations:

1. Students must sign in to use the computer lab facilities. They may be asked to show University identification.
2. Students may not install software on University computers. Software copyrights are strictly enforced. The Computer Software Policy provides complete details.
3. Students may not bring food or drink into the labs.
4. Computing resources in the lab are for University-related use purposes only.
5. Students should minimize their use of lab printers. Printing is restricted to 25 pages at a time. Students must use copy machines when multiple copies of documents are required. The lab assistant has the right and responsibility to limit computer printing based on local requirements and his/her judgment.
6. The computers are equipped with headphones for student's use for multi-media content. Students are asked to adjust the volume on the headsets to a level that will not disturb others.

The lab assistant or other authorized staff member has the right to ask students to leave for non-compliance with any University regulations. Technical questions, equipment failure or malfunction, and disputes should be reported to the Help Desk line at 858-309-3580 for resolution.

Lab hours are posted at each facility and are subject to change to support class scheduling requirements and holidays. It is the lab user's responsibility to become familiar with the schedule. The computer labs close promptly at the scheduled closing times.

### Ethical Usage

Computing resources must be used in accordance with the high ethical standards of the University community and local, state, and federal laws. Examples of unethical and possible illegal use follow:

- Violations of computing system security
- Unauthorized use of computer accounts, access codes, or computer identification accounts assigned to others
- Intentional use of computer telecommunication facilities in ways that unnecessarily impede the computing activities of others (such as randomly initiating interactive electronic communications or e-mail exchanges, or overuse of interactive network utilities)
- Use of computing facilities for private business purposes unrelated to the purposes or to the mission of the college or college life
- Academic dishonesty (plagiarism, cheating)
- Violation of software license agreements
- Violation of network usage policies and regulations
- Violation of another user's privacy

### Illegal Usage

Computer resources may not be used for illegal purposes. Examples of illegal purposes include but are not limited to:

- Intentional harassment of other users
- Intentional destruction of or damage to equipment, software, or data belonging to the University or other users
- Intentional disruption of unauthorized monitoring of electronic communications
- Unauthorized copying of copyrighted material. The copying of copyrighted materials, such as third-party software, without the express written permission of the owner or the proper license, is prohibited.

### Network Security Terms of Use Policies

In order to promote ethical and facilitative computing, National University's network users are prohibited from any of the following:

- Use of systems and/or networks in attempts to gain unauthorized access to remote systems
- Use of systems and/or networks to connect to other systems, in evasion of the physical limitations of the remote system
- Decryption of system or user passwords
- The copying of system files
- Intentional attempts to "crash" network systems or programs
- Any attempts to secure a higher level of privilege on network systems
- Running of HTTP, E-mail, and FTP servers is strictly prohibited on student machines
- The willful introduction of computer "viruses" or other disruptive/destructive programs into the organization network or into external networks

Failure to adhere to these prohibitions may subject the student to punishable disciplinary action.

### Computer Software and E-mail Policies

The Copyright Law of the United States (Title 17, United States Code) governs the making of copies of copyrighted software. Copyright infringement could subject the violator to civil damages and criminal penalties, including a fine or imprisonment.

University policy further prohibits any use or copying not authorized by the purchase agreement or license under which the university acquired the software. A copy of such agreement is available for inspection at the office of the Vice President, Information Technology. Students may not use the e-mail addresses of other students, faculty, or staff for purposes unrelated to the University. Violations may lead to disciplinary action.

### Family Educational Rights and Privacy Act of 1974 (FERPA)

National University maintains all student records in accordance with the provisions of FERPA as amended. FERPA affords students certain rights with respect to their education records. They are:

- The right to inspect and review the student's education records within 45 days of the day the University receives a request for access. Students should submit to the registrar, school dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- The right to request an amendment of the student's education records that the student believes is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official acts in any of the following capacities: is performing a task that is specified in his or her position description or contract agreement, related to a student's education or to the discipline of a student: providing a service or benefit relating to the student or the student's family (e.g., counseling, job placement, financial aid, etc.); or maintaining the safety and security of the campus. Upon request, the University may disclose education records without a student's consent to officials of another school in which that student seeks or intends to enroll. Personally identifiable information may also be disclosed by Federal and State Authorities to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is principally engaged in the provision of education, such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Federal and State Authorities may also release personally identifiable information to researchers performing certain types of studies. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive personally identifiable information. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without consent personally identifiable information and track participation in education and other programs by linking personally identifiable information to information obtained from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by National University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, DC 20202-4605

Directory information at National University is limited to the following public information:

- Name of student
- Date of birth
- Place of birth
- Major field of study
- Dates of enrollment
- Degrees and dates conferred
- Academic honors and awards received
- Addresses, telephone numbers, and e-mail addresses of alumni will be placed in the Alumni Directory
- Any other personal information voluntarily provided by alumni to be distributed to other alumni

If students do not want the University to release directory information they must submit the FERPA Request for Non-Disclosure Form to the Office of the Registrar. This form is found on the University website. For more information, and for particular questions with respect to a student's rights under FERPA, students should contact the Office of the Registrar at 858-642-8260 or e-mail registrar@nu.edu.

## ACADEMIC POLICIES AND PROCEDURES

Some degree programs may have additional policies and procedures. Please see the appropriate section of the catalog for more information.

### Grade Appeals

Faculty members are vested with the authority to establish course requirements and standards of performance. It is the responsibility of faculty to articulate and communicate course requirements and standards of performance to students at the beginning of each course and apply all grading criteria uniformly and in a timely manner. Final grades submitted by faculty to the Office of the Registrar are presumed to be accurate and final. A student, who has questions about a grade received in a course, should ordinarily seek to resolve the issue by first consulting with the instructor. If the issue has not been resolved after consultation, and the student believes there are grounds for appealing the grade, the student may invoke the grade-appeal procedure outlined below.

Grounds for a Grade Appeal: Students can appeal a grade only when they can document that one or a combination of the following has occurred:

- An error in calculating the grade
- Failure of the instructor to notify students clearly and promptly of the criteria for grade determination
- Assignment of a grade based on reasons other than the announced criteria and standards
- Assignment of a grade based on factors other than student achievement, e.g., personal bias
- Inconsistent or inequitably applied standards for evaluation of student academic performance
- If the student believes that the grade received is based upon unlawful discrimination, or sexual harassment, as defined in these policies and procedures, the student should proceed with the process under "Complaints Relating to Discrimination and Sexual Harassment."

### The Appeal Process

When students believe that they have grounds for appealing a grade issued by an instructor because of an occurrence of one or more of the above mentioned circumstances, the following procedures must be followed:

The student must submit an e-form electronically via the student portal to the school dean within 45 days of the submission of the grade for the course. The student must attach to the e-form clear substantiating documentation that demonstrates the occurrence of one or more of the above-listed grounds for appeal. Documentation may be in the form of e-mail correspondence, graded assignments, proof of timely submission, etc. The student must also attach documentary evidence of the level of achievement in support of the particular grade that the student believes he/she should have been awarded. If the evidence meets the criteria, the school dean forwards the student's e-form to the instructor for a response, which the instructor must provide within fifteen (15) days. The dean then refers all documentation to the grade appeals committee.

### Grade Appeals Committee

A standing committee within each school in San Diego, the Grade Appeals Committee consists of three or more faculty members (full-time or associate) appointed by the appropriate School Dean. The Grade Appeals Committee considers the documentation and may decide either to change or uphold the grade.

The Grade Appeals Committee will render a decision within thirty (30) days of receiving the grade appeal e-form information from the School Dean. The office of the school dean will notify all of the following: the student, the instructor, and the Office of the Registrar.

### Accelerated Study

#### Maximum Number of Units

Students with a superior academic record and a compelling, demonstrated need may petition the school dean for an accelerated study allowing them to be enrolled in more than 7.5 quarter units in the same term. The granting of an accelerated study is wholly at the school dean's discretion. With the exception of certain approved programs, applications for acceleration must be approved a month in advance. To be eligible, students must have:

1. Completed 13.5 quarter units at National University prior to the request
2. Maintained a 3.5 grade point average for undergraduates or a 3.7 for graduates
3. Completed all prior coursework with no outstanding grades of "Incomplete"

- Maintain a current account balance, i.e., the balance should not exceed the current month's tuition. Note: This requirement can be waived if the student has an approved financial aid packet in the Financial Aid Office or an approved military/company reimbursement plan on file in the Student Accounts Office
- Demonstrated a compelling, exceptional need

Students who believe that they meet the above requirements should submit their e-form well in advance of the anticipated course start date since processing time is six (6) to eight (8) weeks.

Approval to take more than 18 units in a quarter requires approval from the school dean of the student's program. Students are not approved to accelerate their studies every month or to take more than two classes in one month.

If students meet all of the above conditions, they should take the following steps:

- Fill out an Accelerated Study Request, available as an e-form on the student portal, or see an admissions advisor for assistance
- The e-form must include justification of the special circumstances that necessitate an accelerated study

#### Additional Considerations

- With regard to summer intensive programs, students who wish to accelerate may take either a summer intensive course with an evening course or two summer intensive courses in the same month, provided that they meet the above criteria.
- Students in the Master of Arts in Counseling Psychology who have a GPA of 3.0 may take a regular evening course simultaneously with PSY 631B, Practicum for MFT Trainees.

#### Independent Study

Independent study is a catalog course taught independently to one student. Not all courses in the catalog are approved for independent study. Under certain conditions and circumstances, students may be approved to take a course through independent study. Convenience or the desire to graduate early are not considered valid reasons. Approval is at the discretion of the school dean. Students who believe that they have a justifiable reason for an independent study should submit their request well in advance of the anticipated start date because processing time is six (6) to eight (8) weeks.

To be considered eligible to apply, all of the following conditions must be met:

- The course must be approved for independent study.
- The student must be evaluated by the Office of the Registrar.
- The student must have completed 13.5 quarter units in residence with a grade point average of 3.0 or higher.
- The student must have no grades of "Incomplete" at time of application
- The student must have no more than one other independent study at the current degree level.
- Maintain a current account balance, i.e., the balance should not exceed the current month's tuition. Note: This requirement can be waived if the student has an approved financial aid packet in the Financial Aid Office or an approved military/company reimbursement plan on file in the Student Accounts Office.

If a required class is cancelled and not available either onsite or online for at least four months, students may request special consideration to waive the above requirements. Students should submit the e-form with their advisor's assistance (see below) and notate this information.

Students taking an independent study course are expected to meet all of the course competencies and are evaluated according to criteria similar to those employed in normal offerings of the course (i.e., written examination and/or a substantive, interpretive research paper).

If students meet all of the above conditions, they should take the following steps:

- See an Admissions Advisor and request that an independent study request, available as an e-form, be submitted.
- The e-form must include justification of the special circumstances that necessitate an independent study

If the department chair or school dean approves the independent study, the Office

of Academic Services adds the class to the student's schedule. The school will notify the instructor and the student of the scheduled class dates.

Work on the independent study cannot begin until the student and the instructor have been placed in the scheduled course and notified of the class dates. Students who are not approved for an independent study are notified by the school via e-mail.

If an instructor submits a grade of "Incomplete," the instructor must also notate the date when the grade of "I" is entered. "Incomplete" grades that are not removed before the time limit become permanent grades of "F" or "U" as appropriate for the course. Standard tuition charges apply to independent study classes.

#### Guided Study

Guided study is an individualized course that deals with material not covered in any approved catalog course. Guided study course numbers are XXX 490 or XXX 690. Students in guided study courses work independently under the guidance of an instructor. Guided studies follow the same approval process as independent studies and students must meet the eligibility requirements as indicated under the independent study section. Requests should be made well in advance of the desired start of the guided study.

#### Change of Academic Program

Students may apply for a change of academic program, provided they are not on probation or disqualified from their current program. Application for such a change does not mean automatic acceptance into the new program, which occurs only when the Office of the Registrar changes the student's program on their official record. Students on probation must submit their request for a change of program to the Committee on the Application of Standards for approval. Students who change academic programs will be subject to the requirements of the new program in effect in the current catalog at the time of the change. Students must be aware that courses taken in the program they are exiting might not apply toward the new program. For financial aid purposes, the University will not include in the calculation of a student's Satisfactory Academic Progress (SAP) standing the credits attempted and grades earned that do not count toward the student's new major. The University will count credit earned as it applies toward the current program. All coursework attempted will be calculated in determining cumulative grade point average and academic standing. Students are allowed a maximum of two change requests. The third (3rd) and subsequent requests for a change in program must be petitioned to and approved by the Committee on the Application of Standards. The letter accompanying the petition should explain the reason for the change request along with the plan for completion.

#### Practicums, Internships, and Residencies

Students may be required to take practical training courses in the form of internships, practicums, or residencies depending on the academic discipline in which they are enrolled. This training may be accomplished at National University facilities or at offsite locations, depending on the specialty. All such courses share commonalities, including:

- Students must register in advance.
- University instructors are responsible for developing course requirements and supervising the progress of students.
- Regular meetings between students and instructors provide opportunities for guidance and evaluation. These interactions are generally held on a weekly basis.
- Practical training experiences require significantly more time than a regular course.
- Students are evaluated on their progress and assigned either a letter grade or a satisfactory/unsatisfactory grade, as determined by the appropriate academic department. The satisfactory grade is not calculated into the student's GPA.
- All practicums, internships, or residencies are granted full credit toward graduation, do not extend degree requirements, and are mandatory in several degree and credential programs.
- Student teaching field experience does not grant graduate credit, but is required for degree conferral as part of a joint master's/credential program.
- Standard tuition charges apply.
- Students who do not complete practicums, internships, or residencies in the time allotted are issued either a grade of Incomplete (I) or In Progress (IP), depending on the approved grading criteria for the course. Students must complete the "I" or "IP" within the time specified. Students who fail to complete the course by the required completion date receive the grade of "F" or

“U”, as appropriate for the grading criteria of the class.

Students should consult the academic program requirements for further information. Veterans should contact the Veterans Affairs Office at National University to determine how enrollment in such courses may affect benefits.

### Concurrent Enrollment at Other Institutions

After students are admitted to National University, all courses leading to an associate, credential, bachelor's degree, or master's degree must be taken at National University unless written approval to take coursework at another institution is given in advance by the Office of the Registrar. Credit earned at another institution without such prior approval might not apply toward an academic program at National University. To qualify for concurrent enrollment, students must:

1. Have completed the admissions process and been officially evaluated, and not on an approved leave of absence.
2. Not exceed the maximum number of units (18 quarter units) authorized by the University for each term.
3. Maintain a 2.0 grade point average in undergraduate studies or a 3.0 grade point average in graduate studies
4. Submit the e-form request for concurrent enrollment located on the student portal. Requests must include a course description.
5. Request that an official transcript be sent directly to the Office of the Registrar upon completion of the approved course(s).
6. Be in good financial standing.
7. International students must complete 13.5 units prior to concurrent enrollment approval.
8. Submit the concurrent enrollment request no later than four weeks prior to the enrollment date at the other institution.

Courses must be completed at a Regionally Accredited Institution and needed for current plan of study at National University.

### Committee on the Application of Standards (CAS)

#### Exceptions to Academic Policies

In cases of exceptional circumstance, students can request an exception to a published University academic policy by submitting a request to the Committee on the Application of Standards (CAS). Convenience or ignorance of a published policy does not constitute sufficient justification for a CAS request. Some policies are not eligible for petition exception, such as but not limited to change to and/or backdating of conferral date, retroactive processing of a program change, waiver of minimum GPA, residency and/or unit requirements toward a degree or certificate, waiver of minimum GPA requirement for student teaching/internships/practicum, extension of an Incomplete or In Progress grade past the allowed completion time-frame, removal of classes completed and graded with an A-D or S grade, adding/dropping/withdrawing of classes over one calendar year old, utilization of a 400 level course to meet GE requirements. Petitions received requesting exception to policies that are not eligible will be denied by the CAS Coordinator.

Students should make a CAS request through their admissions advisor or via an e-form on the student portal. Students must submit a letter of explanation and documentary evidence in support of the request. Each case is decided upon its own merits and the decision of the committee is final and not subject to appeal, unless there is information pertinent to the outcome which was not available at the time of the initial request. Decisions are typically rendered within 4-6 weeks of receipt of student petition, however, CAS strives to review and render decisions on all incoming petitions in as timely a manner as possible. All decisions rendered by the committee are valid for one (1) year from the date the decision was made. Appeals approved by the committee will be considered null and void if a student does not take action within the allotted one (1) year time frame. CAS may require action be taken within a shorter time frame, based on the students unique circumstance and the policy to which an exception has been requested.

If students meet all of the above conditions, they should take the following steps:

1. Fill out a Committee on the Application of Standards Request, available as an e-form on the student portal, or see an admissions advisor for assistance
2. The request must include both justification and documentation of the special circumstances that necessitate an exception to a published University policy.

### Institutional Review Board

The National University Institutional Review Board (NU-IRB) was established in accordance with federal regulations governing the use of human subjects in research. The NU-IRB is charged with the responsibility for review and surveillance of all research involving human subjects carried out at National University. Review and surveillance are conducted to assure the protection of the rights and welfare of all research subjects, including volunteers.

Any research conducted by National University faculty, staff, or students that involves human subjects in any way must receive IRB approval before the research can be undertaken. Also, any research that utilizes National University faculty, staff, or students as subjects must be approved by the NU-IRB before the research can be undertaken. Research that is based solely on external literature written by others about human subjects does not require approval of the NU-IRB nor does research that is purely theoretical or is exclusively limited to non-human subjects such as engineering, etc. If the research, however, involves human subjects in any way, such as being recorded in a data pool or being asked to participate in an experiment, to be observed, to respond to a survey or questionnaire or to participate in a focus group, then approval of the NU-IRB is required.

All individuals who conduct research at National University or under its auspices shall observe the guidelines and policies in the planning, designing, and implementation of research projects involving human subjects. These policies and guidelines are intended to supplement, not supplant, ethical guidelines for research established by professional organizations that represent the various disciplines within the academic and professional communities. Researchers at the University shall strive to maintain the highest ethical standards and shall utilize the guidelines described in the policy as minimum standards in the effort to protect the welfare and rights of their human subjects and contribute knowledge to their disciplines. Finally researchers must remember that the highest wisdom is that which cherishes and protects the dignity of each and every human being. (Human Subjects Research Policy, Policy #8:01:00).

The CITI (Collaborative Institutional Training Initiative) Program provides research ethics instruction in various aspects of the responsible conduct of research (RCR) including human subjects protection, health information privacy and security, laboratory animal welfare, research misconduct, data management, authorship, peer review, conflict of interest, mentoring and collaborative science. National University uses the CITI program to stay in compliance with Federal and institutional policies regarding training, as a condition before conducting human subjects, as well as assure that research protocols are planned, and conducted in an ethical manner and consistent with standards established by the NU-IRB.

The Office of the Institutional Review Board will only accept electronic protocol submissions via IRBNet ([www.irbnet.org](http://www.irbnet.org)). All protocols (including revisions and renewals) must be submitted electronically via IRBNet, and all review decision letters will be issued electronically via IRBNet. Principal investigators, faculty sponsors and IRB members will be required to complete human subject research training through the Collaborative Investigator Training Initiative (CITI). The passing rate is a cumulative score of 85%. Each module takes approximately 15 minutes to complete. Please go to [www.citiprogram.org](http://www.citiprogram.org) to register for CITI online training.

An interactive IRB training course is available for all applicants, faculty and IRB Members. You may access IRB Orientation from the main menu in eCollege using your standard username and password. There is a separate module for applicants, faculty sponsors, and IRB members. User guides, FAQs, and PowerPoints are also available from this site for download. Students enrolled in thesis/capstone courses will be automatically enrolled or contact your admissions advisor for enrollment.

The Office of the Institutional Review Board can be contacted at (858) 642-8136 or [irb@nu.edu](mailto:irb@nu.edu).

#### IRB Orientation

For students conducting human subject research, this self-paced course provides some key information about how to successfully complete the Institutional Review Board process at National University. It is separated into different sections to focus on key groups involved in the approval process: Applicants (Individuals wishing to conduct human subject research; students and faculty), Faculty Sponsors (Instructors teaching research courses), and IRB Committee (Faculty who are approved IRB members). No tuition, non-credit. For more information students should contact [irb@nu.edu](mailto:irb@nu.edu) or your admissions advisor.

## CIVIL RIGHTS POLICIES AND PROCEDURES

### Complaints Relating to Discrimination or Sexual Harassment

National University is committed to maintaining a working and learning environment in which students, faculty, and staff can develop intellectually, professionally, personally, and socially. Such an atmosphere must be free of intimidation, fear, coercion, and reprisal. The University prohibits discrimination or harassment on the basis of race, ethnic or national origin, religion, age, gender, sexual orientation, color, physical or mental disability, marital or veteran status under any program or activity offered under its control.

In keeping with this commitment, the University also maintains a strict policy that prohibits sexual harassment, which includes harassment based on gender, pregnancy, childbirth, or related medical condition and inappropriate conduct of a sexual nature. This policy applies regardless of the gender or sexual orientation of the complainant or the alleged harasser.

It is University policy that all persons should enjoy freedom from unlawful discrimination of any kind, as well as from sexual harassment, or retaliation for reporting a complaint. This policy applies to prohibit unlawful discrimination or harassment between members of the University community, including between students and other students and between students and employees or third parties, if the University has notice regarding or control over the third party. Individuals who engage in prohibited conduct will be subject to disciplinary action.

### Grievance Procedures for Civil Rights Violations

The University encourages prompt reporting of complaints so that a rapid response can be made and appropriate action taken. Note that reporting a complaint need not be limited to someone who was the target of the discrimination or harassment.

The following person is designated to coordinate the University's responsibilities under the law and to insure compliance with the University's policies against discrimination:

Vice President for Student Services  
National University  
11255 North Torrey Pines Road  
La Jolla, CA 92037-1011  
Telephone: (858) 642-8036

Any student who feels that they have been subjected to discrimination by a student or by the University through any of its employees, contractors, entities, policies, procedures, or programs may file a complaint with the Vice President for Student Services.

The University will endeavor to maintain confidentiality to the extent permitted by law. Where the complainant's desire to maintain anonymity constrains the University from attempts at establishing facts and eliminating the potential discrimination, the University will attempt to find the right balance between the complainant's desire for privacy and confidentiality and its responsibility to provide an environment free of discrimination. The University has a duty to review even if the student declines to file a complaint or demand action. The University may take more formal action in cases of egregious discrimination that may require complete disclosure of all relevant facts.

### Informal Procedures for Civil Rights Issues

Students who believe that they have been subjected to unlawful discrimination or harassment may use the following informal procedures to resolve their complaint. This process may be used as a prelude to filing a formal complaint or as an alternative and generally is completed within 45 days. It is not necessary that this option be used. Students have the right to file a formal written complaint either initially or if they believe informal resolution is not possible. Students may, at any time, elect to stop these informal procedures.

The Office of Student Affairs will provide any member of the University community an opportunity to discuss specific concerns in a confidential setting. The University encourages discussion between the parties directly involved in a dispute, especially in the early stages before the parties have assumed official or public positions that may polarize the dispute and make resolution more difficult. Students may seek advice about how best to approach this individual or to obtain other assistance, such as mediation, from their admissions advisor, the Office of Student Affairs, or any other appropriate campus officer.

If no resolution is forthcoming or if direct confrontation is deemed inappropriate, the student may report the incident(s) to the Vice President for Student Services through a Formal Procedure (Written Complaint).

### Formal Procedures for Civil Rights Issues

Filing a Written Complaint with the Vice President for Student Services:

1. The complainant must file a claim by following the guidelines in this section. To be processed, the claim must be filed within 120 days of the alleged unlawful discrimination or harassment or within 120 days of the complainant's learning of the discriminatory or harassing action.
2. The Vice President for Student Services dates and logs all written complaints and sends the complainant an acknowledgement that the complaint is under review.
3. If the complaint does not meet the procedural requirements, the Vice President for Student Services immediately notifies the complainant of the specific deficiencies of the complaint. If the complaint meets the procedural requirements, the Vice President for Student Services forwards a copy of the complaint to the alleged offender or unit against which the complaint is made ("respondent").
4. The Vice President for Student Services will arrange appropriate interim measures when warranted to protect the parties.
5. The Vice President for Student Services investigates the complaint (or the Vice President's designee, who has been trained in the investigation of such complaints), meeting separately with the student and with others who are either named in the complaint or who may have knowledge of the facts. Generally, the investigation is completed within 45 days from the date the Vice President for Student Services receives the complaint.

On completion of the investigation, the Vice President for Student Services will prepare a report of the witness statements and the evidence. All relevant parties will be notified accordingly. Either party may file a written appeal if they are not satisfied with the findings (see Appellate Procedures below).

### How to File a Claim of Discrimination

To file claim of discrimination, submit a letter to:

Vice President for Student Services  
National University  
11255 North Torrey Pines Road  
La Jolla, CA 92037-1011

Include the following information in your letter:

- Your name, address, telephone number, and student ID number
- The basis of your claim. The basis is what you believe was the motivating factor for the discrimination. For example, you may believe you were treated differently because of your race, color, religion, sex, age, national origin, marital status, sexual orientation, or disability.
- The name of the individual(s) or entity you believe discriminated against you.
- The issue(s) of your claim. The issue is a description of what happened, or the action that was taken by the individual(s) that discriminated against you, resulting in some harm. Explain as clearly as possible what happened, why you believe it happened, and how you were discriminated against. Please include how other persons in the same setting were treated differently than you, if applicable. If you were denied a benefit or service, please provide a copy of the denial letter. If you have documents to support the events you are reporting, provide a copy of the supporting documents.

### Appellate Procedures for Civil Rights Issues

A party may file a written appeal within 10 days of receipt of the findings with the Office of the Provost. The written appeal must state the objections to the decision. Upon receipt of the appeal, the Provost will forward a copy to the other party (ies).

Parties can forward commentary to the Provost within 14 days of receipt of the appeal.

Within 21 days following receipt of an appeal, the Provost will render a final decision.

Changes to these procedures may be made as needed to resolve problems. Any request for changes should be directed to the Vice President for Student Services. If the complaint is against the Vice President for Student Services or other officer involved in these procedures, the Provost will designate a University employee to act in their place in these complaint procedures.

If the decision finds that the complainant falsely accused another of discrimination or harassment knowingly or in a malicious manner, the complainant will be subject to appropriate sanctions.

Retaliatory action of any kind by any member of the University community against anyone seeking redress under these procedures, cooperating in the investigation, or other participation in these procedures is prohibited and will be regarded as the basis for disciplinary action.

In cases of discrimination or sexual harassment, the complainant may, at any time during the informal or formal procedure at National University, file a complaint with:

Office for Civil Rights  
U.S. Department of Education  
50 Beale Street, Suite 7200  
San Francisco, California 94105

The University will complete its investigation and make findings on a complaint filed at the University, even if a complaint has also been filed with the Office for Civil Rights.

## STUDENT DISCIPLINE

Students are expected to conduct themselves in a responsible manner that reflects ethics, honor and good citizenship. They are also expected to be aware of University regulations and to abide by them. It is the students' responsibility to maintain academic honesty and integrity and to manifest their commitment to the goals of the University through their conduct and behavior. Any form of academic dishonesty, or inappropriate conduct by students or applicants, may result in penalties ranging from warning to dismissal, as deemed appropriate by the University. Students will be informed in writing of the nature of the charges against them. They will be given a fair opportunity to refute the charges and there will be provisions for appeal of a decision.

### Drug and Alcohol Policy

The "Drug-Free Schools and Communities Act Amendments of 1989" (Public Law 101-226) clearly stated the position which universities are expected to take with regard to drug and alcohol abuse. In support of the purpose of this legislation National University wishes to make known its concern for the health and well-being of all members of the University community—students, staff, and faculty—as well as the health and well-being of the community as a whole.

National University policy prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities. Such prohibition specifically includes, without limitation:

- Possession or use of any controlled substance, including heroin, barbiturates, cocaine, LSD, hallucinogens, and marijuana.
- The sale of any controlled substance which is in violation of local, state, or federal statutes.
- Giving alcohol to any person under the age of twenty-one (21) or the use of alcohol on campus, unless at a specifically authorized university activity.
- Any other conduct which involves a drug-related violation of local, state, or federal statutes is included in this prohibition.

Violations of this policy will result in disciplinary action or referral for prosecution according to local, state, and federal statutes, or both. Disciplinary actions for violations by students will be determined by a Hearing Committee according to the process outlined in "Hearing Procedures" below.

### Academic Dishonesty

Academic dishonesty includes cheating, plagiarism, and any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means. Below is a list of some forms academic dishonesty may take.

- Using or attempting to use unauthorized materials, information, or study aids in any academic exercise

- Submitting work previously submitted in another course without the consent of the instructor
- Sitting for an examination by surrogate or acting as a surrogate
- Representing the words, ideas, or work of another as one's own in any academic exercise
- Conducting any act that defrauds the academic process

Plagiarism is the presentation of someone else's ideas or work as one's own. As such, plagiarism constitutes fraud or theft. Plagiarism or academic dishonesty in any form, regardless of intent, is a grave offense and will not be tolerated.

If an instructor determines there is sufficient evidence of academic dishonesty on the part of a student, the instructor may exercise one or more of the following options:

- Require a timed writing sample to be written on the assigned topic to determine the veracity of the suspicion
- Require that the work be rewritten
- Issue a lowered or failing grade for the assignment
- Issue a lowered or failing grade for the course
- Request formal disciplinary action by the Judicial Affairs Officer

If a student's assignment or course grade is lowered on the grounds of academic dishonesty, the instructor must inform the student that academic dishonesty figured into the calculation of the grade. The student may exercise his/her right to appeal the grade by requesting a review from the Disciplinary Appeals Committee, convened by the Judicial Affairs Officer (JAO). The student must submit an e-form electronically via the student portal within 45 days of the submission of the grade for the course. The student must attach clear, substantiating documentation that demonstrates grounds for appeal to the e-form. If the evidence meets the criteria, the JAO forwards the student's e-form to the instructor. The JAO then refers all documentation to the Disciplinary Appeals Committee. Students are responsible for the work they submit and intent cannot be determined, so neither is grounds for appeal.

### Disciplinary Appeals Committee

A standing committee, the Disciplinary Appeals Committee consists of three or more faculty members. The Disciplinary Appeals Committee considers the documentation and may decide either to change or uphold the allegation.

The Disciplinary Appeals Committee will render a final decision within thirty (30) days of receiving the e-form information from the JAO. This decision is then forwarded to the JAO who notifies all parties via e-mail.

The decision of the Disciplinary Appeals Committee on these matters is final and cannot be appealed.

It is the instructor's responsibility to report any reasonable suspicion of academic dishonesty to the Judicial Affairs Officer so that such behavior may be monitored and repeat offenders identified. Notification may be made through one's department chair. Upon request for disciplinary action or upon repeated offenses, the Judicial Affairs Officer will initiate hearing proceedings that may result in disciplinary action such as probation, suspension, or expulsion.

### Avoiding Plagiarism

Students are responsible for the work they submit and must give credit for any information that is not either the result of original research or common knowledge. For example, it would be necessary to give credit to an author who provided an argument about the strategic importance of the Emancipation Proclamation in the American Civil War. Conversely, major historical facts, such as the dates of the American Civil War, are considered common knowledge and do not require that credit be given to a particular author.

If a student borrows ideas or information from another author, he/she must acknowledge the author in the body of the text and on the reference page. If a student borrows the words of another author, he/she must be careful to use the author's exact words, enclose them in quotation marks, and cite the source in the body of the text and also on the reference page. If students are unsure whether or not they should cite, they are encouraged to cite. They are also encouraged to ask their instructors for guidance on this issue. Students might also consult writing handbooks such as the *Essential Little Brown Handbook* and for formatting questions refer to manuals such as *The MLA Handbook for the Humanities*, *The*



Publication Manual of the APA for social sciences and business, and The CBE Style Manual for natural and applied sciences.

### **Civility in the Classroom: A Code of Classroom Etiquette**

Freedom of speech and expression is valued not only throughout society but also, and particularly, in the academic setting. No more is this so than in the classroom. As a diverse community of learners, students must strive to work together in a setting of civility, tolerance, and respect for each other in an environment that does not distract from the mutual commitment to academic inquiry and reflection. To that end, the following code of classroom etiquette has been established.

- When participating in class dialogue, no one monopolizes discussions to the exclusion of others, either in terms of time or opinions expressed.
- Conflicting opinions among members of a class are respected and responded to in a professional manner.
- No side conversations or other distracting behaviors are engaged in during class discussions or presentations.
- No offensive comments, language, or gestures are part of the classroom environment.
- Cell phones and other electronic devices (notebooks accepted) are placed in the “off” mode during class time.
- Children and pets (guide dogs excepted) are not brought to class.

Adherence to this code of etiquette will enable students to receive the most from their academic endeavors and should be seen as a regular and voluntary compact among faculty and students. Any infraction of this code, or act that is deemed to be materially or substantially disruptive of the learning environment, is cause for removal of a student from a class or for student disciplinary proceedings.

### **Online Student Code of Conduct**

Freedom of speech and expression is valued not only throughout the society but also, and particularly, in the academic setting. Equally valued is the respect given to university computer systems and information technology. To that end, students will adhere to the following online code of conduct:

- Access National University courses only for lawful purposes.
- Respect the privacy of other members of the class and other students.
- Respect the integrity of the University’s computer systems.
- Respect the diversity of opinions among the instructor and members of the class and respond to them in a courteous manner. Electronic communication consisting of all caps, large font, or bold print may be considered unprofessional and a form of verbal abuse.
- Maintain an environment free of harassment, stalking, threats, abuse, insults, or humiliation to the instructor and members of the class. This includes, but is not limited to demeaning written or oral comments of an ethnic, religious, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimidations by email, or on discussion boards and other postings in course shells.
- Abide by all rules and regulations published by the University and agree to be subject to disciplinary actions as described in the General Catalog.

### **Reasons for Probation, Suspension, and Dismissal of Students**

Students may also be disciplined for any of the following reasons:

- Academic dishonesty
- Forgery, altering University documents, or knowingly providing false information
- Disruption of the educational or administrative process of the University, by acts or expression
- Physical abuse or threat of abuse to students, University employees, or their families
- Verbal abuse or intimidation of students or University employees including shouting, use of profanity, or other displays of hostility
- Theft of University property or the property of a University employee, student, or visitor
- Vandalism or unauthorized destruction of University property or the property of a University employee, student, or visitor

- Sale or knowing possession of illegal drugs or narcotics
- Use of or being under the influence of alcohol on campus
- Possession, use, or threats of use of explosives or deadly weapons on University property
- Sexually explicit, indecent, or obscene behavior on University property or by any means of communication, including the Internet
- Sexual harassment
- Sexual assault
- Soliciting or assisting another in an act that would subject students to a serious University sanction
- Trespassing in an area of the University where the student is not authorized to be, or failure to leave immediately an area when directed by an employee of the University
- Using University equipment or networks to violate copyrights
- Violation of the University’s visitor policy
- Violation of the University’s animal policy
- Violation of the University’s computer regulations
- Violation of any other lawful policy or directive of the University or its employees.
- Any action that would grossly violate the purpose of the University or the rights of those who comprise the University
- Violation of the University’s Human Subject Research Policy and Procedures

Disciplinary action may include probation, suspension, or dismissal from the University. Students suspected of committing any violation of University policy are accorded procedures consistent with fair process typically before disciplinary action is imposed. However, in appropriate circumstances, students may be suspended prior to a hearing.

Any violation of University policy (including all forms of academic dishonesty) can result in a student being barred from graduate or professional schools at this or other universities. In addition, violating University policy can make a student ineligible for government commissions or other employment.

When a violation has occurred, an incident report, including the date, time, and circumstances of the alleged act, must be submitted to the Office of Student Affairs. This report includes a description of the actions of all parties involved, names of witnesses available, and documentary evidence that supports the charge. Students wishing to report a violation should file the report through the Director/Associate Director of Student Services, or a full-time/associate faculty member. Upon receipt of the report, the Student Judicial Affairs Officer will determine if a University policy may have been violated by the student. If there is insufficient information to make that determination, the Judicial Affairs Officer will notify the person making the report. If there is sufficient information, the Judicial Affairs Officer will contact the student and initiate an investigation.

If the investigation indicates that a violation of the code of conduct has occurred, the Judicial Affairs Officer will contact the student in writing informing the student of the charges in sufficient detail, including the time and place the alleged violation occurred and the penalty that would be appropriate if the student did in fact violate the policy. The Judicial Affairs Officer is responsible for ensuring the student’s right to due process by notice and the opportunity to be heard (hearing). If circumstances warrant it, the student may be given the option of waiving a hearing and accepting a lesser penalty. In cases that go to a hearing, disciplinary action is determined by the hearing committee. See Hearing and Appellate Procedures below.

A written warning is used when a student’s behavior is unacceptable, but is considered to be minor. It includes a warning that any other violation of University policy, for which the student is found guilty, will result in more severe disciplinary action. The notification does not result in a conduct record and therefore, is not appealable. The written warning shall be delivered to the email address most recently filed with the Office of the Registrar.

Disciplinary Probation is used in cases more egregious than those warranting a written warning, but less than those warranting suspension.

Suspension is appropriate in cases of serious misconduct, in cases when a student has violated a condition of disciplinary probation, or has failed to meet the stipulations of lesser sanctions. During the period of suspension, the student charged may not enter any National University campus, other than to attend the hearing regarding the merits of his/her suspension. Violation of any condition of suspension shall be grounds for dismissal.

Dismissal is the most severe sanction that the University may impose, and is permanent. If a dismissed student returns to the campus, he or she could be charged with unlawful entry and may be arrested.

Disciplinary Probation is entered on a student's transcript, with the beginning and end date, for the period of time that the probation is in effect. Suspension is entered on the student's transcript, with the beginning and end date, for the period of time that the suspension is in effect. Expulsion is entered on the student's transcript permanently, along with the date it takes effect.

### Hearing Procedures

Hearing committees consist of three (3) members. The Judicial Affairs Officer appoints two (2) members from the University faculty or administrative staff and the student selects one (1) member from the University faculty. If the student fails to provide the name of a faculty member, the Judicial Affairs Officer will select the third (3rd) member. The Judicial Affairs Officer also designates the chairperson to conduct the proceedings and report the committee's decision. Members of hearing committees must be unbiased and must not have had direct involvement in the case prior to the hearing.

Parties to the hearing are notified in writing of the hearing date, time, location and procedures at least seven (7) working days before the hearing.

Hearing procedures include the following:

- A written or electronic record of the proceedings is maintained and confidential. The hearing is closed and members of the committee will take reasonable precautions to ensure that the proceedings remain confidential, unless disclosure is required by law. A scribe or technician may be present to record the minutes.
- The proceeding is not governed by formal rules of evidence or by trial-like procedures. The procedures are those used by reasonable persons conducting a serious proceeding. The chairperson rules on all procedural questions.
- The chairperson reads the charges or complaint to the committee.
- Each side presents its case.
- Members of the committee have the right to question any of the parties or witnesses.
- Parties may be advised by legal counsel, but legal counsel may not be present during the hearing.
- The chairperson may terminate a party's right to address the committee if the party becomes abusive or persists in presenting irrelevant evidence or information.
- If either party fails to appear, the hearing will continue as if the absent party were present.
- The failure of any party to appear without justifiable cause will terminate that party's right to appeal.
- After the hearing, the committee deliberates and renders a decision by simple majority based on a preponderance of the evidence (a preponderance of evidence is generally defined as "greater than 50%" or alternatively "more likely than not."). If the committee decides to impose a penalty, it specifies the disciplinary action to be imposed.
- The Judicial Affairs Officer and the committee chairperson send written notification of the committee's decision and of the right to appeal it.

### Appellate Procedures

Students who believe they have been wrongfully or excessively penalized may appeal the hearing decision. Such an appeal must be requested in writing within thirty (30) days of notification of the action and must be directed to the Provost. In order for the Provost to convene an appeals committee, a student must establish that there is sufficient cause for such an appeal. It is the responsibility of the student to submit a clear, coherent, written statement providing the basis for the appeal, including any

supporting documentation. For an appeal to be granted, the student must present:

- a reasonable possibility that the unfavorable decision was clearly wrong, given the hearing committee's interpretation of the evidence or in the disciplinary action imposed.
- new evidence that was not available for presentation at the original hearing and which, if true, creates a reasonable probability of a different decision. In addition, a satisfactory explanation must be provided for the failure to present such evidence at the hearing.

At the discretion of the Provost any disciplinary action previously imposed may be suspended pending disposition of the appeal. The Provost will appoint a panel of three (3) individuals from the University's faculty, administration, or both, and will designate one of them to conduct appeal proceedings. Members of the committee must not have had direct involvement in the case prior to the appellate hearing. A meeting time is arranged within thirty (30) days of receiving of the request for an appeal. All relevant information is then considered by the committee, including the record of the proceedings of the original hearing, written statements of the case and the testimony of any witnesses for each of the opposing parties and any new evidence presented.

The hearing procedures for the appeal will be identical to the procedures for the original hearing (see Hearing Procedures). The appeal committee will make every attempt to render a decision within ten (10) working days from the date of the hearing. The committee may recommend to uphold the previous decision, mitigating sanctions, or dismiss all charges or complaints. The chairperson of the committee will send a written report of the appeal committee's recommendation, including a description of the appeal and the rationale for its recommendation, to the Provost. Within fourteen (14) days of receiving the recommendation, the Provost will send written notification of his/her decision to the student. This decision is final.

All documentation for all hearings will be kept on file.

Disciplinary expulsions are noted on student transcripts. Probation and suspension are also noted on transcripts but only for the duration of the probation or suspension.

Any retaliatory action of any kind by an employee or student of the University against any other employee or student of the University as a result of that person's seeking redress under these procedures, cooperating in an investigation, or other participation in these procedures is prohibited and will be regarded as the basis for disciplinary action.

### Hearing Rights

In disciplinary, administrative, grievance, and appeal hearings, parties have the following rights:

- To be present during the hearing
- To be informed of all the evidence received by the committee
- To present witnesses - only those with direct knowledge of the incident shall be allowed to appear as witnesses.
- To challenge or rebut evidence or testimony presented by the opposing party
- To submit evidence on behalf of their own position. Prior to the hearing, the student will provide the Judicial Affairs Officer with copies of all information (relevant to the incident) to be shared at the hearing and a list of possible witnesses. These items must be provided at least 5 days prior to the hearing.
- To make a summary argument and to respond to the argument of the opposing party to bring another person to the hearing as support or as a spokesperson.

Forty-five (45) days from notification of the allegation/dismissal to submit a written hearing request to the Judicial Affairs Officer. (Thirty (30) days to appeal a hearing decision – See Appellate Procedures)



## **ACADEMIC INFORMATION FOR UNDERGRADUATE DEGREES**

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- 56 Admission Procedures**
- 57 Sources of Credit**
- 59 CLEP Examinations Chart**
- 60 Advanced Placement (AP) Exam Chart**
- 60 National University Credit and Challenge  
by Examination**
- 61 International Baccalaureate (IB) Chart**
- 62 DSST Examinations Chart**
- 63 Grades and Grading System**
- 64 Satisfactory Academic Progress**
- 64 Graduation Requirements for  
Undergraduate Degrees**
- 65 Major, Minor, and Concentration Requirements**
- 65 Honor Societies**
- 66 Degree Conferral**



# ACADEMIC INFORMATION FOR UNDERGRADUATE DEGREES

## ADMISSION PROCEDURES

### Admissions Advising

National University offers year-round admission. Persons seeking admission to undergraduate studies at National University are unique in their specific circumstances and needs. Applicants are interviewed by an admissions advisor, who discusses the applicants' specific requirements for admission at the initial interview. All prospective and registered students receive a unique nine-digit student number.

### Faculty Advising

Upon admission to the University, students may contact a faculty advisor to assist them in making appropriate decisions about educational and career-related issues. Faculty advisors, who are listed under each degree program within this catalog, provide students the benefit of experience in professional practice and insight gathered from years of formal study in higher education. Students should direct requests for information about curriculum content, course requirements, proficiency examinations, and program goals to their faculty advisor as well. Faculty advisors help students meet University academic regulations and standards.

### Use of Social Security Number

Applicants must include their Social Security Number where indicated on the application for admission forms. The Social Security Number is used to identify student records, including records for financial aid eligibility and the disbursement and repayment of financial aid and other debts payable to the University. The Internal Revenue Service requires the university to file forms that include information such as amount paid for tuition. This information is used by the IRS to help determine whether a student, or a person claiming the student as a dependent, may take a credit or deduction on their federal income taxes.

### E-mail Address

All students must provide a valid e-mail address where indicated on the application for admission forms. National University regularly uses e-mail to communicate important announcements to its students regarding financial aid, student accounts, advising, student records, and more. As the preferred method of communication, it is important that students provide the University with an e-mail address they use frequently and notify the University if it changes. The University keeps students e-mail addresses on file with other contact information.

### Qualifications

Applicants for admission to an undergraduate program must meet the following requirements:

#### Freshman Admission Applicants:

- Must have attended a regionally accredited high school\*
- High school graduates applying for enrollment at National University must have a high school GPA of 2.0.
- High school applicants who are within six months of completing their high school diploma may be eligible for conditional admission. See conditional admission section below.

\*Applicants who attended a non-regionally accredited high school or were home schooled must petition the Committee on the Application of Standards for admission approval.

#### Home Schooled Applicants:

Undergraduate students who indicate they received their secondary school instruction through home schooling will be required to submit an official high school transcript with the following information:

- Student's name
- A list and description of courses completed.
- Grades earned for the courses completed.
- Number of credits earned for each course
- Names of textbooks utilized in courses
- Signed by person who administered curriculum
- Graduation date (if applicable)

\*Courses must be broken down by grade level.

Students must also provide a letter from their state Department of Education or local school district confirming home school registration. If the student's home state requires that individuals who were home schooled through secondary school take the GED to show high school completion, the student must submit official GED test scores to the Office of the Registrar. The student will not be required to submit an official high school transcript if providing official GED test scores.

Students will be considered to be provisionally accepted (see provisional acceptance section below) until receipt of the required documentation. Students may be allowed to take courses but should note that final verification of high school completion will be made by the Office of the Registrar at the time official high school transcripts are received. Students who are deemed to not have met the high school completion requirement will be required to submit official GED test scores prior to continued enrollment.

### Transfer Applicants

- Applicants who have completed fewer than 90 quarter (60 semester) units of transferable college credit (remedial-level, pass/fail, and repeat courses are nontransferable) must have graduated from high school, passed a high school-level G.E.D. test (standard score for each section must be at least 410 with an overall score of 450), or received a Certificate of Proficiency from a State Department of Education to be accepted on a provisional basis.
- Applicants transferring from regionally accredited colleges and universities are admitted as degree students if their cumulative grade point average from all schools is 2.0 (C) or better.
- Applicants with a cumulative grade point average below 2.0 may be admitted on probationary status if the Committee on the Application of Standards (CAS) determines there is sufficient evidence of potential to complete college studies. See Probationary Admission below.
- Students who have documents from a foreign country must request a foreign credential pre-evaluation to determine eligibility through their admissions advisor.

All applicants must present preliminary evidence of prior education at the required interview with an admissions advisor. Unofficial transcripts are acceptable.

All applicants to the University must also:

1. Complete an application for admission
2. Execute an enrollment agreement
3. Pay a nonrefundable application fee of \$60

Note: If the University determines that a student does not meet stated admissions requirements, his/her studies will be interrupted. The Committee on the Application of Standards must approve any exceptions to the above admissions requirements before the applicant can be accepted for admission to the University.

### Provisional Acceptance

Undergraduate students may take courses during provisional acceptance while the Office of the Registrar awaits receipt of official transcripts from:

- All colleges and universities the student has previously attended.
- All examinations the student has taken including CLEP, AP, DAN TES, and/or Excelsior College Exams
- Military documents
- Official Military DD-295 or Official Military JST Transcript (Army, Navy or Marine)
- Copy of the DD-214
- Coast Guard Institute (Coast Guard)
- Community College of the Air Force transcript
- High school transcripts (required if the student has less than 60 semester units [90 quarter units] of transferable coursework from previous collegiate level institutions or if the student has not attended any higher education institution). G.E.D. or high school proficiency certificates may be submitted by students who have obtained high school equivalency through an alternative route. Coursework not included in total transferable units include remedial, pass/fail, repeats, and excess vocational, and PE.

If the Office of the Registrar does not receive all required documentation within 60 days of the date of admission, the students' studies are temporarily interrupted until the Registrar receives all official documents. If the students' studies are temporarily interrupted this can affect financial aid eligibility. The Registrar will send a courtesy notification every 30 days to students in provisional status advising them of any outstanding documentation needed for their file to be complete. Students should also view their To-Do list which can be found on the student web portal to determine outstanding documents. Coursework satisfactorily completed during the provisional acceptance period counts toward graduation if it is consistent with specific degree program requirements.

### Conditional Admission

Applicants who are within six months of completing a high school diploma may apply and be conditionally admitted into a National University undergraduate program. The official admission of such students will occur when they produce, in a sealed envelope, an official transcript that shows conferral of the high school completion. Baccalaureate courses may not be taken until proof of the student's high school conferral is provided. When the Office of the Registrar receives this official documentation, students will be considered for full admission into a National University program.

### Probationary Admission

Applicants who have a cumulative grade point average below 2.0 and who are ineligible for admission must apply to the Committee on the Application of Standards (CAS). Students should work directly with an admissions advisor to submit all of the following required documentation through the CAS e-form process:

- Transcripts from all institutions the student has attended (unofficial transcripts are acceptable). High school transcripts must be included
- A copy of their mathematics and English ACCUPLACER exam scores
- A letter of intent explaining their purpose and goals for attending the University and academic strategies student intends to employ to ensure academic success

If CAS determines that there is sufficient evidence of potential to complete college studies, it will admit the student on probation for a specific number of courses in which the student must meet all conditions of CAS. The number of courses and other requirements set as CAS conditions are individualized according to each student's situation. Students are not eligible to receive financial aid during the probationary admission period. Upon satisfactory completion of all CAS conditions, the student will be officially admitted to the University. If the student does not meet the conditions of CAS during the probationary period, he/she will not be admitted to the University.

### Mathematics and English Evaluation

It is strongly recommended that all entering undergraduate students take the ACCUPLACER mathematics and English evaluation as part of the admissions process. The results of the evaluation are printed immediately and a copy is provided to students.

First-time undergraduate students can take the ACCUPLACER evaluation tests once at no charge. Subsequent examinations can be repeated after 14 days for a \$5 fee. The ACCUPLACER may be repeated a maximum of three (3) times.

### Mathematics Placement

Students may request transfer credit for lower division college-level mathematics courses completed elsewhere with a grade of "C-" or better. Remedial-level courses will not transfer or count for credit. It is recommended that students without transferable mathematics credits complete the pre-collegiate mathematics sequence, MTH 012A and MTH 012B, prior to starting college-level mathematics. Students may test out of one or both of these classes through successful placement by ACCUPLACER.

MTH 012A and MTH 012B are remedial-level courses and do not grant collegiate credit. Grading for these courses is Satisfactory/Unsatisfactory only.

### English Placement

Students may request transfer credit for lower division college-level English courses completed elsewhere with a grade of "C-" or better. Remedial-level courses will not transfer or count for credit. It is strongly recommended that students without transferable English credits take the ACCUPLACER exam to determine whether they should complete the pre-collegiate English course, ENG 013, prior to college-level English.

Students may test out of ENG 013 through successful placement by Accuplacer.

ENG 013 is a remedial-level course and does not grant collegiate credit. Grading for this course is Satisfactory/Unsatisfactory only.

### Transcript Requests of Other Institutions

Transfer credit earned at other institutions cannot be considered without official transcripts. To expedite the evaluation process, it is recommended that students request transcripts directly from all of their previous institutions or the evaluation process may be delayed.

Official transcripts should be sent by the issuing institution directly to:

Office of the Registrar  
National University  
11255 North Torrey Pines Road  
La Jolla, California, 92037-1011

The Office of the Registrar will not accept hand-carried transcripts or transcripts "issued to student" as official documents unless they are in a sealed envelope from the issuing institution.

Upon request, the University will process on the student's behalf the initial request for all domestic transcripts (excluding GED scores), including payment of associated fees. If a transcript has not arrived within four weeks, the Office of the Registrar will submit a second request. Thereafter, it becomes the student's responsibility to ensure that the University receives the document(s). Students are advised that they must follow up with the documents that are outstanding to assure receipt within the required time frame.

When the admission process is complete, any further acquisition of transcripts is the sole responsibility of the student.

The University will not process requests for foreign transcripts/documents. Students who have attended institutions in foreign countries or who have a GED must acquire official transcripts/documents themselves.

Transcripts from other institutions that have been presented for admission or evaluation become a part of the student's academic file and are not returned or copied for distribution.

### Evaluation

Evaluation is the official determination of the required course of study for a student's degree and is the final step in the admission process. After the Office of the Registrar receives all official transcripts and other documents required for admission, the student's records are evaluated for transferability of credit. The course of study that a student discussed with an advisor at the initial admissions interview is only an estimate of the course requirements for a degree. The Office of the Registrar makes the official determination regarding the applicability of previous coursework toward meeting the requirements of a particular degree program. Students will be notified by e-mail when they may view their Academic Advisement Report (AAR) online through the student portal. As students progress through the program, the AAR will show coursework already completed and courses remaining to be completed. The AAR helps students, advisors, and the University to determine progress toward completion of program requirements and also serves as a graduation check.

Applications for financial aid cannot be processed until evaluation has occurred. Federal regulations require the University to determine the appropriate grade level for funding purposes.

### Readmission Procedures

Students who are in good standing but have a break in enrollment for 12 or more months may be readmitted to the University by submitting an application for readmission. They are required to follow the policies of the catalog in effect at the time of readmission, including the degree requirements for their program. Students must also pay a readmission fee.

## SOURCES OF CREDIT

### Transfer Credit

National University accepts credits from regionally accredited institutions. It may also accept credits from institutions that are accredited by an agency which is a member of Council for Higher Education Accreditation (CHEA), provided that the

academic quality of the institutions can be verified and the credits otherwise comply with National University guidelines. National University may also accept credits from collegiate institutions which are accredited by non-CHEA member agencies provided they are recognized by the United States Secretary of Education. In either case, the below process must be followed to request transfer credit consideration.

Transfer of credits from agencies which are not CHEA members are subject to additional scrutiny to validate their academic programs adhere to the standards of institutions accredited by CHEA members. Credits transferred from collegiate institutions will only be accepted if they apply to the student's degree or certificate program and if they are comparable in nature, content, and level of credit to similar coursework offered by National University. Transfer students must have been in good standing and eligible to return to the last institution in which they were enrolled. Remedial college credits do not meet collegiate standards and will not be accepted as transfer credits by National University.

National University makes transfer credit decisions based upon its assessment of the collegiate institution and the circumstances and performance of the student. For students transferring from non-regionally accredited institutions, National University may accept fewer transfer credits, require the student to have earned minimum grades, or accept transfer credit on a provisional basis to be validated by satisfactory coursework in residence. Under no circumstances will National University accept transfer credit for a course in which the student earned a "D+" or lower grade.

The maximum transfer credit allowed for an Associate's degree is 58.5 quarter units. The maximum allowed for a bachelor's degree is 135 quarter units.

#### **Requests for transfer credit consideration:**

Any student who would like to request consideration of non-regionally accredited coursework must submit the following via a CAS e-form (available on the Student Portal).

- Institution's catalog for the years the student attended
- Listing of what courses the student would like to use in transfer, including direct course equivalencies whenever possible.

It is recommended that the student work with an admissions advisor for assistance.

#### **California Community College Transfer to Triumph Program**

Students who are transferring from a California Community College may be eligible for the Transfer to Triumph program. To be eligible students must meet the following requirements:

- Be in good academic standing at the time of application to National University
- Have completed their last 30 semester units at a California Community College
- Their last semester of attendance was at a California Community College and is within 24 months of their application date to National University

Further information on the Transfer to Triumph program can be found in the Scholarships section of this catalog. This award applies only to courses governed by the University's standard tuition rate.

#### **Collegiate**

The maximum number of collegiate lower-division credits acceptable for transfer to an associate degree program is 58.5 quarter units (39 semester units). For a baccalaureate degree program, no more than 103.5 quarter units (69 semester units) are allowed.

The maximum number of upper-division collegiate credits acceptable for transfer is 40.5 quarter units (27 semester units). A total of 36 quarter units (24 semester units) may be accepted from the extension division of a regionally accredited university. In either case, only credits accepted by the previous institution toward degree requirements are transferable.

The maximum credit allowed in transfer for vocational/technical courses is 18 quarter units (12 semester units). The maximum credit allowed in transfer for physical education is 9 quarter units (6 semester units).

#### **Non-collegiate Credit Transfer**

The maximum number of credits acceptable for non-collegiate learning is 58.5 quarter units (39 semester units) for an associate degree or a cumulative total of 67.5 quarter units (45 semester units) for a baccalaureate degree. This maximum total is cumulative of all non-collegiate coursework. The credits may be from the following sources:

- A maximum of 67.5 quarter units (45 semester units) may be earned at the lower-division by College-Level Examination Program (CLEP) examinations
- A maximum of 45 quarter units (30 semester units) may be earned at the lower division level for Advanced Placement Examinations (AP) or International Baccalaureate Examinations (IB).
- A maximum of 22.5 quarter units (15 semester units) may be earned for:
  1. DANTES independent study/credit by examination courses
  2. Excelsior College Examinations
  3. Credit recommended in the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE])
  4. Local, state, and federal law enforcement training recommended by ACE and such credit as is listed on a transcript from a regionally accredited college.
  5. Departmental examinations at National University (Credit by Examination)
- A maximum of 45 quarter units (30 semester units) may be allowed for military experience and military schools that have been evaluated by ACE. An additional 9 quarter units of correspondence credit is available to active or veteran Marine Corps students.
- A maximum of 45 quarter units (30 semester units) of lower-division credit may be allowed for clinical courses for a registered nurse who is a graduate of a three-year hospital nursing school. Up to 22.5 quarter units (15 semester units) of additional lower-division credit may be granted for academically equivalent coursework.

#### **College Level Examination Program (CLEP)**

The University awards credit for successful completion of CLEP subject examinations. CLEP examination credit can be applied to meet general education, preparation for the major or general lower-division elective credit. National University awards credit for CLEP examinations in accordance with published American Council on Education (ACE) guidelines. The ACE guidelines provide a minimum score required as well as a recommendation on the amount of transfer credit that may be applied. In order to receive credit for CLEP examinations, an official CLEP transcript must be received by the Office of the Registrar. CLEP information can be found at the College Board website: [www.collegeboard.com/clep](http://www.collegeboard.com/clep). The total number of units awarded for CLEP exams cannot exceed 67.5 quarter units (45 semester units) towards a bachelor's degree.

Currently the following National University campuses offer the CLEP examinations: San Diego, Costa Mesa, Nellis Air Force Base, Redding, Sacramento, Twentynine Palms, MCAS Miramar, and San Jose. For further information on testing sites please contact the Testing Center at (858) 541-7951.

Note: Students who have taken a CLEP general examination prior to 2002 may use the credit towards general education requirements, as it applies, up to a maximum of 27 quarter units or 18 semester hours. National does not accept transfer credits for the mathematics general CLEP examination.

The chart below provides the transfer credit allowed for CLEP examinations.

#### **Defense Activity for Non-Traditional Education Support (DANTES)**

DANTES Subject Standardized Tests (DSST) demonstrates college-level learning acquired outside of the college classroom. The tests cover material usually taught in one-semester or one-year post-secondary courses. Credit for successful completion of DSST can be applied toward general education, preparation for the major or general elective credit. Most tests grant three semester units (4.5 quarter units) of credit. The total number of units awarded for subject exams cannot exceed 22.5 quarter units (15 semester units).

DSST are available to military personnel through the Base Education Services Officer. Further information can be found at <http://getcollegetcredit.com>.

Note: The DANTES code for National University is 7858.

#### **Excelsior College Examinations**

The Excelsior College Examinations assess college-level competence acquired in non-campus settings in more than 40 arts and sciences, business, education, and nursing subjects. Credit for successful completion of an Excelsior College Examination can be applied toward general education, preparation for the major or general lower-division elective credit. Most examinations are for three or six

semester units (4.5 or 9 quarter units) of credit. The total number of units awarded for subject exams cannot exceed 22.5 quarter units (15 semester units). Excelsior College Examination information is available through the Testing Center in San Diego. Students should contact the Testing Center at (858) 541-7951 for further information.

### Advanced Placement (AP) Exams

National University awards college credit, as recommended by ACE, for advanced placement exams passed with a score of 3, 4, or 5. An official transcript must be received in order for credit to be awarded. Further information on the AP Exams can be found at [www.collegeboard.com](http://www.collegeboard.com). Credits from the AP Exams will transfer as outlined in the chart.

### Military Education Credit

To be awarded credit for courses taken at military service schools on an equivalency basis, students must submit proof of discharge (Form DD-214), an “Ap-

plication for the Evaluation of Educational Experiences during Military Service” (DD-295), Coast Guard Institute transcript for Coast Guard service members, Community College of the Air Force transcript, or a military JST transcript for those serving in the Army, Navy or Marine Corps.

Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

Credits for military school courses apply directly to undergraduate work as it relates to the level and content of the particular degree program. The maximum amount of transfer credit granted for military education is 45 quarter units. An additional 9 units of correspondence coursework may be granted for active or veteran students who served in the Marine Corps. National University will only accept credit for military courses that have been recommended for credit by the American Council on Education (ACE).

CLEP EXAMINATIONS	MINIMUM SCORE	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR:
American Government	50	4.5	POL201
American Literature	50	9	2 General Ed Area D: Humanities
Analyzing & Interpreting Literature	50	9	LIT100 & 1 General Ed Area D: Humanities
Biology	50	9	BIO100 & 1 General Ed Area A-G
Calculus	50	4.5	MTH220
Chemistry	50	9	CHE101 & 1 General Ed Area A-G
College Algebra	50	4.5	MTH215
College Composition	50	9	ENG100, ENG101 & ENG240
College Composition Modular	50	4.5	ENG100 & ENG101
College Mathematics	50	9	1 General Ed Area B & 1 open elective
English Literature	50	9	2 General Ed Area D: Humanities
Financial Accounting	50	4.5	ACC201
French Lanugage - Level 1	50	9	2 General Ed Area D: Language
French Lanugage -Level 2	59	18	2 General Ed Area D: Language & 2 General Ed Area A-G
German Language - Level 1	50	9	2 General Ed Area D: Language
German Language - Level 2	60	18	2 General Ed Area D: Language & 2 General Ed Area A-G
History of the United States I: Early Colonization to 1877	50	4.5	HIS220A
History of the United States II: 1865 to Present	50	4.5	HIS220B
Human Growth and Development	50	4.5	1 General Ed Area E
Humanities	50	9	2 General Ed Area D: Humanities
Information Systems and Computer Applications	50	4.5	1 General Ed Area A-G
Introduction to Educational Psychology	50	4.5	1 Open Elective
Introductory Business Law	50	4.5	1 Open Elective
Introductory Psychology	50	4.5	PSY100
Introductory Sociology	50	4.5	SOC100
Natural Sciences	50	9	2 General Ed Area A-G
Precalculus	50	4.5	1 General Ed Area B
Principles of Macroeconomics	50	4.5	ECO204
Principles of Management	50	4.5	1 Open Elective
Principles of Marketing	50	4.5	1 Open Elective
Principles of Microeconomics	50	4.5	ECO203
Social Sciences and History	50	9	2 General Ed Area E
Spanish Language - Level 1	50	9	SPN100 & SPN101
Spanish Language - Level 2	63	18	SPN100, SPN101, SPN200, SPN201
Western Civilization I: Ancient Near East to 1648	50	4.5	1 General Ed Area D: Humanities
Western Civilization II: 1648 to Present	50	4.5	1 General Ed Area D: Humanities



### Other Non-Collegiate Credit

National University accepts credit, to the maximum specified above, from coursework recognized by the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE]). Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

Credits for non-collegiate approved courses apply directly to undergraduate work as it relates to the level and content of the particular degree program.

### International Baccalaureate (IB)

National University awards college credit to students who successfully obtain the International Baccalaureate Diploma who have completed Higher Level Examinations. Credit may also be awarded to students who score a 4, 5, 6, or 7 on individual Higher Level Exams. No credit is awarded for IB standard level passes. An official transcript must be received in order to award credit. Further information on the IB programs can be found at [www.ibo.org](http://www.ibo.org). The chart shows how the credit from IB Examinations will be transferred.

## NATIONAL UNIVERSITY CREDIT AND CHALLENGE BY EXAMINATION

### Credit by Examination

Currently enrolled students can obtain credit for undergraduate courses through departmental examinations, called Credit by Examination, when their training or work experience seems to provide proficiency in the subject matter of an approved course. Only a limited number of courses are approved for Credit by Examination. Students cannot challenge courses that are in the same area as an advanced course taken at National University or another regionally accredited institution. Students cannot challenge a course they have previously attempted regardless of grade earned. Students can apply for credit or challenge by exam via the e-forms link on the Student Portal. Students must submit their petitions after they are evaluated at the University. The Office of the Registrar determines eligibility for the exam and whether an exam will be for credit or challenge, depending on the student's degree program requirements. Approval for the exam must be granted by the Office of the Registrar. Students must pay the required \$100 Credit by Examination fee to the Business Office and complete the exam within 120 days of the approval. Should the 120 days pass, students are eligible for one (1) extension per exam. The Office of the Registrar determines eligibility for this exception, including extension length.

All Credit by Examinations must support the objectives of the student's degree program and cannot exceed 13.5 quarter units in an associate degree program or

ADVANCED PLACEMENT (AP) EXAM	SCORE REQUIRED	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR:
Biology	3	12	BIO100, 1 General Ed Area A-G & 1 Open Elective
Calculus AB	3	4.5	MTH220
Calculus BC	3	4.5	MTH221
Chemistry	3	12	CHE101, 1 General Ed Area A-G & 1 Open Elective
Chinese Language and Culture	3	9	2 General Ed Area D: Humanities
Computer Science A	3	6	1 General Ed Area A-G
English Language/Composition	3	9	ENG100, ENG101 & ENG240
English Literature/Composition	3	9	ENG100, ENG101 & LIT100
European History	3	9	2 General Ed Area E
French Language	3	9	2 General Ed Area D: Language
German Language	3	9	2 General Ed Area D: Language
Human Geography	3	4.5	1 General Ed Area D: Humanities
Italian Language and Culture	3	12	2 General Ed Area D: Humanities
Japanese Language and Culture	3	9	2 General Ed Area D: Humanities
Latin: Literature	3	12	2 General Ed Area D: Humanities
Latin: Vergil	3	12	2 General Ed Area D: Humanities
Macroeconomics	3	4.5	ECO204
Music Theory	3	9	2 General Ed Area D: Arts
Physics B	3	12	PHS104, 1 General Ed Area A-G & 1 Open Elective
Physics C: Electricity and Magnetism	3	6	PHS104 & 1 General Ed Area A-G
Physics C: Mechanics	3	6	1 General Ed Area F & 1 General Ed Area A-G
Psychology	3	4.5	PSY100
Spanish Language	3	9	2 General Ed Area D: Language
Spanish Literature	3	9	2 General Ed Area D: Humanities
Statistics	3	4.5	MTH210
Government and Politics: US	3	4.5	POL201
Government and Politics: Comparative	3	4.5	1 General Ed Area E
United States History	3	9	HIS220A & HIS220B
World History	3	9	1 General Ed Area E
United States History	3	9	HIS220A & HIS220B
World History	3	9	1 Area E

22.5 quarter units in a baccalaureate degree program, including credits earned toward an associate's degree. Of the 22.5 quarter units permitted in a bachelor's degree, a maximum of 13.5 may consist of credit by examination at the upper-division level. Students can earn no more than 9 quarter units in their major or minor through Credit by Examination. All grades are final; students cannot repeat a Credit by Examination if a previous attempt was unsuccessful.

Credit from Credit by Examination counts toward graduation, but no grade points are assigned or included in calculating grade point averages. The credit cannot be used to meet residency requirements.

### Challenge by Examination

Waivers for certain University courses can only be established by departmental examination. Typically, the courses that require a departmental examination to establish an exemption (waiver) are courses in computer science, mathematics, technical subjects, or those required for licensure or a credential.

Procedures to challenge a course by examination are identical to the credit by examination procedures explained above, but the fee for a Challenge by Examination is \$50 rather than \$100. No credit is awarded for a waived course.

### Undergraduate Course Waivers

Occasionally, students may request to waive a course based on previous training or experience. If the student can demonstrate mastery of a subject, the department chair must submit a recommendation to the Committee on the Application of Standards (CAS) to allow the student to waive the particular course. If the course in question has an available credit/challenge by examination (or other approved test) then the student must pass the examination and may not request for a waiver.

A course waived by CAS exempts a student from that course. Units are not awarded for a waived course, so the student may need to take a different course such as an elective in order to meet the overall unit requirements for the degree. Waiver requests must be submitted at least 4 weeks prior to the class scheduled start date.

### Language Proficiency Testing

National University will offer competency proficiency testing for students who need foreign language proficiency verification through an agreement with the University of Pennsylvania Penn Language Center. National University will allow students, who have met the Intermediate level of foreign language proficiency through this test, to waive the Area D language requirement in G.E. This service is made available to the students at a reasonable cost. (\*note that students will still need to meet the overall unit requirement for General Education).

The foreign language competency test consists of four components which measures one's ability to communicate, read, and write in a foreign language. The duration of the test varies depending on the language, and could take approximately 1.5 – 2 hours. The test contains an oral interview between test candidate and the tester, a reading comprehension assignment, and a writing sample. University of Pennsylvania Penn Language Center will keep a permanent record of the results of the competency testing. Credit by exam is not available.

Website: [www.pls.sas.upenn.edu/testing](http://www.pls.sas.upenn.edu/testing)

### Servicemembers Opportunity College (SOC) Agreement

National University is a member of Servicemembers Opportunity Colleges (SOC) Consortium and participates in the SOCNV, SOCMAR, and SOCCOAST bachelor programs, as well as the SOCNV and SOCMAR associate degree programs for active duty personnel and their adult dependents. Although not yet a partici-

INTERNATIONAL BACCALAUREATE HIGHER LEVEL	SCORE REQUIRED	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR: (IB HL) EXAMS
Biology	4-7	9	SCI161 & SCI162
Business & Management	4-7	9	Open Elective Units
Chemistry	4-7	9	SCI141 & SCI142
Computer Science	4-7	9	Open Elective Units
Design Technology	4-7	9	Open Elective Units
Economics	4-7	9	ECO203 & ECO204
Environmental Systems	4-7	9	2 General Ed Area A-G
Extended Essay	4-7	9	Open Elective Units
Film	4-7	9	Open Elective Units
French A2	4-7	9	2 General Ed Area D
Geography	4-7	9	2 General Ed Area A-G
German A2	4-7	9	2 General Ed Area D
History	4-7	9	1 General Ed Area E & 1 General Ed Area A-G
Japanese A2	4-7	9	2 General Ed Area D
Language A1	4-7	9	General Ed Area A1 & LIT100
Mathematics	4-7	9	1 General Area B & 1 General Ed Area A-G
Music	4-7	9	Open Elective Units
Physics	4-7	9	SCI171 & SCI172
Spanish A2	4-7	9	SPN200 & SPN201
Spanish B	4-7	9	SPN200 & SPN201
Theatre Arts	4-7	9	2 General Ed Area D
Theory of Knowledge	4-7	9	Open Elective Units
Visual Arts	4-7	9	Open Elective Units
Theatre Arts	4-7	9	2 General Ed Area D
Visual Arts	4-7	9	Open Elective Units
Extended Essay	4-7	9	Open Elective Units
Theory of Knowledge	4-7	9	Open Elective Units

	DSST EXAMINATIONS	MINIMUM SCORE	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR:
<b>Lower Division</b>	A History of the Vietnam War	44	4.5	1 General Ed Area E
	Art of the Western World	48	4.5	1 General Ed Area D: Art
	Astronomy	48	4.5	Open Elective
	Business Mathematics	400	4.5	Open Elective
	Environment and Humanity: The Race to Save the Planet	46	4.5	Open Elective
	Foundations of Education	46	4.5	Open Elective
	Fundamentals of College Algebra	400	4.5	MTH 215
	Fundamentals of Counseling	45	4.5	Open Elective
	General Anthropology	47	4.5	Open Elective
	Human Resource Management	46	4.5	Open Elective
	Human/Cultural Geography	48	4.5	1 General Ed Area E
	Introduction to Business	400	4.5	BUS100
	Introduction to Computing	400	4.5	Open Elective
	Introduction to Law Enforcement	45	4.5	Open Elective
	Introduction to the Modern Middle East	47	4.5	1 General Ed Area E
	Lifespan Developmental Psychology	46	4.5	Open Elective
	Organizational Behavior	48	4.5	Open Elective
	Personal Finance	400	4.5	Open Elective
	Physical Geology	46	4.5	EES 103
	Principles of Financial Accounting	47	4.5	ACC 201
	Principles of Physical Science I	47	4.5	PHS 102
	Principles of Public Speaking	47	4.5	COM 103
	Principles of Statistics	400	4.5	MTH 210
	Principles of Supervision	400	4.5	Open Elective
Technical Writing	46	4.5	Open Elective	
Western Europe Since 1945	45	4.5	1 General Ed Area E	
<b>Upper Division</b>	Business Ethics and Society	400	4.5	BUS Elective
	Business Law II	44	4.5	LAW 305
	Criminal Justice	400	4.5	CJA Elective
	Ethics in America	400	4.5	1 General Ed Area D: Humanities
	Here's to Your Health	400	4.5	COH Elective
	Introduction to World Religions (Diversity enriched)	400	4.5	1 General Ed Area D: Humanities
	Management Information Systems	400	4.5	CIS 301
	Money and Banking	48	4.5	ECO 447
	Principles of Finance	400	4.5	FIN 310
	Rise and Fall of the Soviet Union	45	4.5	1 General Ed Area E
	Substance Abuse (former Drug & Alcohol Abuse)	400	4.5	COH 318
	The Civil War and Reconstruction	47	4.5	HIS220A

part, but anticipating to be in the SOCAD program, National University will also prepare student agreements for Army personnel and their adult dependents so they may receive the benefits of a SOC contract.

The SOC network programs provide active duty personnel with a means to earn an undergraduate degree from National University if they are transferred before completion of the required coursework.

National University issues a SOC Student Agreement to active-duty service members admitted, provided that National University is designated as student's home college. A home college is defined as the institution where a student is making academic progress toward degree completion.

To receive a SOC Agreement students must:

- Apply to National University online or by submitting paperwork to an admissions advisor
- Send all official transcripts and other required documents, such as the DD295 or JST transcript to National University Office of the Registrar for evaluation.
- Satisfactorily complete 9 quarter units in residence.
- Submit a SOC e-form request on the SOAR student portal.

Participation in the SOC network begins when a Student Agreement is issued. This agreement guarantees that National University will accept transfer credit from SOC member colleges and will confer the undergraduate degree upon suc-

successful completion of all academic requirements. A SOC Student Agreement is valid for a period of five years. If the student requests to change their academic degree plan, a new SOC contract will be created according to the catalog in effect at the time of the request. To be eligible for an associate or bachelor's degree from National University under the terms of the Student Agreement, students must complete at least 18 quarter units in residence at National University. Military students should contact the Office of the Registrar for further information.

National University extends the Student Agreement process to service members of the military branches noted above and their adult dependents.

### Approval for the Training of Veterans

National University is approved for the training of veterans under Title 38 of the U.S. Code, Chapters 30, 31, 32, 34, and 35. The University is also authorized for active duty tuition assistance.

### Course Applicability for Veteran Students Using VA Benefits (Applies to all GI Bill Educational Programs)

Only courses that satisfy the minimum requirements outlined in the curriculum guide or graduation evaluation form can be certified for VA purposes. A curriculum guide or graduation evaluation form should be kept in the student's file. When a student takes a course that does not fulfill a program requirement, it cannot be certified for VA purposes. Excessive free electives, for example, cannot be certified.

National University students are responsible for notifying the Veterans Affairs' Department of any change of status, class schedule changes, or unsatisfactory progress.

## GRADES AND GRADING SYSTEM

Students who have more than three absences, excused or unexcused, cannot be awarded a satisfactory grade.

### Definition of Grades

**A** Outstanding Achievement  
Significantly Exceeds Standards

**B** Commendable Achievement  
Exceeds Standards

**C** Acceptable Achievement  
Meets Standards

**D** Marginal Achievement  
Below Standards

**F** Failing

**I** Incomplete  
A grade of "I" may only be issued when a student has attended at least two-thirds of the course sessions and is unable to complete the requirements due to uncontrollable and unforeseen circumstances. Students must communicate these circumstances (preferably in writing) to the instructor prior to the final day of the course. If an instructor decides that an "Incomplete" is warranted, he/she issues a grade of "I" and notates the conditions for removal of the "Incomplete" in the student's record. Students receive notification via e-mail about the assignment of an "Incomplete," including the conditions for its removal. The information remains in place until the "Incomplete" is removed or the time limit for removal has passed. An "Incomplete" is not issued when the only way the student could make up the work is to attend a major portion of the class the next time it is offered. Students must resolve "Incomplete" grades no later than six months after the official course end date. Students can be required to remove an "Incomplete" in a shorter period of time at the discretion of the instructor. The Office of the Registrar sends a courtesy e-mail reminder regarding the "Incomplete" on record when four months has elapsed since the course end date, provided the instructor has not specified a shorter end date. An "I" that is not removed within the stipulated time becomes an "F" or a "U" based on the grading criteria of the course. No grade points are assigned. The "F" is calculated in the grade point average.

**U** Unsatisfactory  
A permanent grade indicating that a credit attempt was not acceptable. An "Unsatisfactory" grade merits no grade points and is not computed in the grade point average.

**W** Withdrawal  
Signifies that a student has withdrawn from a course after midnight of the ninth day of the class session. A "Withdrawal" is not allowed after the twenty-first (21st) day of the session. This is a permanent mark with no grade points assigned.

**S** Satisfactory  
Credit is granted but no grade points are assigned.

**IP** In Progress  
A designation representing a project course that allows up to six months or more for completion. No grade points are assigned for the "IP" grade.

The following grades are assigned for selected project/practicum courses identified in the course description section of this catalog:

**H** Honors  
Signifies Outstanding Achievement. No grade points are assigned.

**S** Satisfactory  
Signifies Acceptable Achievement. No grade points are assigned.

**U** Unsatisfactory  
Signifies Unacceptable Achievement. No credit is granted and no grade points are assigned.

### Plus/Minus Grading

National University uses a plus/minus grading system. The grade of A+ is not issued. In the plus/minus system, the grade points per credit used in the calculation of the grade point average are specified below. Instructors may elect not to use the plus/minus system provided that they clearly state this in the course outline.

### Repetition of Courses

Students are not obligated to repeat a failed course unless it is a course required for graduation. Students may repeat, at the prevailing cost per quarter unit, any course in which an "F," "D," or "C-" grade was received. Only courses completed in residence may be repeated to improve cumulative GPA. The original grade remains part of the student's permanent record, but is not considered in computing the grade point average. In order to properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

No course can be repeated more than twice.

No course may be repeated in which a grade of "C" or higher has been earned.

### Computing Grade Point Averages

To compute a student's grade point average, the total number of credit units is divided into the total number of grade points. Course units count only once toward graduation requirements. "I," "W," "U," "IP," "H," and "S" designations carry no grade points and are not considered when figuring the grade point average. When a course is repeated, the original grade remains part of the permanent record but is not calculated in the grade point average. If an undergraduate student changes their plan of study, all completed coursework will be utilized to calculate cumulative grade point average regardless of applicability to current program of study.

### Grade Points Awarded

A = 4.0	A- = 3.7
B+ = 3.3	B = 3.0
B- = 2.7	C+ = 2.3
C = 2.0	C- = 1.7
D+ = 1.3	D = 1.0
D- = 0.7	F = 0.0

### Grade Changes

All grades are final. Students are not allowed to complete additional work after the final grade has been assigned or to repeat examinations in order to improve a grade. Students may request a review of their records if the possibility of a clerical or computational error exists. (Please see the section on Grade Appeals in this catalog.)

## SATISFACTORY ACADEMIC PROGRESS

Students attending National University are expected to maintain satisfactory academic progress in their degree program. Academic progress is defined by a qualitative measure. The qualitative academic progress is assessed by the cumulative grade point average (GPA) achieved at National University.

### Grade Point Average (GPA) Requirements

Undergraduate students must maintain a “C” (2.0) grade point average for coursework taken at National University.

All coursework completed at National University in fulfillment of major requirements must average 2.0 or higher.

All coursework completed for the minor or the concentration must average 2.0 or higher. If the required grade point average is not maintained, the minor or concentration is not awarded. If the degree requires a concentration, then the student must repeat coursework that was completed with a grade of “C-” or below until the required 2.0 GPA is obtained.

### Academic Probation

Students whose cumulative GPA falls below 2.0 for coursework taken at National University are placed on academic probation. They are allowed six courses to improve their cumulative GPA to 2.0, provided no further grades of C- or below are earned. If a student on probation receives a grade of C- or below they will be academically disqualified. Students placed on academic probation are removed from this status when they have improved their cumulative GPA to 2.0 or better. Academic probation is permanently notated on official transcripts.

### Academic Disqualification

Students on academic probation who fail to raise their cumulative GPA to 2.0 within six classes, or who receive a grade of C- or below while on probation, will be academically disqualified from the University. To be considered for reinstatement, they must complete 12 semester units (18 quarter units) of transferable coursework at a regionally accredited institution with a GPA of no less than 2.3 and then petition the Committee on the Application of Standards. Academic disqualification is permanently notated on official transcripts.

If the faculty determines that a student should be academically dismissed for reasons other than grades, they will refer the matter to the Office of Student Affairs, which will initiate an administrative hearing process. The hearing process to be followed is identical to the one invoked for disciplinary actions, outlined in the Policies and Procedures section of this catalog.

### Interruption of Study Due to Excessive Incomplete Grades

Students who have three concurrent “Incomplete” grades will be prohibited from taking any further courses until all “Incomplete” grades have been removed. They will be allowed to resume their program when final grades have been received for all “Incomplete” grades. In the event that these “Incomplete” grades become permanent grades of “F,” the student will be dismissed from the University and will not be eligible for reinstatement.

### Second Degree from National University

A second degree from National University can be granted if all course and residency requirements for the second degree have been met. Completion of an additional minor within the same degree major does not qualify for a second degree. The number of courses for a second degree varies, but at least 45 quarter units must be completed in residence in the new degree program. No more than 50 percent of the core requirements for the second degree can be completed in a previously conferred degree.

### National University Memorial Degree

In the event of a student death prior to completion of degree requirements, the family may request that the board of trustees award posthumously a memorial degree in the field of the student’s area and level of study, as long as the student was in good standing at the University. A family member may contact the University Registrar at (858) 642-8260.

### Catalog Rights

Any student whose record reflects a break in enrollment for a period of 12 or more consecutive months is not eligible to retain his/her catalog rights. All other students are defined as having continuous enrollment and, as such, remain subject to the requirements of the academic program that were listed in the catalog at the time of their admission. Students who interrupt studies for a period of greater than 12 or more

months must re-apply for admission. Re-admitted students are subject to all catalog requirements in existence at the time of re-enrollment. Active duty military students with an active SOC agreement may maintain catalog rights for up to 5 years.

Students who change their major after having been admitted to the University must follow the major requirements in effect at the time of such change. Students who choose to add or drop a minor are not subject to a catalog change, unless the minor is not offered in the original catalog. If the minor was not offered in the original catalog, the student must meet both major and minor requirements under the catalog in effect at the time of the requested plan change.

Students can elect to follow the requirements listed in the current catalog; however, students cannot combine requirements from their previous catalog with those in the current catalog.

Students who have been disqualified and are later approved for reinstatement (after a 12-month absence) are subject to the requirements of the catalog in effect at the time they are reinstated and re-admitted to the University.

## GRADUATION REQUIREMENTS FOR UNDERGRADUATE DEGREES

### Unit and GPA Requirements

#### Total Number of Units

The minimum number of units required to earn an associate degree is 90 quarter units.

The minimum number of units required to earn a baccalaureate degree is 180 quarter units. Students may be required to complete more than 180 quarter units depending upon their program of study.

#### Upper-Division Units

The total number of upper-division units (numbered 300 through 599) required for a baccalaureate degree is 76.5 quarter units.

#### Residency Requirements

To qualify for a certificate, students must complete two-thirds of the certificate program at National University.

To qualify for an associate degree, students must complete each of the following requirements at National University:

- A minimum of 31.5 quarter units. A minimum of 18 quarters units required for students with an active SOC Agreement.
- At least half of the courses/units required for the major or core requirements if the associate degree has a major or core requirements.
- At least two-thirds of the courses/units required for the minor or concentration, if a student has selected a minor or concentration, or if a concentration is required as part of the degree requirements.

To qualify for a baccalaureate degree, students must complete each of the following requirements at National University:

- A minimum of 45 quarter units, at least 36 units of which must be in upper-division courses (numbered 300–599). A minimum of 18 quarters units required for students with an active SOC Agreement.
- At least half of the upper-division units required for the major
- At least two-thirds of the upper-division units required for the minor or concentration, if a student has selected a minor or concentration, or if a concentration is required as part of the degree requirements.

Courses taken through credit by examination and credits students transfer to the University do not apply towards residency requirements.

#### GPA Requirements

Students must meet the following GPA requirements for their degree.

- a. Minimum overall cumulative grade point average of 2.0
- b. Minimum cumulative grade point average of a 2.0 within their major or core coursework (unless otherwise specified)
- c. Minimum cumulative grade point average of 2.0 within their minor or concentration coursework (unless otherwise specified.)

## General Education Requirements

All undergraduate students must complete the University General Education requirements specific to their degree level. Unless otherwise specified in the program, students must meet the requirements located in the General Education section of this catalog. The general education curriculum furnishes students with the basic knowledge necessary to pursue any degree program. Students who fulfill the curriculum gain a strong interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

The general education program consists of a minimum of 34.5 quarter units (Associate degrees) and 70.5 quarter units (bachelor degrees). As part of the General Education unit requirements all students must complete at least 4.5 units in diversity enriched coursework and those in bachelor degrees must meet at least 4.5 units at the upper-division level.

## CSU General Education Certifications and IGETC

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certification are typically required to take one to three upper-division general education courses at National in order to fulfill the unit requirements. Students must provide an official transcript with the certification included or a separate certification form from the community college attended.

National University has general education requirements in the following areas: English Communication, Mathematical Concepts and Quantitative Reasoning, Information Literacy, Arts, Humanities, and Languages, Social and Behavioral Sciences, Physical and Biological Sciences, and Lifelong Learning and Self Development. The required number of units in each section can be found in the General Education section of this catalog:

Courses taken to achieve minimum collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

## MAJOR, MINOR, AND CONCENTRATION REQUIREMENTS

### Preparation for the Major

Some majors require a set of introductory and/or skills courses designed to prepare students for upper-division study. Many courses taken for this purpose can also be used to satisfy general education requirements.

### Major

Students must complete a departmental major for any bachelor's degree. Most majors consist of an integrated area of specialized study at the upper-division level and contain at least nine courses, which total at least 40.5 quarter units. Coursework taken to meet major requirements cannot be used to meet minor or general education requirements. At least half of the required upper-division courses for the major must be completed in residence. Students with an active SOC Agreement have a residency requirement of at least 18 quarter units.

### Minor

Students may take any minor with any baccalaureate degree program. Students must verify, prior to requesting a change of degree plan, that the particular combination being requested has not been duplicated by the major or specifically prohibited by the baccalaureate program. Students must also meet any entry requirements and prerequisites for the requested minor.

Completion of a minor is not required. A minor consists of a minimum of six upper-division courses that total at least 27 quarter units, unless otherwise specified. Courses in the minor cannot be used to meet the major requirements. Courses in the minor can be used to satisfy preparation for the major and general education requirements as appropriate. At least two-thirds of the units in the minor must be completed in residence. Students with an active SOC Agreement have a residency requirement of at least 18 quarter units.

### Concentration

A Concentration may be required by the degree program or an optional choice for the student. A Concentration is an area of specialization related to the major that

allows students to delve deeper into a focused study area. Unless otherwise specified completion of a concentration is not required. Courses in the concentration cannot be used to meet major requirements. Courses in the concentration can be used to satisfy preparation for the major and general education requirements as appropriate. At least two thirds of the units in the concentration must be completed in residence.

## Application for Graduation

Graduation is not automatic upon the completion of degree requirements. Students must submit the online graduation application located on the student portal within the designated application period for degree posting. Students are advised to submit their application at least three months prior to their anticipated conferral date. A \$100 processing fee is required at the time of application. Requirements for graduation include:

1. Satisfactory completion of student's program of study leading to a degree.
2. Settlement of all financial obligations with the University.

Additional graduation and commencement information can be found on the web at [www.nu.edu](http://www.nu.edu).

\*Note: National University does not backdate degrees. Students applying for graduation will automatically be processed for the next conferral date.

## Graduation with Honors

Graduation with honors is available to students whose academic record indicates superior achievement. Earned honors are noted on diplomas and official University transcripts.

Honors for associate and baccalaureate degrees are determined only by courses taken at National University. Honors are awarded according to the following grade point averages:

Summa Cum Laude	3.90
Magna Cum Laude	3.70
Cum Laude	3.50

Only those students who complete 45 quarter units or more in residence in their program are considered for honors awards.

\*Note: In the calculation of eligibility for honors the cumulative GPA is truncated to two decimal places. For example, if the cumulative GPA of record is a 3.695 this figure is truncated to 3.69 and the honors designation would be Cum Laude.

## Application for Certificate

Awarding a certificate is not automatic upon completion of required courses. Students must submit an application for certificate located on the National University website: [www.nu.edu/OurPrograms/Graduation.html](http://www.nu.edu/OurPrograms/Graduation.html). Students are advised to submit their application during their final required course. There is no fee to submit an application for certificate. Requirements for a certificate include:

1. Satisfactory completion of required courses or specific courses.
2. Students must complete two-thirds of the certificate program at National University.
3. Have a minimum overall cumulative grade point average of 2.0 for courses in the certificate program.

Specific certificate course requirements can be found in the National University catalog.

## HONOR SOCIETIES

### Pinnacle Honor Society for Undergraduate Students

Pinnacle is a national collegiate honorary society founded for the single purpose of recognizing the nation's most outstanding adult and other non-traditional students. Honored students receive letters of congratulation, certificates of membership, lapel pins, diploma seals and honor cords. Students accepted for membership to the Pinnacle Honor Society are nationally recognized for their academic achievement, community service, leadership, and ethical standards. Each commencement season, the Office of Student Affairs invites undergraduate students to join Pinnacle based on their qualifying grade point average. Students will be asked to complete an application which is then reviewed for eligibility determination.

### Sigma Beta Delta Honor Society

Sigma Beta Delta, founded in 1994, is an honor society which recognizes scholarship and achievement by students of business, management, or administration

who have attained superior records at universities with regional accreditation. The society characterizes itself by three principles: wisdom, honor, and the pursuit of meaningful aspirations. It recognizes these qualities as being important for success in the academic realm, as well as providing guidelines which lead to a fulfilling personal and professional life and a life distinguished by honorable service to humankind. The Dean of the School of Business and Management invites qualified students to join Sigma Beta Delta. Membership provides lifetime recognition, eligibility for fellowship awards, networking opportunities and a lifetime subscription to the Society's "Aspirations" newsletter. Dark green and gold cords worn during commencement exercises designate Sigma Beta Delta graduates.

#### **Pi Lambda Theta Honor Society**

Pi Lambda Theta is the international honor society and professional association for students in the field of education. The Dean of the School of Education nominates students to Pi Lambda Theta who have met rigorous requirements. Membership in this honor society offers students access to scholarships, research grants, career search, and leadership conferences, as well as support from the National Board of Professional Teacher Standards. A gold cord worn during commencement exercises designates Pi Lambda Theta graduates.

#### **DEGREE CONFERRAL**

Effective July 2013, degrees will be posted to transcripts six times annually, specifically on the third Sunday in January, March, May, July, September and November. Diplomas are mailed four to six weeks following the degree conferral date. A maximum of five duplicate diplomas may be ordered at no additional charge.

Annual commencement exercises are held in San Diego and Sacramento. Students may elect to attend the commencement ceremony in the location that is most convenient for them. The online Application for Degree allows the student to specify which commencement location he/she would like to attend. Detailed information with specific instructions regarding the commencement exercises is mailed to eligible students prior to each ceremony date for those who have submitted their online Application for Degree by the posted deadline to participate. Consult the University's website for the dates of commencement.

## **ACADEMIC INFORMATION FOR GRADUATE DEGREES AND CREDENTIALS**

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- 68 Admission Procedures**
- 69 Sources of Credit**
- 70 Grades and Grading System**
- 70 Satisfactory Academic Progress**
- 71 Second Degree from National University**
- 71 Catalog Rights**
- 71 Graduation Requirements for Graduate Degrees**
- 71 Unit and GPA Requirements**
- 71 Application for Graduation**
- 72 Application for Certificate**
- 72 Graduation with Honors**
- 72 Honor Societies**
- 72 Degree Conferral**





# ACADEMIC INFORMATION FOR GRADUATE DEGREES AND CREDENTIALS

## ADMISSION PROCEDURES

### Admissions Advising

National University offers year-round admission. Persons seeking admission to graduate and credential studies at National University are unique in their specific circumstances and needs. Applicants are interviewed by an admissions advisor, who discusses applicants' specific requirements for admission at the initial interview. All prospective and registered students receive a unique nine-digit student number.

### Faculty Advising

Upon admission to the University, students may contact a faculty advisor to assist them in making appropriate decisions about educational and career-related issues. Faculty advisors, who are listed under each degree program within this catalog, provide students the benefit of experience in professional practice and insight gathered from years of formal study in higher education. Students should direct requests for information about curriculum content, course requirements, proficiency examinations, and program goals to their faculty advisor as well. Faculty advisors help students meet University academic regulations and standards.

### Use of Social Security Number

Applicants are required to include their Social Security Number where indicated on the application for admission forms. The Social Security Number is used to identify student records, including records for financial aid eligibility and the disbursement and repayment of financial aid and other debts payable to the University. The Internal Revenue Service requires the University to file forms that include information such as amount paid for tuition. This information is used by the IRS to help determine whether a student, or a person claiming the student as a dependent, may take a credit or deduction on their federal income taxes.

### E-mail Address

All students must provide a valid e-mail address where indicated on the application for admission forms. National University regularly uses e-mail to communicate important announcements to its students regarding financial aid, student accounts, advising, grades, student records, and more. As the preferred method of communication, it is important that students provide the University with an e-mail address they use frequently and notify the University if it changes. The University keeps students e-mail addresses on file with other contact information.

### Qualifications

Applicants for admission to the Doctor of Nursing Practice must meet the admission criteria listed in the School of Health and Human Services.

Applicants for admission to a graduate or post-baccalaureate program, other than the Doctor of Nursing Practice, must meet one of the following five requirements:

1. Hold a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.5 or better was achieved, or where a grade point average of 2.75 or higher was achieved in the last 90 quarter units.
2. Hold a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.0 to 2.49 was achieved and a satisfactory score on one of the following tests:
  - Minimum score of 550 on the Graduate Management Admission Test (GMAT)
  - Minimum scores of 152 (verbal) and 147 (quantitative) the Graduate Record Examination (GRE)
  - Minimum score of 408-413 on the Miller Analogies Test
  - An approved, standardized program-specific exam  
Note: National University's College Board Institutional Code=4557
3. Hold a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.0 to 2.49 was achieved and have successfully completed at least 13.5 quarter units of graduate level coursework with grades of "B" or better at a regionally accredited institution.

4. Holders of a bachelor's degree or higher from a regionally accredited college or university where an overall grade point average of 2.0 to 2.49 was achieved may be admitted on a probationary status. See Probationary Admission section below for additional information.
5. Applicants who are within six months of completing a baccalaureate degree may be eligible to apply for admission to National University. See Admission prior to completion of a bachelor's degree for more information. If an applicant is registered for graduate level courses and it is determined that they did not complete the bachelor's requirements the offer of admission will be rescinded.

\* Applicants whose higher education was completed in a foreign country must request a foreign pre-evaluation through an admissions advisor to determine eligibility for a graduate program. Applicants who are seeking any California credential must have their official documents evaluated by an approved agency and an official evaluation report must be received by the Office of the Registrar notating that they have earned an equivalent to a 4 year United States bachelor's degree.

Graduates of Bologna-compliant degree programs may be eligible for admission to graduate programs at National University under the following criteria:

- The graduate program to which you are seeking admission must be in the same or similar field of study as that in which you earned your undergraduate degree
- The awarding institution must be a university. Students from vocational or technical institutions are not eligible for admission.
- You must submit an official equivalency report from IERF ([www.ierf.org](http://www.ierf.org)) indicating the Bologna-compliant undergraduate degree is comparable to a U.S. undergraduate degree. All applicable fees are your responsibility.
- Approval of admission eligibility as determined by the Office of the Registrar

International students approved to enroll from Bologna-compliant degree programs would be required to meet all additional graduate admission requirements as listed in the University Catalog. The Office of the Registrar is responsible for making the final determination regarding admission eligibility after receipt and review of the official evaluation report from IERF and admission documents as is the standard procedure for all international students.

All applicants must present preliminary evidence of prior education at the required interview with an admission advisor. Unofficial transcripts are acceptable.

All applicants to the University must also:

- A. Complete an application for admission.
- B. Execute an enrollment agreement.
- C. Pay a non-refundable application fee of \$60.
- D. Complete the program admission process.

All post-baccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English, must demonstrate competence in English. Students who do not possess a bachelor's degree from a post-secondary institution where English is the language of instruction are encouraged to take the English ACCUPLACER evaluation as part of the admissions process.

The English ACCUPLACER evaluation for graduate students is for advisory purposes only and does not delay the admissions process. The results of the English evaluation are printed immediately and a copy is provided to the student. Based on the student's score, the admissions advisor recommends appropriate English courses.

\* Any exceptions to the above admissions requirements must be considered by the Committee on the Application of Standards.

### Probationary Admission

Students whose undergraduate GPA was 2.0 to 2.49 may be accepted on probationary status. They are ineligible for official admission and will not be processed for degree evaluation or financial aid until they have completed 4.5 quarter units of graduate study with a grade of "B" or better. Students admitted on probationary status are not permitted to schedule more than one course for 4.5 quarter units during the probationary period. However, if the first required course in a student's degree program is taken using satisfactory/unsatisfactory (S/U) grading criteria, the student may schedule the S/U course and one additional course that issues a letter grade. Students are not permitted to enroll in any other coursework until the first letter grade has been posted to their record and their probationary status has

been lifted. Students should be aware that this may mean a break in enrollment of one term (month) due to the timeframe for submission of grades by Instructors. Students who receive a grade below “B” during the probationary period are not eligible for admission to the University.

### Admission in the Term Prior to Bachelor’s Degree Completion

Undergraduate students in their final semester or term before graduation who want to be admitted and enrolled into National University for graduate study may be admitted into a post-baccalaureate program if their record to date provides evidence that they will complete the degree as anticipated. They must have a 2.50 (or equivalent) overall cumulative GPA. Students who register for graduate or post baccalaureate coursework and then are determined not to have completed the requirements for the bachelor’s degree will have their offer of admission rescinded. Graduate coursework completed prior to completion of a bachelor’s degree will not be eligible for graduate credit at National University or any other institution. All domestic students must provide a copy of their diploma or final transcript to an Admissions Advisor before commencing post baccalaureate or graduate level work. International students must provide their final documentation for verification prior to or at orientation.

### Provisional Acceptance

Students who have completed a baccalaureate degree and want to be admitted to a post-baccalaureate degree program when official transcripts are not immediately available can be provisionally accepted. Students are responsible for obtaining, from the college or university where they earned their baccalaureate degree, an official transcript in a sealed envelope. When the Office of the Registrar receives official documentation, it considers students for eligibility.

Post-baccalaureate students may take courses during provisional acceptance while the Office of the Registrar awaits receipt of official transcripts. If the Office of the Registrar does not receive the required documentation within 60 days of the date of admission, the student’s studies are temporarily interrupted until all official documents are received. If the student’s studies are temporarily interrupted this can affect financial aid eligibility. The Office of the Registrar will send a courtesy notification every 30 days to students in provisional status, advising them of what documentation remains outstanding. Students should also view their To-Do list, which can be found on the student web portal, to determine outstanding documents. Coursework completed satisfactorily during provisional acceptance will count toward graduation if it is consistent with specific degree program requirements.

### Official Transcript and Bachelor’s Degree Verification Requirements

Post-baccalaureate students are required to secure from the college or university where they completed their baccalaureate degree a copy of their transcript in a sealed envelope. The Office of the Registrar will not accept hand-carried official transcripts or transcripts “issued to student” as official documents unless in a sealed envelope from the issuing institution.

Official transcripts should be sent by the issuing institution directly to:

Office of the Registrar  
National University  
11255 North Torrey Pines Road  
La Jolla, California, 92037-1013

Transcripts from other institutions that have been presented for admission or evaluation become a part of the student’s academic file and are not returned or copied for distribution.

### Evaluation

Once eligibility for admission to a post-baccalaureate program has been determined students are eligible for official evaluation. Students will be notified by e-mail that they have been evaluated and the student may view their Academic Advisement Report (AAR) online. The course of study that a student discussed with an advisor at the initial admissions interview is only an estimate of the course requirements for a degree. AAR is the official notification of the coursework and other requirements that are required for the program. As students progress through the program, the AAR will show coursework already completed and the coursework remaining. The AAR helps students, advisors, and the University to determine progress toward completion of program requirements and also serves as a graduation check.

Applications for financial aid cannot be processed until evaluation has occurred.

### Readmission Procedures

Students who are in good standing but have a break in enrollment for 12 or more months may be readmitted to the University by submitting an application for re-admission. They are required to follow the policies of the catalog in effect at the time of re-admission, including the degree requirements for their program. Students must also pay a re-admission fee.

## SOURCES OF CREDIT

### Course Waivers and Unit Transfer Limits

Students who believe that they have taken graduate level coursework at a regionally accredited institution that is applicable to their current program may submit an e-form waiver either through the student portal or with the assistance of an admissions advisor. An official course description for each course must be attached to the e-form request. Course descriptions can usually be obtained directly from the issuing institution, copied from an institution’s catalog, or found online through an institution’s course catalog. The Office of the Registrar must receive official transcripts from the transferring institution before a course waiver request may be submitted. If a course description is not sufficient for determining transferability, students may be required to submit a course syllabus.

Students can transfer a maximum of 13.5 quarter units at the graduate level provided that the units have not been used to satisfy the requirements of an awarded degree. Regardless of the number of units transferred to the graduate program, students must meet residency requirements of their particular program in order to be eligible for graduation. Students should refer to their particular degree program to determine the maximum amount of transfer credit that can be applied. All courses considered for graduate transfer credit must have been taken in a graduate level degree program or notated as graduate level on the issuing institution’s transcript.

To be considered for a course waiver, the transferring course must have been completed with a grade of “B” (3.0) or better. No courses can be accepted in transfer as a waiver or credit where the grade earned was a “B-” or below.

If the transfer only qualifies for a waiver, the student does not have to complete the course but credit is not awarded. The Academic Advisement Report (AAR) will show that course requirement has been met but that zero (0) units have been awarded. Students who discontinue and apply for readmission must resubmit for approval of previously applied course waivers. This may require additional graduate-level coursework to be taken in order to satisfy the graduate unit requirements for the student’s degree.

### Prerequisite Waivers

Some graduate degree programs require students to complete undergraduate-level prerequisites. If a student has completed equivalent coursework at a regionally accredited institution then he/she must submit an e-form course waiver request. The Office of the Registrar will review the course content and make a determination on the waiver request. No graduate transfer credit will be awarded if the course was taken as part of an undergraduate level degree or classified as an undergraduate class by the institution attended.

### Special Consideration Waivers Based on Non-Graduate Level Coursework

Students who have a course waiver approved based on a course taken through extended learning or continuing education will typically not be awarded any units. If the issuing institution recognizes the credits as meeting graduate level academic standards, notates on the transcript that the course is granted graduate level academic credit, and confirms in an official letter from their Office of the Registrar that the course would be accepted to meet a requirement in their own graduate programs, National University may consider approving and awarding credit.

When a student has acquired mastery of a subject through a concentration of undergraduate courses or through considerable experience or training, the lead faculty member may recommend that a course be waived. The lead faculty will determine the required documentation that needs to be submitted in support of the waiver. The lead faculty will then make a recommendation, which must be submitted through an e-form to the Committee on the Application of Standards.

### Time Limit

Coursework that is more than seven years old cannot be transferred into post-baccalaureate credential or degree programs. Similarly, coursework completed at National University more than seven years ago cannot be applied to post-baccalaureate credential or degree programs for re-enrolling students. Coursework that is more than seven years old must be repeated, or, with the approval of the school dean, a more recent, suitable course may be substituted.

## Challenge by Examination

Students in the School of Education (SOE) and School of Business and Management (SOBM) have the option to take a Challenge by Examination for one or more of the following classes - subject to the limitations noted in the respected degree programs: (SOE) EDT 608, EDT 655, HED 1101X and (SOBM) ACC 501, ACC 601M, MGT 605, MKT 602, MGT 608, MNS 601, ECO 602, ECO 607, FIN 609A, ACC 604, FIN 501. In order to test out of these courses, students must follow the same procedures as outlined in Academic Information for Undergraduate Degrees under the heading "Challenge by Examination." The fee for each challenge exam is \$50 and no credit is awarded. Additional coursework may need to be taken to make up the graduate level units in the degree program. Contact an advisor or a local representative for more information.

Credit by Examination is not allowed at the graduate level.

## GRADES AND GRADING SYSTEM

Students who have more than three absences, excused or unexcused, cannot be given a satisfactory grade.

- A Outstanding Achievement
- B Commendable Achievement
- C Marginal Achievement
- D Unsatisfactory Achievement
- F Failing
- I Incomplete

A grade of "I" may only be issued when a student has attended at least two-thirds of the course sessions and is unable to complete the requirements due to uncontrollable and unforeseen circumstances. Students must communicate these circumstances (in writing) to the instructor prior to the final day of the course. If an instructor decides that an "Incomplete" is warranted, he/she issues a grade of "I" and notes the conditions for removal of the "Incomplete" in the student's record. Students receive notification via e-mail about the assignment of an "Incomplete," including the conditions for its removal. The information remains in place until the "Incomplete" is removed or the time limit for removal has passed. An "Incomplete" is not issued when the only way the student could make up the work is to attend a major portion of the class the next time it is offered. Students must resolve "Incomplete" grades no later than six months after the official course end date. Students can be required to remove an "Incomplete" in a shorter period of time at the discretion of the instructor. The Office of the Registrar sends a courtesy e-mail reminder regarding the "Incomplete" on record when four months has elapsed since the course end date, provided the instructor has not specified a shorter end date.

An "I" that is not removed within the stipulated time becomes an "F" or a "U" based on the grading criteria of the course. No grade points are assigned. The "F" is calculated in the grade point average.

- U Unsatisfactory  
A permanent grade given indicating that a credit attempt was not acceptable. An "Unsatisfactory" grade merits no grade points and is not computed in the grade point average.
- W Withdrawal  
Signifies that a student has withdrawn from a course after midnight of the ninth day of the session. A "Withdrawal" is not allowed after the twenty-first (21st) day of the session. This is a permanent mark with no grade points assigned.
- S Satisfactory  
Credit is granted and no grade points are assigned. This is a grade assigned for satisfactory work in practicum, residencies, and field experience courses.
- IP In Progress  
A designation representing a project/thesis/research/practicum/internship/field study course that allows up to 12 months for completion. No grade points are assigned for the "IP" grade.

The following grades are assigned for selected project/practicum courses identified in the course description section of this catalog:

- H Honors  
Signifies outstanding work. No grade points are assigned.
- S Satisfactory  
Signifies acceptable work. No grade points are assigned.
- U Unsatisfactory  
Signifies unacceptable work. No credit is awarded and no grade points are assigned.

## Plus/Minus Grading

National University uses a plus/minus grading system. The grade of A+ is not issued. In the plus/minus system, the grade points per credit used in the calculation of the grade point average are specified below. Instructors may elect not to use the plus/minus system provided that they clearly state this in the course outline.

## Repetition of Courses

Students are not obligated to repeat a failed course unless it is a course required for graduation. Students may repeat, at the prevailing cost per quarter unit, any course in which an "F," "D," "C," or "B-" grade was received. The original grade earned remains part of the student's permanent record, but is not considered in computing the grade point average. In order to properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

No course can be repeated more than twice.

A course in which a grade of "B" or higher has been earned may not be repeated.

## Grade Changes

All grades are final. Students are not allowed to complete additional work after the final grade has been assigned or to repeat examinations in order to improve a grade. Students may request a review of their records if the possibility of a clerical or computational error exists. (Please see the section on Grade Appeals in this catalog.)

## Computing Grade Point Averages

To compute a student's grade point average (GPA), the total number of credit units is divided into the total number of grade points. Course units count only once toward graduation requirements. "H," "I," "IP," "S," "U," and "W" carry no grade points and are not considered in computing the grade point average. When a course is repeated, the original grade is excluded from the GPA calculation but remains part of the permanent record.

## Grade Points Awarded

A = 4.0    A- = 3.7  
B+ = 3.3    B = 3.0    B- = 2.7  
C+ = 2.3    C = 2.0    C- = 1.7  
D+ = 1.3    D = 1.0    D- = 0.7  
F = 0.0

## SATISFACTORY ACADEMIC PROGRESS

Graduate students must maintain a cumulative grade point average (GPA) of 3.0 for all graduate work. The cumulative GPA is calculated by taking into account all graduate-level course work that has not been applied to a completed degree. Once a degree has been completed, a cumulative GPA is assigned for the course work in that degree, and the cumulative GPA calculator is reset for any future course work. If a graduate student has two or more degree and/or credential plans that are not yet completed, all the course work in those plans is used to calculate the cumulative GPA.

Students who receive a "D" or "F" grade in a required course must repeat the course. The "D" or "F" grade is calculated in the cumulative GPA until the course is satisfactorily repeated. The original grade is excluded from the GPA calculation but remains as part of the student's official academic record. In order to properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

\*Note: Academic probation, disqualification, dismissal, and/or reinstatement are permanently noted on student's transcripts.

### Academic Probation

Students whose cumulative GPA falls below a 3.0 for coursework completed at National University are placed on academic probation. Students are allowed three courses to improve their cumulative grade point average to the required 3.0, provided no further grades of B- or below are earned. The University strongly recommends that any coursework in which a letter grade of “C” or below was earned should be repeated while on probation. In this situation, if the courses are not repeated, the student may fail to raise the cumulative GPA to the required 3.0 and will be subject to disqualification. No courses with a grading basis of Satisfactory/Unsatisfactory should be taken while on academic probation as this may impact student’s ability to improve their cumulative GPA to the minimum required.

### Removal from Probation

Students placed on probation will be removed from probation once they have improved their grade point average to a cumulative GPA of 3.0 or higher.

Satisfactory grades received while on probation count toward fulfillment of degree requirements.

### Disqualification

Students on academic probation who fail to raise their GPA to 3.0 or higher or who receive a grade of B- or below during their probationary period will be disqualified from their academic program. Disqualified students cannot attend National University for the next three months (terms) following the month in which the student was disqualified. After a three-month leave from the University, students can apply for reinstatement.

Note: International students on an F-1 student visa must apply for reinstatement within 15 days of the date of disqualification due to immigration regulations regarding student visas.

### Reinstatement

Students who have been disqualified and want to be considered for reinstatement must petition the Committee on the Application of Standards (CAS.) The petition must explain the reason for the disqualification and the steps the student has taken to remedy the issues. Students must include supporting documentation. Students, approved by CAS, who are readmitted to the University, will be placed on a “Conditional” status. CAS will indicate the conditions and time frame requirements of the reinstatement. Students who meet the conditions of CAS and achieve the required 3.0 cumulative GPA will be placed on permanent probation. Students who fail to meet the CAS conditions will be dismissed from the University and are ineligible for re-admission.

### Interruption of Study Due to Excessive Incomplete Grades

Students who have three concurrent “Incomplete” grades will be prohibited from taking any further courses until all “Incomplete” grades have been removed. They will be allowed to resume their program when final grades have been received for all “Incomplete” grades. In the event that these “Incomplete” grades become permanent grades of “F,” the student will be dismissed from the University and will not be eligible for reinstatement.

### Academic Dismissal

Post-baccalaureate students who were disqualified from, and reinstated to, their academic program on a status of permanent probation must maintain a cumulative GPA of 3.0 or better. A cumulative GPA that falls below a 3.0 will result in academic dismissal and the student is not eligible for reinstatement.

If the faculty determines that a student should be academically dismissed for reasons other than grades, they will refer the matter to the Office of Student Affairs, which will initiate a hearing process. The hearing process to be followed is identical with the one invoked for disciplinary actions.

### SECOND DEGREE FROM NATIONAL UNIVERSITY

Students can obtain a second master’s degree from National University if they have met all course and residence requirements for the second degree. Completion of an additional area of specialization within the same degree does not qualify for a second degree. Units earned toward the first master’s degree cannot be applied toward the second.

### National University Memorial Degree

In the event of a student death prior to completion of degree requirements, the family may request that the board of trustees award posthumously a memorial degree in the field of the student’s area and level of study, as long as the student was in good standing at the University. A family member may contact the University Registrar at (858) 642-8260.

### CATALOG RIGHTS

Any student whose record reflects a break in enrollment for a period of 12 or more consecutive months is not eligible to retain his/her catalog rights. All other students are defined as having continuous enrollment and, as such, remain subject to the requirements of the academic program that were listed in the catalog at the time of their admission. Students who interrupt studies for a period of 12 or more months must re-apply for admission. Re-admitted students are subject to all catalog requirements in existence at the time of re-enrollment.

Students who request to change their academic program after admission must follow the catalog requirements in effect on the date they request the change.

Students can elect to change to the current catalog. However, they must meet all prerequisites and requirements for their academic program that are in effect in the current catalog. They cannot combine requirements from their previous catalog with those in the current catalog.

Students who are disqualified and are approved through CAS for reinstatement after an absence of 12 months are subject to the requirements of the catalog in effect at the time they are re-admitted to the University.

### Additional Residency Requirements for Credential and Certificate Programs

Students in certificate programs must complete two-thirds of the required coursework at National University.

Credential candidates must complete a minimum of 31.5 quarter units in residence at National University to be recommended for a credential to the Commission on Teacher Credentialing. Courses taken online are considered to be in-residence. All credential programs must be completed with a GPA of 3.0 (“D” and “F” grades are not accepted).

The credential residency requirement does not apply to candidates for the following programs:

- Level II Special Education
- California Reading Certificate
- Early Childhood Special Education Certificate
- Professional (Tier II) Administrative Services Credential
- An additional credential if one is previously held

### GRADUATION REQUIREMENTS FOR GRADUATE DEGREES

Each master’s degree has been structured to delineate the program prerequisites, core requirements, area (s) of specialization, and electives that constitute the requirements for the degree. Each degree has a designated field of study (core) that consists of at least six courses, which total at least 27 quarter units. Not all degrees have areas of specialization.

### UNIT AND GPA REQUIREMENTS

#### Residency

Graduate degrees require the completion of a minimum of 45 quarter units. Students must earn a minimum of 40.5 quarter units at National University and must complete half of the core requirements and three-fourths of the area of specialization in residence.

#### Field of Study and Area of Specialization GPA Requirements

Students must meet the following GPA requirements for their degree.

- a. Minimum overall cumulative grade point average of 3.0
- b. Minimum cumulative grade point average of a 3.0 within their core requirements
- c. Minimum cumulative grade point average of 3.0 within their area of specialization (if one is required or selected)

### APPLICATION FOR GRADUATION

Graduation is not automatic upon the completion of degree requirements. Students must submit the online graduation application located on the student portal within the designated application period for degree posting. Students are advised to submit their application at least three months prior to their anticipated conferral date. A \$100 processing fee is required at the time of application. Requirements for graduation include:

1. Satisfactory completion of student's program of study leading to a degree.
2. Settlement of all financial obligations with the University.

mitted their online Application for Degree by the posted deadline to participate. Consult the University's website for the dates of commencement.

Additional graduation and commencement information can be found on the web at [www.nu.edu](http://www.nu.edu).

\*Note: National University does not backdate degrees. Students applying for graduation will automatically be processed for the next conferral date.

## APPLICATION FOR CERTIFICATE

Awarding a certificate is not automatic upon completion of required courses. Students must submit an application for certificate located on the National University website: [www.nu.edu/OurPrograms/Graduation.html](http://www.nu.edu/OurPrograms/Graduation.html). Students are advised to submit their application during their final required course. There is no fee to submit an application for certificate. Requirements for a certificate include:

1. Satisfactory completion of required courses or specific courses.
2. Students must complete two-thirds of the certificate program at National University.
3. Have a minimum overall cumulative grade point average of 3.0 for courses in the certificate program.

Specific certificate course requirements can be found in the National University catalog.

## GRADUATION WITH HONORS

Graduate students whose grade point average is a 3.85 or better will graduate "With Distinction." Prerequisites completed at the undergraduate level are not included in the calculation of the grade point average for graduate honors.

\*Note: In the calculation of eligibility for Honors the official cumulative GPA is truncated to two decimal places. Students must have a cumulative GPA of 3.85 or higher to be eligible for the Honors designation.

Earned honors are noted on diplomas and official University transcripts. Only students who complete 40.5 quarter units or more of their programs in residence are considered for honor awards.

## HONOR SOCIETIES

### Pi Lambda Theta Honor Society

Pi Lambda Theta is the international honor society and professional association for students in the field of education. The Dean of the School of Education nominates students to Pi Lambda Theta who have met rigorous requirements. Membership in this honor society offers students access to scholarships, research grants, career search, and leadership conferences, as well as support from the National Board of Professional Teacher Standards. A gold cord worn during commencement designates Pi Lambda Theta graduates.

### Sigma Beta Delta Honor Society

Sigma Beta Delta, founded in 1994, is an honor society which recognizes scholarship and achievement by students of business, management, or administration who have attained superior records at universities with regional accreditation. The society characterizes itself by three principles: wisdom, honor, and the pursuit of meaningful aspirations. It recognizes these qualities as being important for success in the academic realm, as well as providing guidelines which lead to a fulfilling personal and professional life and a life distinguished by honorable service to humankind. The Dean of the School of Business and Management invites qualified students to join Sigma Beta Delta. Membership provides lifetime recognition, eligibility for fellowship awards, networking opportunities and a lifetime subscription to the Society's "Aspirations" newsletter. Dark green and gold cords worn during commencement designate Sigma Beta Delta graduates.

## DEGREE CONFERRAL

Effective July 2013, degrees will be posted to transcripts six times annually, specifically on the third Sunday in January, March, May, July, September and November. Diplomas are mailed four to six weeks following the degree conferral date. A maximum of five duplicate diplomas may be ordered at no additional charge.

Annual commencement exercises are held in San Diego and Sacramento. Students may elect to attend the commencement ceremony in the location that is most convenient for them. The online Application for Degree allows the student to specify which commencement location he/she would like to attend. Detailed information with specific instructions regarding the commencement exercises is mailed to eligible students prior to each ceremony date for those who have sub-

# GENERAL EDUCATION

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## 74 General Education Program Requirements



## ASSOCIATE OF ARTS AND ASSOCIATE OF SCIENCE GENERAL EDUCATION REQUIREMENTS

The following General Education requirements apply to all Associate of Arts and Associate of Science degrees except:

The Associate of Arts in General Education (formerly the Associate of Arts) program has specific General Education requirements. Please see the specific information in the program for more information.

The General Education program for the Associate of Arts and Associate of Science degrees promotes the intellectual growth of all students in National University's Associate level undergraduate degree programs. The general education curriculum assumes that undergraduates will not concentrate on a major field of study until they have completed a general education program that provides instruction in writing and mathematical skills as well as introducing the student to subject matter in the Humanities, Information Literacy and Science and Social Science disciplines. Students will also address the cultural diversity of contemporary society.

Students in the general education program are advised to focus on writing and speech communication first. Students are then counseled to explore mathematical and other formal systems to develop abstract reasoning abilities and are encouraged to take a course in informational literacy. Finally, all students are required to have exposure to the natural sciences, the humanities, fine arts, language, and the social and behavioral sciences. Many of these courses include an examination of the human condition in a multicultural society.

The general education curriculum emphasizes communications, mathematics and sciences, humanities, arts, language, and social/behavioral sciences. Thus, the curriculum provides coherence to Associate level undergraduate education.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking, reading and writing skills appropriate to lower-division college work.
- Demonstrate critical awareness of the major approaches, methods, assumptions, and applications of different academic disciplines.
- Employ college-level scientific and quantitative reasoning skills to appraise information and to solve problems.
- Demonstrate awareness of past and present human and cultural diversity.
- Access, evaluate and use information gathered through a variety of resources and technologies in developing research projects and presentations.

### Degree Requirements

The general education curriculum furnishes students with the basic knowledge necessary to pursue any Associate level degree program. Students who fulfill the curriculum gain an interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

### Diversity Requirement

The diversity component serves the general education program goal of increasing respect for, and awareness of, diverse peoples and cultures. A plus [+] after any course on the list of approved general education courses signifies a diversity-enriched course. Students must complete at least one diversity-enriched course in the general education program.

### General Education Program Requirements

The general education program consists of a minimum of 34.5 quarter units. Of the 34.5 quarter units, students must complete at least 4.5 units in diversity enriched coursework.

### AREA A: ENGLISH COMMUNICATION

(Minimum 10.5 quarter units)

#### Category 1 Writing

(6 quarter units)

ENG 100 Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101 Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

#### Category 2 Oral Communication

(4.5 quarter units)

COM 101 Intro to Oral Communication

COM 103 Public Speaking

COM 120 Intro to Interpersonal Comm

### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

MTH 204 Mathematics for Science  
*Prerequisite: MTH 12A, and MTH 12B*

MTH 209A Fundamentals of Mathematics I  
*Prerequisite: Placement Evaluation*

MTH 210 Probability and Statistics  
*Prerequisite: Placement evaluation*

MTH 215 College Algebra & Trigonometry  
*Prerequisite: Placement Evaluation*

MTH 216A College Algebra I (3 quarter units)  
*Prerequisite: Placement Evaluation*

MTH 216B College Algebra II (3 quarter units)  
*Prerequisite: MTH 216A*

MTH 220 Calculus I  
*Prerequisite: MTH 215 or placement evaluation*

MTH 301 Fundamentals of Mathematics II  
*Prerequisite: MTH 209A*

CSC 208 Calculus for Comp. Science I  
*Prerequisite: MTH 215*

MNS 205 Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

BST 322 Intro to Biomedical Statistics

### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

ILR 260 Information Literacy  
*Prerequisite: ENG 100, and ENG 101*

### AREA D: ARTS AND HUMANITIES, AND LANGUAGE

(Minimum 4.5 quarter units)

ARB 100 Beginning Arabic I

ARB 101 Beginning Arabic II  
*Prerequisite: ARB 100*

ARB 200 Intermediate Arabic I  
*Prerequisite: ARB 101*

ASL 120 American Sign Language I

ASL 220 American Sign Language II  
*Prerequisite: ASL 120*

ASL 320 American Sign Language III  
*Prerequisite: ASL 220*

ART 200 Visual Arts

HIS 233\* World Civilizations I  
*Prerequisite: ENG 100, and ENG 101*

HIS 234\* World Civilizations II  
*Prerequisite: ENG 100, and ENG 101*

LIT 100 Introduction to Literature  
*Prerequisite: ENG 100, and ENG 101*

LIT 345 Mythology  
*Prerequisite: LIT 100*

MUS 100	Fundamentals of Music
MUS 327+	World Music <i>Prerequisite: ENG 100, and ENG 101</i>
PGM 101	Philosophy of Coaching
PHL 100	Introduction to Philosophy <i>Prerequisite: ENG 100, and ENG 101</i>
PHL 337	Ethics <i>Prerequisite: ENG 100, and ENG 101</i>
SPN 100	Beginning Spanish I
SPN 101	Beginning Spanish II <i>Prerequisite: SPN 100</i>
SPN 200	Intermediate Spanish I <i>Prerequisite: SPN 101</i>
THR 200	Theater Arts
+ Diversity Enriched Offering	

\* Minnesota residents must complete other Humanities classes to satisfy Minnesota degree standards.

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES (Minimum 4.5 quarter units)

COM 100	Intro to Mass Communication
COM 220	Media Literacy
COM 380+	Democracy in the Info. Age <i>Prerequisite: ENG 100, and ENG 101</i>
ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
HIS 220A+	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B+	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 300	Roots of Western Civilization <i>Prerequisite: ENG 100, and ENG 101</i>
PGM 100	History of Sport
POL 100	Introduction to Politics <i>Prerequisite: ENG 100, and ENG 101</i>
POL 201	American Politics <i>Prerequisite: ENG 100, and ENG 101</i>
PSY 100	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 260	Cultural Anthropology <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>
+ Diversity Enriched Offering	

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES (Minimum 6 quarter units [Note: one science lab is required])

BIO 100	Survey of Bioscience
BIO 100A	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100, or BIO 161 for science majors</i>
BIO 161	General Biology 1
BIO 162	General Biology 2 <i>Prerequisite: BIO 161</i>
BIO 201	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.</i>

BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
CHE 101	Introductory Chemistry <i>Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
CHE 101A	Introductory Chemistry Lab (1.5 quarter units) <i>Prerequisite: CHE 101, or CHE 141 for science majors</i>
CHE 141	General Chemistry 1 <i>Prerequisite: MTH 215 or equivalent, CHE 101</i>
CHE 142	General Chemistry 2 <i>Prerequisite: CHE 141</i>
EES 103	Fundamentals of Geology
EES 103A	Fundamentals of Geology Lab (1.5 quarter units) <i>Prerequisite: EES 103</i>
PHS 104	Introductory Physics <i>Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
PHS 104A	Introductory Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 104, or PHS 171 for science majors</i>
PHS 171	General Physics 1 <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B</i>
PHS 172	General Physics 2 <i>Prerequisite: PHS 171</i>

Please Note: It is strongly recommended that students in the BIO 201 - 203A series complete this series in numerical sequence BIO 201 + 201A, 202 + 202A, 203 + 203A.

#### AREA G: LIFELONG LEARNING AND SELF DEVELOPMENT (Minimum 4.5 quarter units)

ART 250	Self-Reflection via Visual Art
COH 100	Personal Health
COH 201	Integrative Health
COH 317	Public Health Nutrition
COH 318	Drug Use and Abuse
COH 319	Human Sexuality
GLS 150	Global Issues and Trends

#### GENERAL EDUCATION FOR BACHELOR DEGREES

The general education program promotes the intellectual growth of all students in National University's undergraduate degree programs. The general education curriculum assumes that undergraduates will not concentrate on a major field of study until they have completed a thorough general education program that is writing-intensive and addresses the cultural diversity of contemporary society.

Students in the general education program are advised to focus on writing and speech communication first. Students are then counseled to explore mathematical and other formal systems to develop abstract reasoning abilities and are required to take a course in informational literacy and report writing. Finally, all students are required to have a significant exposure to the natural sciences, the humanities and fine



arts, and the social and behavioral sciences and modern language. Many of these courses include an examination of the human condition in a multicultural society.

The general education curriculum emphasizes communications, mathematics and sciences, humanities and social/behavioral sciences. Thus, the curriculum provides coherence to undergraduate education, affording the student the opportunity to:

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking, reading and writing skills appropriate to upper-division college work.
- Demonstrate critical awareness of the major approaches, methods, assumptions, and applications of different academic disciplines.
- Employ college-level scientific and quantitative reasoning skills to appraise information and to solve problems.
- Develop basic proficiency in another language.
- Demonstrate awareness of past and present human and cultural diversity.
- Access, evaluate and use information gathered through a variety of resources and technologies in developing research projects and presentations.

The general education curriculum furnishes students with the basic knowledge necessary to pursue any degree program. Students who fulfill the curriculum gain a strong interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

### Diversity Requirement

The diversity component serves the general education program goal of increasing respect for, and awareness of, diverse peoples and cultures. A plus [+] after any course on the list of approved general education courses signifies a diversity-enriched course. Students must complete at least one diversity-enriched course in the general education program.

### CSU General Education Certifications and IGETC

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certifications are typically required to take one to three upper-division general education courses at National in order to fulfill the unit requirements. Students must provide an official transcript with the certification included or a separate certification form from the community college attended.

### General Education Program Requirements

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 quarter units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. All undergraduate students working toward any associate or bachelor's degree must meet the University's diversity requirement. A maximum of 13.5 upper-division units may be utilized to meet G.E. requirements.

National University has general education requirements in the following areas:

#### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

##### Category 1: Writing

(10.5 quarter units required)

ENG 100	Effective College English I (3 quarter units) <i>Prerequisite: Satisfactory performance on Accuplacer</i>
ENG 101	Effective College English II (3 quarter units) <i>Prerequisite: ENG 100</i>
ENG 240	Advanced Composition <i>Prerequisite: ENG 100, and ENG 101</i>

or

ENG 334A Technical Writing  
*Prerequisite: ENG 100, and ENG 101 (Only Business, Engineering, and Nursing majors may fulfill the requirement by taking ENG 334A)*

#### Category 2: Oral Communication

(4.5 quarter units required)

COM 101	Intro to Oral Communication
COM 103	Oral Communication
COM 120	Intro to Interpersonal Comm

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

MTH 204	Mathematics for Science <i>Prerequisite: MTH 12A, and MTH 12B</i>
MTH 209A	Fundamentals of Mathematics I <i>Prerequisite: Placement Evaluation</i>
MTH 210	Probability and Statistics <i>Prerequisite: Placement evaluation</i>
MTH 215	College Algebra & Trigonometry <i>Prerequisite: Placement Evaluation</i>
MTH 216A	College Algebra I (3 quarter units) <i>Prerequisite: Placement Evaluation</i>
MTH 216B	College Algebra II (3 quarter units) <i>Prerequisite: MTH 216A</i>
MTH 220	Calculus I <i>Prerequisite: MTH 215 or placement evaluation</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A</i>
CSC 208	Calculus for Comp. Science I <i>Prerequisite: MTH 215</i>
MNS 205	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
BST 322	Intro to Biomedical Statistics

#### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

ILR 260	Information Literacy <i>Prerequisite: ENG 100, and ENG 101</i>
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#### AREA D: ARTS, HUMANITIES, AND LANGUAGES

(Minimum 18 quarter units in at least 2 areas)

##### ARTS

ART 100	Introduction to Art History <i>Prerequisite: ENG 100, and ENG 101</i>
ART 200	Visual Arts
MUS 100	Fundamentals of Music
MUS 327+	World Music <i>Prerequisite: ENG 100, and ENG 101</i>
THR 200	Theater Arts

##### HUMANITIES

HIS 233*	World Civilizations I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 100	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>

LIT 345	Mythology <i>Prerequisite: LIT 100</i>
PGM 101	Philosophy of Coaching
PHL 100	Introduction to Philosophy <i>Prerequisite: ENG 100, and ENG 101</i>
PHL 337	Ethics <i>Prerequisite: ENG 100, and ENG 101</i>

## Languages

### Language Proficiency Testing

National University will offer language proficiency testing for students who need foreign language proficiency verification through one of the below two options:

1. Passing a credit/challenge by examination offered through the National University testing center. Note: only limited languages are available.
2. If the language is not available through a National University Credit/Challenge examination then testing can be done through an agreement with the University of Pennsylvania Language Proficiency Testing Department. National University will allow students who have met the Intermediate level of foreign language proficiency through this test to waive the corresponding Foreign language requirement in G.E. This service is made available to students at a reasonable cost. Further information may be obtained from <http://www.plc.sas.upenn.edu/testing/>

In all cases students will still be required to meet the overall unit requirement for General Education.

ARB 100	Beginning Arabic I
ARB 101	Beginning Arabic II <i>Prerequisite: ARB 100</i>
ARB 200	Intermediate Arabic I <i>Prerequisite: ARB 101</i>
ARB 201	Intermediate Arabic II <i>Prerequisite: ARB 200</i>
ASL 120	American Sign Language I
ASL 220	American Sign Language II <i>Prerequisite: ASL 120</i>
ASL 320	American Sign Language III <i>Prerequisite: ASL 220</i>
SPN 100	Beginning Spanish I
SPN 101	Beginning Spanish II <i>Prerequisite: SPN 100</i>
SPN 200	Intermediate Spanish I <i>Prerequisite: SPN 101</i>

Students may also satisfy Area D Foreign Language requirements with 9 quarter units of computer languages:

CSC 242	Intro to Programming Concepts <i>Prerequisite: CSC 200, and CSC 208</i>
CSC 252	Programming in C++ <i>Prerequisite: CSC 242</i>
CSC 262	Programming in JAVA <i>Prerequisite: MTH 215</i>

\* Minnesota residents must complete other Humanities classes to satisfy Minnesota degree standards.

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

COM 100	Intro to Mass Communication
COM 220	Media Literacy
COM 380+	Democracy in the Info. Age <i>Prerequisite: ENG 100, and ENG 101</i>

ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
HIS 220A+	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B+	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 300+	Roots of Western Civilization <i>Prerequisite: ENG 100, and ENG 101</i>
PGM 100	History of Sport
POL 100	Introduction to Politics <i>Prerequisite: ENG 100, and ENG 101</i>
POL 201	American Politics <i>Prerequisite: ENG 100, and ENG 101</i>
PSY 100	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 260	Cultural Anthropology <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

BIO 100	Survey of Bioscience
BIO 100A	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100, or BIO 161 for science majors</i>
BIO 161	General Biology 1
BIO 162	General Biology 2 <i>Prerequisite: BIO 161</i>
BIO 201	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.</i>
BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
CHE 101	Introductory Chemistry <i>Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
CHE 101A	Introductory Chemistry Lab (1.5 quarter units) <i>Prerequisite: CHE 101, or CHE 141 for science majors</i>
CHE 141	General Chemistry 1 <i>Prerequisite: MTH 215 or equivalent</i>
CHE 142	General Chemistry 2 <i>Prerequisite: CHE 141</i>
EES 103	Fundamentals of Geology
EES 103A	Fundamentals of Geology Lab (1.5 quarter units) <i>Prerequisite: EES 103</i>

- PHS 104 Introductory Physics  
*Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B*
- PHS 104A Introductory Physics Lab (1.5 quarter units)  
*Prerequisite: PHS 104, or PHS 171 for science majors*
- PHS 171 General Physics 1  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B*
- PHS 172 General Physics 2  
*Prerequisite: PHS 171*

**AREA G: LIFELONG LEARNING AND SELF DEVELOPMENT**

(Minimum 4.5 quarter units)

- ART 250 Self-Reflection via Visual Art
- COH 100 Personal Health
- COH 201 Integrative Health
- COH 317 Public Health Nutrition
- COH 318 Drug Use and Abuse
- COH 319 Human Sexuality
- GLS 150 Global Issues and Trends

**AREA A-G: GENERAL EDUCATION**

(Minimum 4.5 quarter units)

If a student has not met the upper-division unit requirement in the completion of the above general education areas, an upper-division course from the following list must be taken. (Upper-division courses applicable to General Education are numbered 300-399). If a student has already met the upper-division unit requirement in the completion of the above general education areas, any course below or any course in Areas A through G may satisfy this Area.

- ART 315 Film as Art  
*Prerequisite: ENG 100, ENG 101*
- ART 329+ World Art  
*Prerequisite: ENG 100, ENG 101*
- BRO 210 History of Television  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*
- COM 360+ Representation in the Media  
*Prerequisite: ENG 100, and/or ENG 101*
- COM 380+ Democracy in the Info. Age  
*Prerequisite: ENG 100, and ENG 101*
- EES 301 Earth & Planetary Sciences
- EES 322 Oceanography
- EES 335 Environmental Science
- ENG 375 Nature Writing  
*Prerequisite: ENG 100, and ENG 101*
- HIS 300 Roots of Western Civilization  
*Prerequisite: ENG 100, and ENG 101*
- HUM 362 Persian Culture  
*Prerequisite: ENG 100, and ENG 101*
- LIT 311 British Literature I  
*Prerequisite: LIT 100*
- LIT 312 British Literature II  
*Prerequisite: LIT 100*
- LIT 321 American Literature I  
*Prerequisite: LIT 100*
- LIT 322 American Literature II  
*Prerequisite: LIT 100*
- MUS 326 Survey of Am Music History
- PHL 320+ World Religions  
*Prerequisite: ENG 100, and ENG 101*

- PHL 332 Religion of Islam  
*Prerequisite: ENG 100, and ENG 101*
- PHL 375 Environmental Ethics  
*Prerequisite: ENG 100, and ENG 101*
- PHS 102 Survey of Physical Science
- PSY 300 Social Psychology of Sport  
*Prerequisite: ENG 100, ENG 101, PSY 100*
- PSY 301 Child Development  
*Prerequisite: ENG 100, ENG 101*
- SCI 300+ Geography
- SOC 325 Popular Culture  
*Prerequisite: ENG 100, and ENG 101*
- SOC 327 Arab Culture  
*Prerequisite: ENG 100, and ENG 101*
- SOC 336 + American Film and Society  
*Prerequisite: ENG 100, and ENG 101*
- SOC 344 Marriage, Sex and the Family  
*Prerequisite: ENG 100, and ENG 101*
- SOC 350+ Cultural Diversity  
*Prerequisite: ENG 100, and ENG 101*
- SOC 352 Modern Chinese Culture  
*Prerequisite: ENG 100, and ENG 101*

Remedial courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

# COLLEGE OF LETTERS AND SCIENCES

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Dean, Carol P. Richardson  
Ed. D. Music Education, University of Illinois at Urbana-Campaign

- 80 Degrees Offered**
- 81 Degrees Offered by Department**
- 82 Faculty**
- 85 Undergraduate Degree Programs**
- 111 Minors**
- 113 Graduate Degree Programs**
- 126 Certificate Programs**



# DEGREE PROGRAMS OFFERED

## UNDERGRADUATE DEGREES

### Associate of Arts

with a Major in:



- General Education

with Concentrations in:

- » Business Administration 



### Associate of Arts

with a Major in:

- Communication 
- Creative Writing 


















### Associate of Science

With Majors in:

- Alcohol and Drug Abuse Counseling 
- Human Biology
- Professional Golf Management 



### Bachelor of Arts

with Majors in:

- English 
- With a concentration in:
  - » Creative Writing
- English with a Preliminary Single Subject Credential (California) 
- English with Single-Subject Matter Preparation 
- General Studies 
- Global Studies 
- History 
- Interdisciplinary Studies 
- Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (California) 
- With concentration in:
  - » STEM (Science, Technology, Engineering, Mathematics)
- Mathematics with a Preliminary Single Subject Credential (California) 
- Political Science 
- Psychology 
- Social Science with a Preliminary Single Subject Teaching Credential (California) 
- Sociology 
- Spanish 
- with optional
  - » Preliminary Single Subject Teaching Credential (California) 
- Sport Psychology 
- Strategic Communications 

### Bachelor of Science

with Majors in:









- Biology
- Mathematics 
- Organizational Behavior 

### Foreign Credential Bridge Program

#### Transition Programs

- Bachelor of Arts in Global Studies to Master of Arts in History
- Bachelor of Arts in History to Master of Arts in History
- Bachelor of Arts in Political Science to Master of Public Administration
- Bachelor of Science in Biology to Master of Forensic Science
- Bachelor of Science in Organizational Behavior to Master of Arts in Human Behavior




#### Minors

- Creative Writing 
- English 
- Global Studies 
- History 
- Mathematics 
- Political Science 
- Psychology 
- Sociology 

## GRADUATE DEGREES

### Master of Arts

with Fields of Study in:

- Applied Linguistics
- Counseling Psychology
- With specializations in:
  - » Licensed Professional Clinical Counseling
  - » Marriage and Family Therapy
- English 
- With specializations in:
  - » Gothic Studies
  - » Rhetoric
- Film Studies 
- Gerontology 
- History 
- Human Behavior 
- Performance Psychology 
- Strategic Communications 


### Master of Fine Arts

with a Field of Study in:

- Creative Writing 


### Master of Forensic Sciences

with Specializations in:




- Criminalistics
- Investigation 

### Master of Science

With a Field of Study in:


- Biology
- Mathematics for Educators 

The following programs are also listed in the School of Education Section:


- Bachelor of Arts
- with Majors in:
  - » English with a California Preliminary Single Subject Credential (California) 
  - » Interdisciplinary Studies with a California Preliminary Multiple Subject Teaching Credential 
  - With concentration in:
    - STEM (Science, Technology, Engineering, Mathematics)
  - » Mathematics with a California Preliminary Single Subject Credential (California) 
  - » Social Science with a Preliminary Single Subject Teaching Credential (California)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Alcohol and Drug Abuse Counseling 


### Graduate Level

- Forensic and Crime Scene Investigations 
- Subject Matter Authorization in Introductory Mathematics for Single or Multiple Subject Teaching Credential Holders

## NATIONAL UNIVERSITY GOLF ACADEMY CERTIFICATE PROGRAMS

- Advanced Professional Golf Management
- Professional Golf Management 

 Entire program can be completed online.

 On-site program with possible online courses or prerequisites.



Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

## DEPARTMENT OF ARTS AND HUMANITIES







### Associate of Arts

*With Majors in:*



- Communication 
- Creative Writing 

### Bachelor of Arts

*with Majors in:*




- English   
*With Concentration in:*
  - » Creative Writing
- English with a Preliminary Single Subject Credential (California) 
- English with Single-Subject Matter Preparation 
- Spanish   
*with optional*
  - » Preliminary Single Subject Teaching Credential (California) 
- Strategic Communications 

### Minors

- Creative Writing 
- English 

### Master of Arts

*with Fields of Study in:*

- Applied Linguistics
- English   
*With specializations in:*
  - » Gothic Studies
  - » Rhetoric
- Film Studies 
- Strategic Communications 

### Master of Fine Arts

*with a Field of Study in:*

- Creative Writing 

## DEPARTMENT OF MATHEMATICS AND NATURAL SCIENCES


### Associate of Science

*With Majors in:*

- Human Biology


### Bachelor of Arts

*with Majors in:*

- Mathematics with a Preliminary Single Subject Credential (California) 

### Bachelor of Science

*with Majors in:*


- Biology
- Mathematics 

### Minors

- Mathematics 


### Master of Forensic Sciences

*with Specializations in:*

- Criminalistics
- Investigation 


### Master of Science

*With a Field of Study in:*

- Biology
- Mathematics for Educators 

## CERTIFICATE PROGRAMS

### Graduate Level

- Forensic and Crime Scene Investigations 
- Subject Matter Authorization in Introductory Mathematics for Single or Multiple Subject Teaching Credential Holders

## DEPARTMENT OF PSYCHOLOGY



### Associate of Science

*With Majors in:*

- Alcohol and Drug Abuse Counseling 
- Professional Golf Management 

### Bachelor of Arts

*with Majors in:*

- Psychology 
- Sport Psychology 

### Bachelor of Science

*with Majors in:*




- Organizational Behavior 

### Minors

- Psychology 

### Master of Arts

*with Fields of Study in:*

- Counseling Psychology  
*with Specialization in:*
  - » Licenced Professional Clinical Counseling
  - » Marriage and Family Therapy
- Gerontology 
- Human Behavior 
- Performance Psychology 

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Alcohol and Drug Abuse Counseling 

## DEPARTMENT OF SOCIAL SCIENCES








### Associate of Arts

*with Majors in:*

- General Education  
*with Specialization in:*
  - » Business Administration

### Bachelor of Arts

*with Majors in:*

- General Studies 
- Global Studies 
- History 
- Interdisciplinary Studies 
- Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (California) 
- With concentration in:*
  - » STEM (Science, Technology, Engineering, Mathematics)
- Political Science 
- Social Science with a Preliminary Single Subject Teaching Credential (California) 
- Sociology 

### Minors

- Global Studies 
- History 
- Political Science 
- Sociology 

### Master of Arts

*with Fields of Study in:*

- History 

## NATIONAL UNIVERSITY GOLF ACADEMY CERTIFICATE PROGRAMS

- Advanced Professional Golf Management
- Professional Golf Management

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## MISSION STATEMENT

The College of Letters and Sciences (COLS) prepares students for meaningful careers and lifelong learning by developing an education that fosters the key qualities of broad-mindedness, self-assurance and competency in oral and written communication, the ability to both understand and undertake academic research, the necessary intellectual skill and zeal to identify and pursue one's chosen area of study, and a commitment to world-citizenship.

The College of Letters and Sciences champions the philosophy of a strong liberal arts education. COLS comprises the liberal arts core of National University and is made up of a community of teaching scholars who are dynamically involved with the University at large, educating the majority of its undergraduates, cultivating and administering the general education curriculum, sponsoring innovative research centers and institutes, and offering numerous graduate degree programs.

## SPECIAL PROGRAMS OFFERED

### General Education Curriculum

The University's general education program links undergraduate work in writing, oral communication, critical thinking, mathematics and other skill areas with programs at the upper division level.

A number of courses address issues of cultural diversity, while the traditional goal of promoting intellectual breadth along with skill-based fundamentals has been enhanced and made more flexible.

The purpose of National University's general education program is to meet the educational objectives of adult learners who seek to strengthen their professional work and advance their creative and analytical abilities.

### Special Programs

#### Center for Cultural and Ethnic Studies

The Center for Cultural and Ethnic Studies hosts forums, workshops and cultural events with the goal of promoting diversity and intellectual curiosity at the University. These events are intended to encourage awareness of contemporary artistic, intellectual and cultural issues in daily life. In practice, the Center serves as a bridge between the University and other communities. Events provide a common platform for the exchange of research and ideas by National University faculty and scholars at other institutions, artists and community members. The work of the Center for Cultural and Ethnic Studies is to bring cultural, intellectual and artistic events of the highest caliber to the University.

# COLLEGE OF LETTERS AND SCIENCES

## ■ ASSOCIATE OF ARTS

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Faculty Advisor: Tom Pollard; (408) 236-1150; [tpollard@nu.edu](mailto:tpollard@nu.edu)

The Associate of Arts (AA) degree is designed to give students a solid foundation for continuing professional and traditional studies as well as continued intellectual growth.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking, reading and writing skills appropriate to upper-division college work.
- Demonstrate critical awareness of the major approaches, methods, assumptions, and applications of different academic disciplines.
- Employ college-level scientific and quantitative reasoning skills to appraise information and to solve problems.
- Develop basic proficiency in another language.
- Demonstrate awareness of past and present human and cultural diversity.
- Access, evaluate and use information gathered through a variety of resources and technologies in developing research projects and presentations.

## General Education Program Requirements

To receive the AA degree in General Education, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Of the 90 units required, 70.5 must fall into the areas of general education as listed below. A list of courses for each category can be found in the General Education section of the catalog – requirements for Bachelor degrees. The other units to meet total unit requirements can be comprised of either elective courses or students may choose to take a concentration in one of the below areas.

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering.

Students are urged to meet English and mathematics requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on undergraduate admission procedures for specific information regarding application and placement evaluation.

### AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

### AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

### AREA D: ARTS, HUMANITIES, and LANGUAGE

(Minimum 18 quarter units over at least 2 areas)

### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required [Note: one science lab is required])

### AREA G: LIFELONG LEARNING AND SELF DEVELOPMENT

(Minimum 4.5 quarter units)

### AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Available concentrations for the Associate of Arts in General Education Degree:

### ▲ Concentration in Business Administration

Faculty Advisor: Gary Zucca; (209) 736-2949; [gzucca@nu.edu](mailto:gzucca@nu.edu)

This concentration is designed for students enrolled in the Associate of Arts degree to provide a broad base of introductory business-related disciplines. Students completing this degree and concentration are prepared for entry-level positions in business and/or articulation into a bachelor's degree program in business.

### Requirements for the Concentration

(8 courses; 36 quarter units)

MNS 205	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
LAW 304	Legal Aspects of Business I
MGT 309C	Prin. of Mgmt & Organizations

## ◆ MAJOR IN COMMUNICATION

Faculty Advisor: Scott Campbell; (858) 642-8055; scampbell@nu.edu

The Associate of Arts in Communication prepares students to enter professions in the communication field and to continue their undergraduate education in one or more of the related fields of public relations, advertising, journalism, corporate communication, and media. Enrolled students gain valuable experience in a variety of contexts while establishing a broad foundation in communication theory. Students who successfully complete the coursework for this program are provided with the critical thinking and analytical skills needed to thrive as a communication professional.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the effectiveness of oral communication messages.
- Establish appropriate communication goals.
- Create content that fulfills communication objectives.
- Apply critical analysis of mediated messages.
- Deliver an effective presentation using digital technology.
- Effectively deliver a clear and well-researched argument.

### Degree Requirements

To receive the Associate of Arts in Communication, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. All students must complete a minimum 34.5 units of the Associate of Arts General Education requirements. In the absence of transfer credit additional electives may need to be taken to meet the overall unit requirement of the degree. Please see Undergraduate Information section for admission and evaluation.

### Requirements for the Major

(9 courses; 40.5 quarter units)

COM 100	Intro to Mass Communication
COM 101	Intro. to Oral Communication <i>Prerequisite: ENG 100, ENG 101</i>
COM 103	Public Speaking
<b>or</b>	
COM 120	Intro to Interpersonal Comm
COM 130	Intro. to Intercultural Comm. <i>Prerequisite: ENG 100, ENG 101, COM 101</i>
COM 150	Small Group Communication <i>Prerequisite: ENG 100, ENG 101, COM 101</i>
COM 160	Argumentation and Debate <i>Prerequisite: ENG 100, ENG 101</i>
COM 190	Business Communication <i>Prerequisite: ENG 100, ENG 101</i>
COM 220	Media Literacy
COM 303	Digital Literacy 2.0 <i>Prerequisite: ENG 100, ENG 101</i>

## ◆ MAJOR IN CREATIVE WRITING

Faculty Advisor: Amina Cain; (310) 662-2165; acain@nu.edu

The Associate of Arts with Major in Creative Writing is designed to help students develop their interests and talents as creative writers and to give them the skills to continue to improve their writing. Students will be introduced to three different genres and given the opportunity for more advanced study in two of them. The program will provide a sound foundation for further work or study in creative writing.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Recognize the basic conventions of contemporary fiction, poetry, and screenwriting
- Produce polished, completed works in two of the genres studied in the program (fiction, poetry, screenwriting)

- Analyze their own work critically and employ revision strategies to improve it
- Critique the writing of others and offer constructive suggestions for improving it in a collegial setting

### Degree Requirements

#### Preparation for the Major

(2 courses; 6 quarter units)

ENG 100*	Effective College English I (3 quarter units) <i>Prerequisite: Satisfactory performance on Accuplacer</i>
ENG 101*	Effective College English II (3 quarter units) <i>Prerequisite: ENG 100</i>

\* May be used to meet a General Education requirement

#### Requirements for the Major

(9 courses; 40.5 quarter units)

LIT 100	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>
ENG 240	Advanced Composition <i>Prerequisite: ENG 100, and ENG 101</i>
ENG 201	Fiction Writing I <i>Prerequisite: LIT 100</i>
ENG 202	Poetry Writing I <i>Prerequisite: LIT 100</i>
ENG 203	Screenwriting I <i>Prerequisite: LIT 100, or ART 315</i>

Two of the following courses:

ENG 301	Fiction Writing II <i>Prerequisite: ENG 201</i>
ENG 302	Poetry Writing II <i>Prerequisite: ENG 202</i>
ENG 303	Screenwriting II <i>Prerequisite: ENG 203</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100, and ENG 101</i>

Two of the following courses:

ART 100	Introduction to Art History <i>Prerequisite: ENG 100, and ENG 101</i>
ART 200	Visual Arts
BRO 210	History of Television <i>Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103</i>
COM 100	Intro to Mass Communication
MUL 245	Principles of Web Design <i>Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103</i>
MUL 255	Interactive Design <i>Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103</i>
MUS 100	Fundamentals of Music
PHL 100	Introduction to Philosophy <i>Prerequisite: ENG 100, and ENG 101</i>
PSY 100	Introduction to Psychology
THR 200	Theater Arts

## ■ ASSOCIATE OF SCIENCE

### ◆ MAJOR IN ALCOHOL AND DRUG ABUSE COUNSELING

Faculty Advisor: Donald Posson; (702) 531-7832; dposson@nu.edu

The Associate of Science in Alcohol and Drug Abuse Counseling is designed to meet California state standards for certification of alcohol and drug abuse counselors. This program is approved by CAADAC's education foundation CA Foundation for Advancement of Addiction Professionals. This program may not meet the requirements for certification in other states. For complete information on the CAADAC certification, or to order a CAADAC Handbook, visit [www.caadac.org](http://www.caadac.org) or call (916) 368-9412.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients with alcohol and drug abuse and/or dependence issues.
- Demonstrate entry level counseling skills in working with individuals, groups, and families relative to alcohol and drug abuse and/or dependence issues.
- Assess and diagnose clients using DSM IV-TR alcohol and drug abuse and dependence criteria.
- Develop a treatment plan based on a biopsychosocial assessment of the individual's strengths, weaknesses, and needs.
- Develop case management plans for clients that bring services, agencies, resources, or people together with a planned framework of action.
- Provide client education to individuals, groups, and families on alcohol and drug abuse and dependence.
- Interact with counselors and other professionals in regard to client treatment and services.
- Adhere to established professional codes of ethics and standards of practice.
- Integrate knowledge of cultural diversity into chemically dependent clients' treatment plans.

#### Degree Requirements

To receive the degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University, a minimum 34.5 units of General Education and complete a 255 hour practicum experience working with clients at an approved practicum site. Students are urged to meet English requirements as early as possible in their college career to avoid serious difficulties in other course work. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

Upon application students must sign the ADC Student Agreement before beginning their coursework. Students must obtain malpractice insurance prior to beginning their work with clients. Students attend live practicum classes one Saturday a month during the seven month clinical practicum at a National University campus. Students must attend live Internet class sessions. Students will have their choice of attending either the live Internet session or reviewing the recording of the session afterwards. Students must have a headset with a microphone that plugs into the USB port on the computer.

#### Recommended as preparation for the Major

(5 courses; 19.5 quarter units)

ENG 100*	Effective College English I (3 quarter units) <i>Prerequisite: Satisfactory performance on Accuplacer</i>
ENG 101*	Effective College English II (3 quarter units) <i>Prerequisite: ENG 100</i>
COM 103*	Public Speaking
MTH 204*	Mathematics for Science <i>Prerequisite: MTH 12A, and MTH 12B, or Accuplacer test placement</i>
ILR 260*	Information Literacy <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement

#### Prerequisites for the Major

(2 courses; 9 quarter units)

PSY 100*	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement + Diversity Enriched Offering

#### Requirements for the Major

(9 courses; 40.5 quarter units)

ADC 205	Intro to Substance Abuse <i>Prerequisite: PSY 100, SOC 100</i>
ADC 215	Physiology of Substance Abuse <i>Prerequisite: PSY 100, SOC 100</i>
ADC 225	Law and Ethics <i>Prerequisite: PSY 100, SOC 100</i>
ADC 235	Case Management <i>Prerequisite: PSY 100, SOC 100</i>
ADC 245	Individual Counseling I <i>Prerequisite: PSY 100, SOC 100, ADC 205</i>
ADC 255	Individual Counseling II <i>Prerequisite: ADC 245</i>
ADC 265	Group & Family Counseling <i>Prerequisite: PSY 100, SOC 100</i>
ADC 275	Personal & Professional Growth <i>Prerequisite: PSY 100, SOC 100</i>
ADC 285	Practicum in Substance Abuse <i>Prerequisite: Satisfactorily complete 5 courses in the major and Program lead faculty approval</i>

### ◆ MAJOR IN HUMAN BIOLOGY

Faculty Advisor: Huda Makhluf; (858) 642-8488; hmakhluf@nu.edu

The Associate of Science in Human Biology (AS-HB) degree is designed to give students a solid foundation for continuing intellectual growth and further professional studies leading to a career in nursing or other health science-related fields. Students planning to transition into a bachelor's degree or other health related field should check that program requirements prior to completing the AS-HB.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss the social, physiological, and psychological aspects of human behavior at a basic level.
- Discuss the complexities of human biology on the continuum from the level of organism to the level of organized social being.
- Use computer technologies to augment productivity, apply statistical procedures and to gain access to multiple informational resource services.
- Communicate effectively with others using oral, visual, and written methods.

#### Degree Requirements

To receive the A.S. – HB degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Of the 90 units required, 42 must fall into the areas of general education listed below. Students must complete 4.5 quarter units in diversity enriched coursework. A plus (+) indicates a diversity enriched offering. All undergraduate students working toward the Associate of Science in Human Biology must meet the University diversity requirement. The other 48 units can be comprised of elective courses and/or specific major program preparatory courses.

Students are urged to meet English requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on undergraduate admission procedures for specific information regarding application and placement evaluation.

### Prerequisites for the Major

(8 courses; 30 quarter units)

ENG 100*	Effective College English I (3 quarter units) <i>Prerequisite: Satisfactory performance on Accuplacer</i>
ENG 101*	Effective College English II (3 quarter units) <i>Prerequisite: ENG 100</i>
COM 103*	Public Speaking
ILR 260*	Information Literacy <i>Prerequisite: ENG 100, and ENG 101</i>
CHE 101*	Introductory Chemistry <i>Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
CHE 101A*	Introductory Chemistry Lab (1.5 quarter units) <i>Prerequisite: CHE 101, or CHE 141 for science majors</i>
HIS 375*#	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100, ENG 101</i>
MTH 204*	Mathematics for Science <i>Prerequisite: MTH 12A, and MTH 12B, or Accuplacer test placement</i>
<b>or</b>	
MTH 215*	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>

# Required for Nevada students only.

\* May be used to meet a General Education requirement

### Requirements for the Major

(9 courses; 31.5 quarter units)

It is strongly recommended that students complete the BIO 201 - 203A series in numerical sequence: BIO 201 + 201A, 202 + 202A, 203 + 203A.

PSY 100	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
BIO 201	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.</i>
BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
BST 322	Intro to Biomedical Statistics
+ Diversity Enriched Offering	

### ◆ MAJOR IN PROFESSIONAL GOLF MANAGEMENT

Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu

The Associate of Science in Professional Golf Management will prepare students for careers in Professional Golf Course Management and provide learners with a fundamental understanding of the knowledge and skills required for introductory positions in the golf industry. The coursework focuses upon managerial competencies and an understanding of the importance of the concepts of wellness and peak performance.

This major provides:

- A broad-based core of administrative competencies coupled with essential sports management fundamentals oriented to the field of golf;
- An introductory understanding of the processes that enable specific administrative functions in the recreation and golf industry;
- A foundation in applied academic rudiments required to include critical thinking, writing, and communication skills required in today's recreational golf industry;
- Knowledge and skill building in the areas of instruction and player development; and
- Professional management skills and exposure to the golf industry.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify fundamental business support activities, theoretical and practical, related to golf management .
- Recognize ethical issues as they apply to cross-functional management activities in the golf industry.
- Identify current and emerging trends in the golf industry in marketing, branding, finance and the evolving customer base.
- Recognize the importance of diversity and multiculturalism in the global golf industry.
- Demonstrate communication skills appropriate for golf management professionals.
- Apply analytical and critical thinking skills in understanding the complex network of challenges and opportunities associated with the burgeoning recreational golfing market.

### Degree Requirements

To receive the Associate of Arts degree with a major in Professional Golf Management students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. All students must complete a minimum of 34.5 units of the Associate of Arts general education requirements as part of the 90 quarter units. In the absence of transfer credit additional electives may be needed to fulfill the overall units required for the degree. Please refer to the section on undergraduate admissions for further information on admission and evaluation.

### Preparation for the Major

(1 courses; 4.5 quarter units)

PSY 100\* Introduction to Psychology

\* May be used to meet a General Education requirement

### Requirements for the Major

(9 courses; 42 quarter units)

PGM 100	History of Sport
PGM 101	Philosophy of Coaching
PGM 102	Facility Operations
PGM 103	Acctg and Business Practices
PGM 200	Personnel Dev & Human Relation
PGM 203	Instruction & Player Dev
PGM 213	Merchandising & Invent Mgmt
PGM 202	Sustainable Golf & Turf Mgmt (6 quarter units)

## ■ BACHELOR OF ARTS

### ◆ MAJOR IN ENGLISH

Faculty Advisor: John Miller; (949) 733-0632; [jmiller@nu.edu](mailto:jmiller@nu.edu)

The Bachelor of Arts in English provides a strong background in the study of English. The program stresses literary analysis, diversity, critical thinking, and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. It is an excellent preparation for careers in teaching, media, advertising, writing, and publishing; for graduate or professional studies in English, communications, or law; and for advancement in any field in which communication skills are important. Students interested in creative writing may choose the Concentration in Creative Writing.

Note: Students interested in teaching English or Language Arts in middle or secondary schools should consider enrolling in the Single Subject Matter Preparation Program or the major in English with Single Subject Teaching Credential.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss the major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.

#### Degree Requirements

To receive the Bachelor of Arts in English degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Preparation for the Major

(1 course; 4.5 quarter units)

LIT 100\* Introduction to Literature  
Prerequisite: ENG 100, and ENG 101

\* May be used to meet a General Education requirement

#### Additional Preparation for Major in English with Concentration in Creative Writing

(2 courses; 9 quarter units)

Two of the following:

ENG 201 Fiction Writing I  
Prerequisite: LIT 100

ENG 202 Poetry Writing I  
Prerequisite: LIT 100

ENG 203 Screenwriting I  
Prerequisite: LIT 100, or ART 315

#### Requirements for the Major

(8 courses; 36 quarter units)

LIT 311 British Literature I  
Prerequisite: LIT 100

LIT 312 British Literature II  
Prerequisite: LIT 100

LIT 321 American Literature I  
Prerequisite: LIT 100

LIT 322 American Literature II  
Prerequisite: LIT 100

LIT 338 Shakespeare  
Prerequisite: LIT 100

LIT 360 Literary Theory  
Prerequisite: LIT 100

LIT 463 20th Century World Literature  
Prerequisite: LIT 100

LIT 498 English Capstone Course  
Prerequisite: Satisfactory completion of 8 upper-division LIT courses

#### Upper-Division Electives for English Major without Creative Writing Concentration

(8 courses; 36 quarter units)

Any three additional upper division LIT courses

and

One of the following:

ART 315 Film as Art  
Prerequisite: ENG 100, ENG 101

COM 360+ Representation in the Media  
Prerequisite: ENG 100, and/or ENG 101

COM 385 Interactive Storytelling  
Prerequisite: ENG 101

ENG 301 Fiction Writing II  
Prerequisite: ENG 201

ENG 302 Poetry Writing II  
Prerequisite: ENG 202

ENG 303 Screenwriting II  
Prerequisite: ENG 203

ENG 310 English Grammar  
Prerequisite: ENG 101

ENG 350 Fundamentals of Linguistics  
Prerequisite: ENG 100, and ENG 101

ENG 352 Origins of English  
Prerequisite: ENG 100, and ENG 101

ENG 375 Nature Writing  
Prerequisite: ENG 100, and ENG 101

and

Any four additional upper division courses in the College of Letters and Sciences.

+ Diversity Enriched Offering

#### ▲ Concentration in Creative Writing

Faculty Advisor: Colin Dickey; (310) 662-2131; [cdickey@nu.edu](mailto:cdickey@nu.edu)

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss the basic conventions of at least two different contemporary creative genres.
- Produce completed works of publishable quality in those genres.
- Read their own work critically and employ revision strategies to improve it to publishable standards.
- Critique the writing of others in a collegial setting and offer constructive suggestions for improving it to publishable quality.
- Produce a significant project of publishable quality in one genre.

## Concentration Requirements

(8 courses; 36 quarter units)

Two of the following:

ENG 301 Fiction Writing II  
*Prerequisite: ENG 201*

ENG 302 Poetry Writing II  
*Prerequisite: ENG 202*

ENG 303 Screenwriting II  
*Prerequisite: ENG 203*

ENG 375 Nature Writing  
*Prerequisite: ENG 100, and ENG 101*

**and**

One of the following:

ENG 401 Fiction Workshop  
*Prerequisite: ENG 301*

ENG 402 Poetry Workshop  
*Prerequisite: ENG 302*

ENG 403 Screenwriting Workshop  
*Prerequisite: ENG 303*

**and**

One of the following:

LIT 401 Contemporary Fiction  
*Prerequisite: LIT 100*

LIT 402 Contemporary Poetry  
*Prerequisite: LIT 100*

**and**

Any two additional upper division LIT courses

and

Any two additional upper division courses in the College of Letters and Sciences.

## ◆ MAJOR IN ENGLISH WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA) 🎓

*Faculty Advisor: John Miller; (949) 733-0632; jmiller@nu.edu*

*Faculty Advisor: Jo Birdsell; (858) 642-8365; birdsell@nu.edu*

The Bachelor of Arts in English with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity, and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation of literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical and emotional domains.

- Create positive learning environments that ensure healthy human growth.
- Utilize systematic observations, documentation, and other assessment strategies to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

## Degree Requirements

To receive a Bachelor of Arts in English with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

## Preparation for the Major

(1 course; 4.5 quarter units)

LIT 100\* Introduction to Literature  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement

## Requirements for the Major

(25 courses; 108 quarter units)

## English Requirements

(11 courses; 49.5 quarter units)

ENG 350 Fundamentals of Linguistics  
*Prerequisite: ENG 100, and ENG 101*

LIT 311 British Literature I  
*Prerequisite: LIT 100*

LIT 312 British Literature II  
*Prerequisite: LIT 100*

LIT 321 American Literature I  
*Prerequisite: LIT 100*

LIT 322 American Literature II  
*Prerequisite: LIT 100*

LIT 338 Shakespeare  
*Prerequisite: LIT 100*

LIT 360 Literary Theory  
*Prerequisite: LIT 100*

LIT 463 20th Century World Literature  
*Prerequisite: LIT 100*

LIT 498 English Capstone Course  
*Prerequisite: Satisfactory completion of 8 upper-division LIT courses*

and

Any two additional upper division Literature (LIT) courses from available offerings.

## Education Orientation, Theory and Methodology Requirements

(8 courses; 36 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305 Teaching as a Profession

TED 300 Fundamentals of Education  
*Prerequisite: TED 320, or TED 305, or TED 306*

TED 430 Special Needs Students  
*Prerequisite: TED 305, or TED 320, or TED 306*

TED 410 Survey of Multicultural Lit.  
*Prerequisite: TED 305, or TED 320, or TED 306*

TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305, or TED 320</i>
TED 450	Methods of Teaching English <i>Prerequisite: TED 305, or TED 320</i>

### Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of pass, and Corequisite: TED 530B</i>

### Additional Courses for Satisfying SB2042 and CTC for California Teaching Credential

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. EDX 1201X is considered graduate level. The grades earned must be a B or better. EDX 1201X will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201X	Computer-based Technology in the Classroom
HEDX 1101X	Intro Health Ed: K-12

### ◆ MAJOR IN ENGLISH WITH SINGLE-SUBJECT MATTER PREPARATION

*Faculty Advisor: John Miller; (949) 733-0632; jmiller@nu.edu*

The major in English with Single Subject Matter Preparation is designed to prepare students for careers teaching middle or secondary school English or language arts. The program is approved by the California Commission on Teacher Credentialing: students who complete this program, including the required portfolio, will not be required to take the California Subject Examination for Teachers (CSET) in English to receive their teaching credential. To fulfill the Single Subject Matter Preparation standards mandated by the state of California, the program requires additional study in certain areas beyond what is required by the regular major in English. In order to receive the equivalency letter, students must also submit a portfolio of work produced in program courses; the requirements of the portfolio are covered in ENG 300.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation of works of literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Analyze popular media texts and their effects on consumers.
- Identify issues and challenges confronting middle and secondary school

English teachers in the public schools.

- Discuss language structures, language acquisition, linguistic diversity and the development of literacy.

### Degree Requirements

To receive a Bachelor of Arts in English with Single-Subject Matter Preparation candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Preparation for the Major

(5 courses; 22.5 quarter units)

COM 103*	Public Speaking
ILR 260*	Information Literacy <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>
THR 200*	Theater Arts
ENG 201	Fiction Writing I <i>Prerequisite: LIT 100</i>
<b>or</b>	
ENG 202	Poetry Writing I <i>Prerequisite: LIT 100</i>
<b>or</b>	
ENG 203	Screenwriting I <i>Prerequisite: LIT 100, or ART 315</i>

\* May be used to meet a General Education requirement

### Requirements for the Major

(14 courses; 63 quarter units)

Note: ENG300 should be taken as early in the student's program as possible; it requires a 31.5 hour observation in the public schools.

COM 360+	Representation in the Media <i>Prerequisite: ENG 100, and/or ENG 101</i>
ENG 300	English Practicum & Portfolio
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 311	British Literature I <i>Prerequisite: LIT 100</i>
LIT 312	British Literature II <i>Prerequisite: LIT 100</i>
LIT 321	American Literature I <i>Prerequisite: LIT 100</i>
LIT 322	American Literature II <i>Prerequisite: LIT 100</i>
LIT 338	Shakespeare <i>Prerequisite: LIT 100</i>
LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>
LIT 463	20th Century World Literature <i>Prerequisite: LIT 100</i>
LIT 498	English Capstone Course <i>Prerequisite: Satisfactory completion of 8 upper-division LIT courses</i>

and

Choose any three additional upper-division Literature (LIT) courses from available offerings.

+ Diversity Enriched Offering



### Upper-Division Elective

(1 course; 4.5 quarter units)

Students can use any upper-division course in the College of Letters and Sciences to fulfill the Upper-Division Elective requirement.

### The Portfolio Requirement

In order to receive the Single Subject Matter Preparation equivalency letter, all students must submit a portfolio of work completed in program classes. (Note: the portfolio is not a graduation requirement.) The specific requirements of this portfolio are discussed in ENG 300. The portfolio itself is submitted upon completion of the program. Students who have completed required program coursework at other colleges or universities will need to submit work from those courses or eligible substitutions. Students or prospective students with questions about this requirement should contact the program Faculty Advisor.

### ◆ MAJOR IN GENERAL STUDIES

Faculty Advisor: Carl Boggs; (310) 826-0671; cboggs@nu.edu

The Bachelor of Arts in General Studies (BAGS) is designed to meet the needs of a growing number of students who have completed considerable study in diverse subject areas, both academic and applied. This program allows students to organize their varied explorations into a coherent degree program. The BAGS is unique among academic curricula, for it liberates students from the burden of repeating coursework in order to fulfill traditional degree requirements. The degree allows students to explore a wide variety of disciplines. It integrates both applied study (e.g., business, law, computer science, leadership) and arts and sciences to an extent not currently available in other degree programs. This is particularly important for adults who often interrupt their studies for prolonged periods and return with a different academic focus and career goal. The general studies degree allows nontraditional learners to continue moving forward without retracing a considerable portion of their study.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking abilities on scholarly discourses within a specific range of disciplines.
- Demonstrate the ability with parenthetical citations within texts and other references.
- Develop oral and written communication skills.
- Demonstrate consistent proficiency with the mechanics of academic writing.
- Explain the role of education in occupational choices.
- Discuss ethical issues involved in research and academic writing.

### Degree Requirements

To receive a Bachelor of Arts in General Studies degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

In addition to the above general education requirements, two depth areas are required. A depth area for the General Studies degree program is defined as 22.5 upper division quarter units in a given discipline. The first depth area requirement is fulfilled by acquiring 22.5 upper division quarter units in an Arts and Sciences discipline such as natural sciences, mathematics, literature, history, or social science. For example: If a student was pursuing a literature depth area, they would need five courses with a Literature prefix. The second depth area requirement is fulfilled by completing 22.5 upper division quarter units in either a single Applied Studies or Arts and Science discipline. If a student selects the second depth area in the Applied Studies discipline, such as management, law, accounting, or marketing, all five courses must have the same prefix such as MGT if the management discipline was selected. However students do have the option of selecting a second depth area in Arts and Sciences rather than Applied Studies. If a second depth area in Arts and Sciences is selected, then students have the option of choosing five courses from various disciplines within the Arts and Sciences area. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Requirements for Major

(13 courses; 58.5 quarter units)

BGS 301 Intro. to General Studies

BGS 385 Methods of Research  
*Prerequisite: BGS 301 and four additional courses from the major.*

### Depth Area Requirement

(10 courses; 45 quarter units)

Each student in the BAGS program is required to complete two depth area requirements of 22.5 upper division quarter units each. Students can choose from a variety of subject areas to satisfy the Arts and Sciences depth area requirements. These courses could be used alone or in combination with courses taken at other institutions. Listed below are examples of subject areas that can be used to fulfill a depth area requirement:

### Arts and Sciences

(5 courses; 22.5 quarter units)

Literature  
Environmental Studies  
Fine and Performing Arts (including Art and Music)  
History  
Social Sciences (including Sociology and Political Science)  
Psychology  
Spanish  
Natural Sciences  
Communication  
Global Studies  
Human Behavior  
Philosophy

### Applied Study

(5 courses; 22.5 quarter units)

Students can also use courses from the listed areas to satisfy the depth area requirement in Applied Study. These courses could be used on their own or in combination with related courses at other institutions.

Law  
Management  
Economics  
Accounting  
Information Technology Management  
Criminal Justice Administration  
Marketing  
Public Administration  
Leadership  
Finance

### Capstone Requirement

(1 course; 4.5 quarter units)

BGS 499 Capstone Project  
*Prerequisite: Completion of other major requirements. Must be taken within last three classes prior to graduation.*

### Upper-Division Electives

(3 courses; 13.5 quarter units)

To fulfill their unit requirements, students can choose electives from any 300-, 400-, or 500-level courses for which they meet prerequisites.

### ◆ MAJOR IN GLOBAL STUDIES

Faculty Advisor: Lorna Zukas; (858) 642-8437; llueker@nu.edu

Offered only online, the Bachelor of Arts in Global Studies degree program provides a flexible integration of skills and competencies that prepares students for a variety of careers as well as graduate studies in international relations, development, education, social science, immigration, law and government and non-governmental sectors. In short, the program provides students with the ability to think locally and act globally.

The global environment in which economics, culture, and technology converge is diverse, changing, complex and interdependent. By combining course work from multiple disciplines, this program provides a framework to understand and effectively negotiate global realities, whether they are economic, political, cultural,

or ecological. The program encourages students to apply cultural understanding and explore and develop potential markets for their ideas and talent. Students in this program learn to use global communications and information technologies to conduct and present research. Global Studies majors become knowledgeable in the cultures and practices of the world's communities. Graduates understand the roles that ecology, gender, race, class, religion, and ethnicity play in cultural environments and apply their understanding to everyday interactions among diverse cultures. Graduates also produce a portfolio that enables them to integrate the skills they have acquired and apply them in a culminating project to the solution of a real world problem. This portfolio, which graduates post on a website of their own design, includes course projects and the full-length culminating project.

### BA Global Studies/MA History Transition Program

Students currently enrolled in the BA Global Studies program who have a cumulative GPA of at least 3.0 and are within six courses of completion of the BA program may register for the BA Global Studies/MA History transition program. They do so by asking their admission advisor to submit a plan change into the transition program, allowing them to take two MA History classes as electives during the BA Global Studies program. Students may choose up to two 600-level History courses with the exception of HIS 600, HIS 692, HIS 695, HIS 696, HIS 697, HIS 698 or HIS 699.

For students in the BA Global Studies/MA History transition program, the University will waive up to two Master of Arts in History courses taken as part of the bachelor's degree if the grade earned is a "B" or higher. No graduate units will be awarded; instead the University will waive the MA history course(s) taken as part of the bachelor's degree. However, these students must still meet the residency requirements for the Master of Arts in History program. Students must apply for and begin the MA History Program within six months of completing the BA Global Studies program.

Students interested in the transition program to the MA History can have their admissions advisor apply to the program's Faculty Advisor for a waiver of the HIS 600 prerequisite requirement for two transition classes that the student chooses. The Faculty Advisor will grant such waivers. Once students have completed the transition program and are matriculated into the MA History program, they will need to take HIS 600 as their initial course in the MA History program since it will be enforced as the prerequisite to all other courses in the program.

A complete description of Transition Program requirements can be found in the Policies and Procedures section of this catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze issues as they impact the global environment.
- Explain the varied experiences of different social groups interacting with the global economy over the past several hundred years.
- Analyze a global problem such as poverty, hunger, the spread of disease, or environmental degradation from several disciplinary perspectives.
- Evaluate scholarship on globalization for its veracity and reliability.
- Describe the relationships between economic and cultural change in regions of the globe.
- Describe the relationships between economic change and processes of nation-state formation over the last several hundred years.
- Synthesize theoretical perspectives and empirical data into a coherent argument.

### Degree Requirements

To obtain a Bachelor of Arts in Global Studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Global Studies major ei-

ther by testing or by satisfactorily passing two courses in one of the following languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, or Spanish. Other languages are acceptable upon approval of the director of the program. If a student opts to take the elective course GLS 440, Study Abroad, or IBU International Experience, additional fees, waivers, passports, visas, immunizations and other requirements may need to be fulfilled depending on the destination. It is the student's responsibility to find out about these additional requirements and to meet them.

### Preparation for the Major

(2 courses; 9 quarter units)

GLS 150\* Global Issues and Trends

and

HIS 234\* World Civilizations II  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement

### Requirements for the Major

(10 courses; 45 quarter units)

HIS 320 Culture of Global Capitalism  
*Prerequisite: ENG 100, ENG 101*

SCI 300 Geography

PHL 320+ World Religions  
*Prerequisite: ENG 100, and ENG 101*

SOC 328 Intercultural Thinking  
*Prerequisite: ENG 100, and ENG 101*

LIT 463 20th Century World Literature  
*Prerequisite: LIT 100*

GLS 410 Gender and Global Society  
*Prerequisite: ENG 240*

GLS 420 Ecological Revolutions  
*Prerequisite: ENG 240*

GLS 430 The Global Economy  
*Prerequisite: ENG 240*

COM 385 Interactive Storytelling  
*Prerequisite: ENG 101*

GLS 499 Seminar and Portfolio Project  
*Prerequisite: ENG 240*

### Upper-Division Electives

(6 courses; 27 quarter units)

ART 329+ World Art  
*Prerequisite: ENG 100, ENG 101*

GLS 310 Global Communications  
*Prerequisite: ENG 240*

GLS 330 Film in a Global Context  
*Prerequisite: ENG 240*

GLS 440 Study Abroad  
*Prerequisite: HIS 320*

IBU 540 International Experience

HIS 325 Modern World Migration  
*Prerequisite: ENG 100, ENG 101*

HIS 434 Modern World, 1500 to Present  
*Prerequisite: ENG 100, ENG 101, and HIS 234*

MUS 327+ World Music  
*Prerequisite: ENG 100, and ENG 101*

PHL 375 Environmental Ethics  
*Prerequisite: ENG 100, and ENG 101*

POL 350 International Relations  
*Prerequisite: ENG 100, and ENG 101*

POL 320	Politics of Social Movements <i>Prerequisite: ENG 100, and ENG 101</i>
EES 335	Environmental Science
COH 422	Global Health Promotion
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
+ Diversity Enriched Offering	

### ◆ MAJOR IN HISTORY

*Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu*

The Bachelor of Arts in History is a broad-based program that has specific goals including: (1) engaging the mind and imagination of those who study history; (2) introducing students to worlds, times, places, and cultures – including their own – in ways they have never before considered; and (3) promoting the acquisition of historical knowledge and critical thinking, reading, writing, and research skills. Upon successful completion of the undergraduate history major, students should be able to demonstrate competency in the vital skills of historical explanation, discernment, and synthesis.

The study of the past broadens our perspective and allows us to discover the essential elements of human existence. The term historian covers a broad range of career options and job settings. In general, historians study, assess, and interpret the past to determine what happened and why. They examine court documents, diaries, letters, and newspaper accounts; they conduct research, write, teach, evaluate, and make recommendations. They interview individuals and study artifacts and archeological evidence.

In addition to providing experience in logical argumentation, history courses offer research, writing, and analytical skills necessary for many fulfilling careers. Graduates with a degree in history often become educators themselves and teach in elementary schools, secondary schools, or in postsecondary institutions. Beyond teaching, historians also work as researchers in museums and local historical organizations that deal with cultural resources management and historic preservation and make valuable contributions to government and private think tanks. A history degree is excellent preparation for journalists, ad writers, editors and anyone interested in producing multimedia materials and documentaries. Historians have rewarding careers as information managers such as archivists, records managers, and librarians. Finally, training in history creates a strong intellectual foundation for people interested in advocacy such as lawyers and paralegals, litigation support, legislative staff work, and nonprofit foundations. Positions that attract history majors will likely require some of the following qualifications beyond the Bachelor of Arts in History: experience, extensive knowledge of a particular time period or region, and specialized writing and research skills.

#### BA History/MA History Transition Program

Students currently enrolled in the BA History program who have a cumulative GPA of at least 3.0 and are within six courses of completion of the BA program may register for the BA History/MA History transition program. They do so by asking their admission advisor to submit a plan change into the transition program, allowing them to take two MA History classes as electives during the BA History program. Students may choose up to two 600-level History courses with the exception of HIS 600, HIS 692, HIS 695, HIS 696, HIS 697, HIS 698 or HIS 699.

For students in the BA History/MA History transition program, the University will waive up to two Master of Arts in History courses taken as part of the bachelor's degree if the grade earned is a "B" or higher. No graduate units will be awarded; instead the University will waive the MA history course(s) taken as part of the bachelor's degree. However, these students must still meet the residency requirements for the Master of Arts in History program. Students must apply to and begin the MA in History program within six months of completing the BA in History program.

Students interested in the transition program to the MA History can have their admissions advisor apply to the program's Faculty Advisor for a waiver of the HIS 600 prerequisites requirement for the two transition classes that the student chooses. The Faculty Advisor will grant such waivers. Once students have completed the transition program and are matriculated into the MA History program, they will need to take HIS 600 as their initial course in the MA History program since it will be enforced as the prerequisite to all other courses in the program.

A complete description of Transition Program requirements can be found in the Policies and Procedures section of this catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of World History.
- Demonstrate knowledge of U.S. History.
- Analyze a variety of primary sources.
- Analyze secondary sources for their argument and use of supporting evidence, including how the argument may be influenced by the incompleteness of evidence or by biases that are part of surviving evidence.
- Discuss current concerns, new theories, new evidence and issues that shape the history of historical interpretation.
- Conduct historical research and support with appropriate primary and secondary source materials.

#### Degree Requirements

To receive a Bachelor of Arts with a Major in History, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of general education. The following courses are degree requirements. In absence of transfer credit, additional general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the History major either by testing or by satisfactorily passing two courses in one of the following languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, or Spanish. Other languages are acceptable upon approval of the director of the program.

#### Preparation for the Major

(5 courses; 22.5 quarter units)

ENG 240*	Advanced Composition <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220A*	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B*	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 233*	World Civilizations I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement + Diversity Enriched Offering

#### Required for the Major

(10 courses; 45 quarter units)

HIS 431	The Ancient World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 432	The Classical World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 433	The Post-Classical World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101, and HIS 234</i>
HIS 400	Historical Theories & Methods <i>Prerequisite: ENG 240</i>
HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>

HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 363	U.S. Since World War I <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 499	Capstone Research Project <i>Prerequisite: ENG 240 or equivalent, HIS 400, and completion of 31.5 quarter units of core courses in the major</i>

### Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units of electives to fulfill the upper-division unit requirements to earn the Bachelor of Arts in History. Students can select from the following strongly recommended and recommended electives OR choose from any upper-division course in the College of Letters and Sciences. Three elective courses must be in the History program (HIS). To ensure adequate preparation for the California State Examination for Teachers (CSET), students who wish to become middle-school and high-school history teachers in California should take all of their electives from the strongly recommended list.

#### Strongly Recommended:

HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100, ENG 101</i>
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 410	California History <i>Prerequisite: ENG 100, ENG 101</i>
PHL 320+	World Religions <i>Prerequisite: ENG 100, and ENG 101</i>
POL 540	American Political System
SCI 300	Geography

#### Recommended:

GLS 410	Gender and Global Society <i>Prerequisite: ENG 240</i>
GLS 420	Ecological Revolutions <i>Prerequisite: ENG 240</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
HIS 300	Roots of Western Civilization <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 325	Modern World Migration <i>Prerequisite: ENG 100, ENG 101</i>
HIS 339	The Middle East, 600-1600 C.E. <i>Prerequisite: ENG 100, ENG 101</i>
HIS 341	History Through Theater <i>Prerequisite: ENG 100, ENG 101</i>
HIS 342	History of Modern Middle East <i>Prerequisite: ENG 100, ENG 101</i>
HIS 345	Latin American Studies <i>Prerequisite: ENG 100, ENG 101</i>
HIS 346	Chinese History and Culture I <i>Prerequisite: ENG 100, ENG 101</i>
HIS 348	Asian Studies <i>Prerequisite: ENG 100, ENG 101</i>
HIS 349	African Studies <i>Prerequisite: ENG 100, ENG 101</i>
HIS 355	Chinese History and Culture II <i>Prerequisite: ENG 100, ENG 101</i>
HIS 370	History of the American S/W <i>Prerequisite: ENG 100, ENG 101</i>
HIS 490	Guided Study
MUS 326+	American Music

*Prerequisite: ENG 100, and ENG 101*

SOC 325	Popular Culture <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 336+	American Film and Society <i>Prerequisite: ENG 100, and ENG 101</i>
GLS 310	Global Communications <i>Prerequisite: ENG 240</i>
GLS 330	Film in a Global Context <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>

+ Diversity Enriched Offering

### ◆ MAJOR IN INTERDISCIPLINARY STUDIES

*Faculty Advisor: Jacqueline Caesar; (858) 792-8345; jcaesar@nu.edu*

The Bachelor of Arts in Interdisciplinary Studies (BAIS) provides a broad, rigorous education that introduces students to essential knowledge, and connections across the disciplines and application of knowledge to life beyond the University. This degree gives students an enriched and provocative curriculum that prepares them for professional work in a changing cultural and economic environment.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines
- Identify and appreciate the cultural perspectives of world views
- Use information communication technology for knowledge sharing and the interdisciplinary approach
- Demonstrate a deep and flexible understanding of subject matter

#### Degree Requirements

To receive a Bachelor of Arts degree with a Major in Interdisciplinary Studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of General Education requirements. The following courses are specific degree requirements. If students intend to complete a teacher credentialing program, these courses will help prepare for the MSAT and Basic Skills requirement tests. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Preparation for the Major

(3 courses; 13.5 quarter units)

ENG 310	English Grammar <i>Prerequisite: ENG 101</i>
<b>or</b>	
ENG 375	Nature Writing <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220A+	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
<b>or</b>	
HIS 220B+	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

## Requirements for the Major

(13 courses; 58.5 quarter units)

COM 380+ Democracy in the Info. Age  
*Prerequisite: ENG 100, and ENG 101*

SOC 336+ American Film and Society  
*Prerequisite: ENG 100, and ENG 101*

or

SOC 350+ Cultural Diversity  
*Prerequisite: ENG 100, and ENG 101*

BIS 301 Intro to Interdisc. Studies

BIS 401 Interdisciplinary Practice: In  
*Prerequisite: BIS 301 and four additional courses from the major*

4.5 quarter units in literature (LIT) are required. The following are recommended:

LIT 321 American Literature I  
*Prerequisite: LIT 100*

or

LIT 322 American Literature II  
*Prerequisite: LIT 100*

or

LIT 338 Shakespeare  
*Prerequisite: LIT 100*

or

LIT 345 Mythology  
*Prerequisite: LIT 100*

or

LIT 446 Studies in Poetry  
*Prerequisite: LIT 100*

or

LIT 450 Studies in the Novel  
*Prerequisite: LIT 100*

or

LIT 460 Gender and Literature  
*Prerequisite: LIT 100*

4.5 quarter units in social sciences (HIS, POL, SOC) are required. The following are recommended:

HIS 320 Culture of Global Capitalism  
*Prerequisite: ENG 100, ENG 101*

or

HIS 341 History Through Theater  
*Prerequisite: ENG 100, ENG 101*

or

HIS 410 California History  
*Prerequisite: ENG 100, ENG 101*

or

SOC 325 Popular Culture  
*Prerequisite: ENG 100, and ENG 101*

or

SOC 344 Marriage, Sex and the Family  
*Prerequisite: ENG 100, and ENG 101*

or

SOC 430 Culture, Technology & Society  
*Prerequisite: ENG 100, and ENG 101*

or

SOC 445 Contemporary Social Problems  
*Prerequisite: ENG 100, and ENG 101*

or

SOC 540 Power and Social Change  
*Prerequisite: ENG 100, and ENG 101*

4.5 quarter units in behavioral sciences (HUB, PSY) are required. The following are recommended:

HUB 420 Human Communication  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

HUB 440 Organizational Development  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

PSY 426 History of Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

PSY 427 Biological Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

PSY 428 Developmental Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

PSY 429 Intro to Personality Theory  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

PSY 432 Social Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

PSY 433 Cognitive Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

Students should choose no fewer than 4.5 quarter units in natural science and 4.5 quarter units in mathematics. A third 4.5 quarter unit course (either SCI, BIO, EES, or MTH) must also be selected. Some of the mathematics courses may have more than one prerequisite. The following are recommended:

SCI 300 Geography

or

BIO 330 Ecology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*

or

BIO 302 Biodiversity  
*Prerequisite: BIO 100, and BIO 100A*

or

BIO 450 Natural History of California  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100, BIO 100A*

or

MTH 301 Fundamentals of Mathematics II  
*Prerequisite: MTH 209A, or Accuplacer test placement evaluation*

or

MTH 317 Mathematical Modeling  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, and MTH 210*

or

MTH 410 Technology in Math Education  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301*

or

MTH 411 Number Theory  
*Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301*

or

MTH 412 History of Mathematics  
*Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B*

or

MTH 417 Foundations of Geometry  
*Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311*

or

MTH 418 Statistical Analysis  
*Prerequisite: MTH 210, and MTH 220*

**or**  
BIS 405 Genetic Anthropology  
*Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215*

Nine quarter units from the humanities complex (ART, HIS, HUM, MUS, PHL, SOC, THR, GLS) are required. The following are recommended:

ART 315 Film as Art  
*Prerequisite: ENG 100, ENG 101*

**or**  
ART 323 Modern Art  
*Prerequisite: ENG 100, and ENG 101*

**or**  
ART 329+ World Art  
*Prerequisite: ENG 100, ENG 101*

**or**  
GLS 410 Gender and Global Society  
*Prerequisite: ENG 240*

**or**  
HIS 345 Latin American Studies  
*Prerequisite: ENG 100, ENG 101*

**or**  
HIS 348 Asian Studies  
*Prerequisite: ENG 100, ENG 101*

**or**  
HIS 349 African Studies  
*Prerequisite: ENG 100, ENG 101*

**or**  
HIS 370 History of the American S/W  
*Prerequisite: ENG 100, ENG 101*

**or**  
MUS 326+ American Music  
*Prerequisite: ENG 100, and ENG 101*

**or**  
MUS 327+ World Music  
*Prerequisite: ENG 100, and ENG 101*

**or**  
PHL 320+ World Religions  
*Prerequisite: ENG 100, and ENG 101*

**or**  
PHL 339 Study of a Major Philosopher  
*Prerequisite: ENG 100, and ENG 101*

**or**  
PHL 375 Environmental Ethics  
*Prerequisite: ENG 100, and ENG 101*

**or**  
PHL 337 Ethics  
*Prerequisite: ENG 100, and ENG 101*

**or**  
SOC 328 Intercultural Thinking  
*Prerequisite: ENG 100, and ENG 101*

**or**  
SOC 500 Cultural Pluralism in the USA  
*Prerequisite: ENG 100, and ENG 101*

#### Capstone course

BIS 499 Interdisciplinary Studies Proj  
+ Diversity Enriched Offering

#### Upper-Division Electives

(2 courses; 9 quarter units)

Students can select any 300-, 400-, or 500-level courses in arts and sciences to complete the total of 76.5 upper-division units for the degree. Students will need

a Task Stream account for portfolio work. Please refer to your Faculty Advisor for more information (including fees.)

#### ♦ MAJOR IN INTERDISCIPLINARY STUDIES WITH A PRELIMINARY MULTIPLE SUBJECTS TEACHING CREDENTIAL (CALIFORNIA) 1 2

*Faculty Advisor: Jacqueline Caesar; (858) 642-8350; jcaesar@nu.edu*  
*For Credential: Mary Anne Weegar; (858) 642-8360; mweegar@nu.edu*

The Bachelor of Arts in Interdisciplinary Studies and a Preliminary Multiple Subjects Teaching Credential (California) provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines, and applies knowledge of life beyond the University. This degree program gives candidates an enriched and thought-provoking curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as multiple subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information.
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines.
- Identify and appreciate the cultural perspectives of world view.
- Use information communications technology for knowledge sharing and the interdisciplinary approach.
- Demonstrate a deep and flexible understanding of subject matter.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical, and emotional domains.
- Utilize different teaching strategies to accomplish the teaching and learning goals.
- Create a positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation and other assessment strategies to facilitate and account for learning, and to support positive growth.
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.

#### Degree Requirements

To receive a Bachelor of Arts in Interdisciplinary Studies with a Multiple Subjects Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level, including a minimum 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate subject-matter competency through a state-approved examination. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Preparation for the Major

(3 courses; 13.5 quarter units required)

LIT 100\* Introduction to Literature  
*Prerequisite: ENG 100, and ENG 101*

HIS 410 California History  
*Prerequisite: ENG 100, ENG 101*

MTH 209A\* Fundamentals of Mathematics I  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

\* May be used to meet a General Education requirement

## Requirements for the Major

(23 Courses; 99 units)

### Core Requirements

(14 courses; 63 quarter units)

BIS 301	Intro to Interdisc. Studies
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100, and ENG 101</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A, or Accuplacer test placement evaluation</i>
ART 400	Expressive and Integrative Art
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 355	Hist/Social Science Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 380	Arts/PE/Health Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
BIS 401	Interdisciplinary Practice: In <i>Prerequisite: BIS 301 and four additional courses from the major</i>
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 440	Leadership and Assessment <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
BIS 499	Interdisciplinary Studies Proj

### Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of pass; TED 531A with a minimum grade of pass; and a corequisite: TED 530B</i>

### Upper Division Requirements

(5 courses; 22.5 quarter units)

COM 380+	Democracy in the Info. Age <i>Prerequisite: ENG 100, and ENG 101</i>
<b>or</b>	
HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100, ENG 101</i>
TED 305	Teaching as a Profession
<b>or</b>	
TED 306	21st Century Teaching Methods
TED 350	Math and Science Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
<b>or</b>	
TED 351	Teaching STEM Methods <i>Prerequisite: TED 305, or TED 306, or TED 320</i>

### and

Two additional courses from the following:

BIO 330	Ecology <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A</i>
BIS 405	Genetic Anthropology <i>Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215</i>
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301</i>
TED 306	21st Century Teaching Methods
TED 351	Teaching STEM Methods <i>Prerequisite: TED 305, or TED 306, or TED 320</i>

+ Diversity Enriched Offering

### ▲ Concentration in STEM (Science, Technology, Engineering, Mathematics)

A concentration in STEM provides students with the depth and breadth of knowledge in science, technology, engineering and mathematics that prepares them to be successful in a digital classroom. Students will define, create and model team building and problem based learning in an interdisciplinary environment that demonstrates an understanding of the integration of knowledge within and across the disciplines.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate how to integrate Science, Technology, Engineering, and Mathematics (STEM) to meet the needs of all learners
- Create and model interdisciplinary learning environments that reflect team building and problem based learning using technology.

### Requirements for the Concentration

(5 courses; 22.5 quarter units)

SCI 400	History of Science <i>Prerequisite: One 4.5 quarter units science course from the natural sciences</i>
TED 306	21st Century Teaching Methods
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301</i>
BIS 405	Genetic Anthropology <i>Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215</i>
TED 351	Teaching STEM Methods <i>Prerequisite: TED 305, or TED 306, or TED 320</i>

Note: Students will need a Taskstream account for portfolio work. Please refer to your Faculty Advisor for more information (including fees).

### ◆ MAJOR IN MATHEMATICS WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

*Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu  
For Credential: Zhonghe Wu; (714) 429-5144; zwu@nu.edu*

The Bachelor of Art in Mathematics with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication
- Develop fundamental knowledge in geometry
- Model real world problems with a variety of algebraic and transcendental functions
- Use advanced statistics and probability concepts and methods
- Use educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students
- Explain how to support growth in cognitive, social, physical and emotional domains
- Create a positive learning environment that ensures healthy human growth
- Utilize systematic observations, documentation, and other assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas
- Demonstrate professional standards and ethics
- Utilize different teaching strategies to accomplish the teaching and learning goals

### Degree Requirements

To receive a Bachelor of Arts in Mathematics with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of general education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Preparation for the Major

(6 courses; 27 quarter units)

MTH 210\* Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

or

MTH 216A\* College Algebra I (3 quarter units)  
*Prerequisite: Accuplacer test placement evaluation, MTH 12A, and MTH 12B*

and

MTH 216B\* College Algebra II (3 quarter units)  
*Prerequisite: MTH 216A*

MTH 220\* Calculus I  
*Prerequisite: MTH 215, or Accuplacer test placement, or evaluation by a lead faculty*

or

CSC 208\* Calculus for Comp. Science I  
*Prerequisite: MTH 215*

MTH 221 Calculus II  
*Prerequisite: MTH 220*

MTH 222 Calculus III  
*Prerequisite: MTH 221*

MTH 223 Calculus IV  
*Prerequisite: MTH 222*

\* May be used to meet a General Education requirement

### Requirements for the Major

(21 courses; 90 quarter units)

#### Mathematics Requirements

(9 courses; 40.5 quarter units)

MTH 311 Topics from Geometry  
*Prerequisite: MTH 215*

MTH 325 Discrete Mathematics  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B*

or

CSC 331 Discrete Structures and Logic  
*Prerequisite: CSC 252, and CSC 310*

MTH 411 Number Theory  
*Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301*

MTH 435 Linear Algebra  
*Prerequisite: MTH 220, and MTH 325*

MTH 416 Algebraic Structures  
*Prerequisite: MTH 435, and MTH 325*

MTH 417 Foundations of Geometry  
*Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311*

MTH 418 Statistical Analysis  
*Prerequisite: MTH 210, and MTH 220*

MTH 412 History of Mathematics  
*Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B*

MTH 410 Technology in Math Education  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301*

#### Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305 Teaching as a Profession

TED 300 Fundamentals of Education  
*Prerequisite: TED 320, or TED 305, or TED 306*

TED 430 Special Needs Students  
*Prerequisite: TED 305, or TED 320, or TED 306*

TED 310 Development and Learning  
*Prerequisite: TED 305, or TED 320, or TED 306*

TED 420 Diversity in Schooling  
*Prerequisite: TED 305, or TED 320*

TED 330B Reading and Language Arts  
*Prerequisite: TED 305, or TED 320*

TED 461 Mathematics Teaching Methods  
*Prerequisite: TED 305, or TED 320*



## Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A Student Teaching I  
*Corequisite: TED 531A*

TED 530B Student Teaching II  
*Prerequisite: TED 530A, Corequisite: TED 531B*

TED 531A Student Teaching Seminar I  
(2.25 quarter units)  
*Corequisite: TED 530A*

TED 531B Student Teaching Seminar II  
(2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

## Credentialing Requirement

(1 course; 4.5 quarter units)

Students must have senior standing to enroll in this class.

HEDX 1101X Intro Health Ed: K-12

## ◆ MAJOR IN POLITICAL SCIENCE

*Faculty Advisor: Shak Hanish; (858) 642-8494; shanish@nu.edu*

Political science, the systematic and rigorous study of politics and government, is becoming increasingly crucial in a complex and controversial world. Current cynicism about politics and public leadership belies a need for responsive, representative, effective, and capable public authority. Citizens still expect government to tackle intimidating social problems, such as healthcare, community security, economic, and social justice and the balancing of conflicting rights and freedoms. Political science analyzes the ways societies use public authority to address collective problems. The political science program is designed to equip students with specialized research and analytical skills as well as familiarity with more generalized problem-solving skills sufficient to allow them to make valuable contributions to any vocation or enterprise they pursue and to insure that they will be prepared to solve public problems.

The Bachelor of Arts in Political Science will engage students in the study of social, economic, and political life, nationally and globally. A bachelor's degree in political science can lead to exciting careers in federal, state, and local governments; law, business, and international organizations; nonprofit associations and organizations; campaign management, electoral politics, and polling; journalism; and research and teaching.

## BA Political Science/Master of Public Administration (MPA) Transition Program

Students who are currently enrolled in the BA Political Science program who have at least a cumulative GPA of 3.0 and are within six courses of completion of the BA program may register for the BA Political Science/MPA transition program. They may do this by asking their admission advisor to submit a plan change into the transition program allowing them to take two MPA classes as electives during the BA Political Science program. To be eligible, students must apply for and begin the MPA program within six months of completing their Political Science degree. Students may choose up to two 600 level public administration (PAD) courses with the exception of PAD 631 and PAD 644.

For students in the BA Political Science/MPA transition program, the University will waive two graduate-level public administration courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MPA.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain major theories, concepts, and methods of political science.
- Apply key political science perspectives and theories to real world situations.
- Apply the methods used by political scientists to undertake research and answer questions about politics and government.

## Degree Requirements

To be awarded a Bachelor of Arts in Political Science, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of general education. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Preparation for the Major

(1 course; 4.5 quarter units)

POL 100\* Introduction to Politics  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement

## Requirements for the Major

(9 courses; 40.5 quarter units)

POL 320 Politics of Social Movements  
*Prerequisite: ENG 100, and ENG 101*

POL 330 Political Theory  
*Prerequisite: ENG 100, and ENG 101*

POL 340 Comparative Politics  
*Prerequisite: ENG 100, and ENG 101*

POL 350 International Relations  
*Prerequisite: ENG 100, and ENG 101*

POL 360 Public Policy  
*Prerequisite: ENG 100, and ENG 101*

POL 400 European Politics  
*Prerequisite: ENG 100, and ENG 101*

POL 410 Middle Eastern Politics  
*Prerequisite: ENG 100, and ENG 101*

POL 540 American Political System

POL 499 Capstone Seminar in Politics  
*Prerequisite: ENG 240 and completion of at least 27 units of core courses in the major*

## Required Upper-Division Electives

(7 courses; 31.5 quarter units)

Students should choose from the following Upper-Division Electives:

CJA 467 Intl. & Domestic Terrorism

COM 380+ Democracy in the Info. Age  
*Prerequisite: ENG 100, and ENG 101*

GLS 410 Gender and Global Society  
*Prerequisite: ENG 240*

GLS 430 The Global Economy  
*Prerequisite: ENG 240*

HIS 320 Culture of Global Capitalism  
*Prerequisite: ENG 100, ENG 101*

SOC 350+ Cultural Diversity  
*Prerequisite: ENG 100, and ENG 101*

HUM 501 Global Civic Culture  
*Prerequisite: ENG 100, and ENG 101*

PAD 403 Government Relations

PHL 320 World Religions  
*Prerequisite: ENG 100, and ENG 101*

PHL 375 Environmental Ethics  
*Prerequisite: ENG 100, and ENG 101*

POL 490 Guided Study 0.5 - 9

POL 539 Dynamics of World Politics

SOC 385	Methods of Social Inquiry <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 445	Contemporary Social Problems <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 540	Power and Social Change <i>Prerequisite: ENG 100, and ENG 101</i>

+ Diversity Enriched Offering

### ◆ MAJOR IN PSYCHOLOGY

*Faculty Advisor: Brenda Shook; (916) 855-4108; bshook@nu.edu*

The Bachelor of Arts in Psychology program offers a comprehensive introduction to the contemporary discipline of psychology. Graduates of this program are well prepared to seek employment in personnel, vocational counseling, criminal justice, journalism, or entry-level counseling in the context of a county-funded agency or hospital. They are also prepared to seek admission to graduate programs at the master's or doctoral level.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Articulate major theories, concepts, and historical trends in psychology.
- Explain behavior, cognition, and emotion from multiple schools of thought and multicultural perspectives.
- Identify a problem in psychology, examine available evidence, analyze assumptions, and apply research methods to solve the problem. This includes the ability to interpret numbers and apply basic statistical procedures.
- Write papers in psychology using different literary formats, e.g., narrative, exposition, critical analysis, and APA format.
- Perform information searches relevant to psychology and organize and evaluate the soundness of the information.
- Use current technologies in both research and communication.

#### Degree Requirements

To receive a Bachelor of Arts in Psychology degree, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper-division level, a minimum 70.5 units of general education and 45 units which must be completed in residence at National University. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Portfolio

Students in the undergraduate psychology program will complete a portfolio. Each portfolio is comprised of specific artifacts completed and collected by the candidate via signature assignments throughout their program. The portfolio is submitted at the onset of Senior Project and is used to inform the candidate of their strengths and weaknesses upon entering the capstone course.

#### Preparation for the Major

(2 courses; 9 quarter units)

MTH 210\* \*Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

PSY 100\* \*Introduction to Psychology

\* May be used to meet a General Education requirement

#### Requirements for the Major

(10 courses; 45 quarter units)

PSY 426 History of Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 427 Biological Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 428 Developmental Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 429 Intro to Personality Theory  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 430 Intro to Psychopathology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 432 Social Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 433 Cognitive Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

HUB 441 Research Design and Analysis  
*Prerequisite: ENG 100, ENG 101, MTH 210, and PSY 100*

CHD 440 Drugs, Values and Society

PSY 480 Senior Project  
*Prerequisite: All other courses required for the major must be completed prior to enrolling in this course.*

or

PSY 491 Guided Study for Honors Student (variable)  
*Prerequisite: Satisfactory completion of core courses with a GPA of 3.75 or higher*

#### Upper-Division Electives

(6 courses; 27 quarter units)

Students not pursuing a minor must choose six Upper-Division Electives from courses with the following prefixes: HUB, PSY, SOC, HRM, and CJA. Other electives must be approved by the department chair or regional full-time or associate faculty. Students may not take PSY 301 as an Upper-Division Elective.

The following course is strongly recommended:

PSY 441 Global Psychology  
*Prerequisite: PSY 100*

### ◆ MAJOR IN SOCIAL SCIENCE WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA)

*Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu*  
*For Credentials: Bernardo Gallegos; (310) 662-2134; bgallegos@nu.edu*

The Bachelor of Arts with a Major in Social Science with a Preliminary Single Subject Credential combines rigorous coursework in history and the social sciences with training in educational methodology to prepare candidates for careers as teachers of social studies and history at the middle and secondary school levels. The program introduces students to a variety of fields in the social sciences and concentrates on World History, U.S. History, and California History. Students examine worlds, times, places and cultures--including their own--in ways they have never considered and they develop strong skills in critical thinking, reading, writing, and researching. The educational methodology and student teaching portions of the program prepare candidates for professional work as single subject social studies or history teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the significance of major trends in World History.
- Assess the significance of major trends in U.S. History.
- Analyze a variety of primary sources.
- Analyze secondary sources for their arguments and use of supporting evidence.
- Discuss current concerns, new theories, new evidence, and issues that shape interpretation in history and the social sciences.
- Conduct research in history and the social sciences supported by appropriate primary and secondary source materials.
- Delineate the central demographic, economic, and political developments in the history of California from the eve of Spanish settlement to the present.
- Integrate educational technology to meet the needs of all learners.

- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts with a Major in Social Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of general education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Preparation for the Major

(9 courses; 40.5 quarter units)

HIS 220A+	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B+	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 233*	World Civilizations I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100, and ENG 101</i>
POL 100*	Introduction to Politics <i>Prerequisite: ENG 100, and ENG 101</i>
POL 201*	American Politics <i>Prerequisite: ENG 100, and ENG 101</i>
SCI 300*	Geography
ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

### Requirements for Major

(24 courses; 103.5 quarter units)

### Requirements for the Social Science Major

(11 courses; 49.5 quarter units)

HIS 431	The Ancient World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 432	The Classical World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 433	The Post-Classical World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101, and HIS 234</i>
HIS 400	Historical Theories & Methods <i>Prerequisite: ENG 240</i>
HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>

HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 363	U.S. Since World War I <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 410	California History <i>Prerequisite: ENG 100, ENG 101</i>
HIS 499	Capstone Research Project <i>Prerequisite: ENG 240 or equivalent, HIS 400, and completion of 31.5 quarter units of core courses in the major</i>

### Education Theory and Methodology

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305, or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 434	Methods of Teaching Social Sci <i>Prerequisite: TED 305</i>

### Student Teaching

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of pass, TED 531A with a minimum grade of pass, and corequisite: TED 530B</i>

### Credentialing Requirements

(2 courses; 9 quarter units)

Students must have a senior standing to enroll in these two courses. EDX1201X is graduate level and the grade earned must be a B or better. EDX1201X will not transfer to National University or any other university as a graduate level class.

HEDX 1101X	Intro Health Ed: K-12
EDX 1201X	Computer Tech in Classroom

### ◆ MAJOR IN SOCIOLOGY

Faculty Advisor: Margaret Greer; (916) 855-4151; mgreer@nu.edu

The Bachelor of Arts in Sociology program engages students in the study of social life, social change, and the social causes and consequences of human behavior. Students will investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to global warfare; from organized crime to religious cults; from the divisions of social class, race, and gender to the shared beliefs of a common culture; and from the sociology of work to the sociology of beauty. In fact, few fields have such broad scope and relevance for research, theory, and application of knowledge.

Sociology majors develop analytical skills and the ability to understand issues within many distinctive perspectives. Sociology offers a range of research techniques that can be applied to virtually any aspect of social life: street crime and delinquency, corporate growth or downsizing, how people express emotions, welfare or education reform, health/HIV AIDS, how families differ and flourish, or problems of peace, war, and terrorism. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs. Sociologists understand social inequality, patterns of behavior, forces for social change and resistance, and how social systems work.

The program's stimulating curriculum in social theory, research methods, and key sociological concepts provides a solid base for students to learn to think abstractly, formulate problems, ask appropriate questions, search for answers, analyze situations and data, organize material, write well, and make oral presentations. Sociological training helps students bring breadth and depth of understanding to the global workplace and graduates frequently enter a variety of jobs in business, the health professions, criminal justice, social services, and government. Sociology provides training for professions such as law enforcement, education, medicine, social work, and counseling. Furthermore, sociology offers valuable preparation for careers in journalism, politics and policy analysis, public relations, business, or public administration, and program evaluation—fields that involve investigative skills and working with diverse groups.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and distinguish between sociological research methods.
- Describe the roles of individuals and groups in the social construction of reality.
- Apply major sociological theories to real world situations.
- Identify the roles of gender, race, ethnicity and social class in social change at the micro social and macro social levels.

### Degree Requirements

To be awarded a Bachelor of Arts in Sociology, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students are required to complete a capstone project as part of the degree program. It is strongly suggested that students save all graded work. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation

### Prerequisites for the Major

(2 courses; 9 quarter units)

SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
MTH 210*	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

### Requirements for the Major

(9 courses; 40.5 quarter units)

SOC 344	Marriage, Sex and the Family <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 443	Sociology of Deviance <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 385	Methods of Social Inquiry <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 455	Organizational Sociology <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 365	Classical Social Theory <i>Prerequisite: SOC 100, and ILR 260</i>

SOC 500	Cultural Pluralism in the USA <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 375	Contemporary Social Theory <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 540	Power and Social Change <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 499	**Sociology Senior Project <i>Prerequisite: SOC 100, and ENG 240 or equivalent</i>

\*\* SOC 499 is taken toward the end of the program after completion of the 36 units of required courses for the major, and after completion of six or more electives.

### Required Upper-Division Electives

(7 courses; 31.5 quarter units)

Students must complete a minimum of seven courses (31.5 quarter units) of electives from the list below. Students wishing to complete a minor in any field may substitute the minor-required courses to fulfill the elective requirements in Sociology. Suggested areas of minor are: Criminal Justice, Global Studies and History.

SOC 449	Sociology of Law <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 460	The Individual and Society <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 331	Sociology of Health & Illness <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>
SOC 325	Popular Culture <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 336+	American Film and Society <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 430	Culture, Technology & Society <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 445	Contemporary Social Problems <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 490	Guided Study (variable)
CJA 448	Violence and Society
GLS 410	Gender and Global Society <i>Prerequisite: ENG 240</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>
HUM 501	Global Civic Culture <i>Prerequisite: ENG 100, and ENG 101</i>
MTH 412	History of Mathematics <i>Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B</i>
PHL 320+	World Religions <i>Prerequisite: ENG 100, and ENG 101</i>
PHL 375	Environmental Ethics <i>Prerequisite: ENG 100, and ENG 101</i>
POL 320	Politics of Social Movements <i>Prerequisite: ENG 100, and ENG 101</i>
SCI 300	Geography
GLS 310	Global Communications <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>

CHD 440 Drugs, Values and Society

+ Diversity Enriched Offering

### ◆ MAJOR IN SPANISH

#### WITH OPTIONAL PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Luis Acebal; (530) 226-4003; lacebal@nu.edu

The Bachelor of Arts with a Major in Spanish consists of intensive proficiency-oriented coursework in Spanish language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of the region. The program prepares students for a variety of career paths in government, military, business, and education. Each student has the option of choosing to complete seven courses of upper-division electives or pursuing a Preliminary Single Subject Teaching Credential (California).

Please see additional requirements in the School of Education's Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop oral, written and reading proficiency in Spanish.
- Read and interpret representative texts and cultural productions in Spanish.
- Develop analytical and critical skills that build from textual, cultural and linguistic analysis to the exploration of society.
- Translate and interpret to and from Spanish.
- Differentiate the major aspects of Latin American and Hispanic culture and civilization from pre-Columbian times to the present.
- Demonstrate familiarity with the history and culture of the Spanish speaking world.
- A comprehensive familiarity with the history and culture of the region.

#### Degree Requirements

To receive the Bachelor of Arts with a Major in Spanish, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of general education. The following courses are degree requirements. In the absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

#### Preparation for the Major

(5 courses; 22.5 quarter units)

SPN 100*	Beginning Spanish I
SPN 101*	Beginning Spanish II <i>Prerequisite: SPN 100</i>
SPN 200*	Intermediate Spanish I <i>Prerequisite: SPN 101</i>
SPN 201	Intermediate Spanish II <i>Prerequisite: SPN 200</i>
LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement

#### Requirements for the Major

(10 courses; 45 quarter units)

SPN 300	Advanced Spanish I <i>Prerequisite: SPN 201</i>
SPN 301	Advanced Spanish II <i>Prerequisite: SPN 300</i>
SPN 310	Literary Readings in Spanish <i>Prerequisite: LIT 100, SPN 301</i>
SPN 320	Advanced Spanish Conversation

*Prerequisite: SPN 201 or 3 semesters of college level Spanish language.*

SPN 330	Intro Lat Am Cultures <i>Prerequisite: SPN 301</i>
SPN 350	Film and Culture <i>Prerequisite: SPN 301</i>
SPN 420	Literature and Culture I <i>Prerequisite: SPN 310, and SPN 330</i>
SPN 430	Literature and Culture II <i>Prerequisite: SPN 420</i>
SPN 450	Identity and Multiculturalism <i>Prerequisite: SPN 310, and SPN 330</i>
SPN 499	Spanish Capstone <i>Prerequisite: SPN 430</i>

#### Upper-Division Electives

(7 courses; 31.5 quarter units)

The following are strongly recommended:

HIS 345	Latin American Studies <i>Prerequisite: ENG 100, ENG 101</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>
HUM 501	Global Civic Culture <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101, and HIS 234</i>
LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>
LIT 460	Gender and Literature <i>Prerequisite: LIT 100</i>
LIT 463	20th Century World Literature <i>Prerequisite: LIT 100</i>
LIT 480	Literature of the Americas <i>Prerequisite: LIT 100</i>
PHL 320+	World Religions <i>Prerequisite: ENG 100, and ENG 101</i>
POL 340	Comparative Politics <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100, and ENG 101</i>
SPN 490	Guided Study in Spanish

#### ◆ OPTIONAL PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

The Bachelor of Arts in Spanish with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Spanish at the middle and secondary school levels. The program stresses foundation Spanish and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. Students majoring in Spanish can enroll in this program at any time prior to the completion of SPN 490 or 499. This program prepares students with the knowledge, skills and dispositions required for entry into the teaching profession.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate application of educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.
- Demonstrate knowledge of adolescent development in order to explain how

to support growth in cognitive, social, physical and emotional domains.

- Demonstrate a thorough understanding of the learning needs of students to create a positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.

### Education Orientation, Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
LTL 504B	Teach Methods: Sec Schs
LTL 524S	Lang Teach & Assess: Spanish

### Student Teaching Requirements

(4 courses; 13.5 units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B</i>

### Credentialing Requirements

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The EDX1201X class is considered graduate level. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201X	Computer Tech in Classroom
HEDX 1101X	Intro Health Ed: K-12

### ◆ MAJOR IN SPORT PSYCHOLOGY

*Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu*

The Bachelor of Arts in Sport Psychology program offers a comprehensive introduction to the contemporary discipline of sport psychology. Graduates of this program are well prepared to seek employment in entry-level coaching positions and admission to graduate psychology programs at the master's or doctoral level.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss current trends in psychological research in both individual and team contexts within sport psychology.
- Analyze how psychological factors influence performance in sport, and techniques to increase performance and reduce anxiety.
- Examine the history of sport psychology and its role in contemporary psychological theories and systems.

- Discuss the influences of diversity and multiculturalism on group interactions and performance.
- Apply psychological theory to coaching situations.
- Communicate orally and in writing using proper sport and psychology terminology.
- Discuss the legal and ethical issues in sport psychology and performance enhancement.
- Discuss the physiological and motoric principles of performance in sport and physical activity

### Degree Requirements

To receive a Bachelor of Arts in Sport Psychology degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

(2 courses; 9 quarter units)

MTH 210*	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
PSY 100*	Introduction to Psychology

\* May be used to meet a General Education requirement

### Requirements for the Major

(13 courses; 58.5 quarter units)

### Core Requirements

(9 courses; 40.5 quarter units)

PSY 302	Foundation of Sport Psychology <i>Prerequisite: ENG 100, and ENG 101, PSY 100</i>
PSY 448	History of Sport & Sport Psych <i>Prerequisite: PSY 100, PSY 302</i>
PSY 300	Social Psychology of Sport <i>Prerequisite: ENG 100, ENG 101, PSY 100</i>
HUB 441	Research Design and Analysis <i>Prerequisite: ENG 100, ENG 101, MTH 210, and PSY 100</i>
PSY 303	Motor Learning <i>Prerequisite: ENG 100, and ENG 101, PSY 100</i>
PSY 440	Sport Psychology for Coaches <i>Prerequisite: PSY 100, PSY 302</i>
PSY 443	Culture and Sport Psychology <i>Prerequisite: PSY 100, PSY 302</i>
BIO 385	Biomechanics of Sport <i>Prerequisite: BIO 100, and BIO 100A</i>
BIO 386	Exercise Physiology <i>Prerequisite: BIO 100, and BIO 100A</i>

All students in the BA Sport Psychology are required to choose an emphasis and complete all courses specified in the emphasis as part of the Requirements for the Major. Each Emphasis requires a Senior Project.

### Emphasis in Applied Sport Psychology

(4 courses; 18 quarter units)

Designed for students wishing to prepare for entry into professional coaching, this specialization focuses upon the application of psychological principles to athletics. The specialization includes a senior project and practicum designed to give students practical experiences in the field of applied sport psychology.

PSY 340A	Counseling Techniques I <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
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- PSY 445 Applied Sport Psychology  
*Prerequisite: PSY 100, PSY 302*
- PSY 442 Sem Applied Sport Psychology  
*Prerequisite: Satisfactory completion of 9 courses in the major*
- PSY 485 Sport Psychology Sr. Project  
*Prerequisite: Satisfactory completion of all Major requirements*

### Emphasis in Professional Golf Management

(4 courses; 18 quarter units)

This emphasis is designed to prepare students for entry into the field of professional golf management and coaching. These courses are designed to include practical experiences in coaching, instruction, and player development as well as introduce students to contemporary issues in golf management.

- PGM 444 Instruction/Player Develop.  
*Prerequisite: Satisfactory completion of 8 core courses*
- PGM 447 Prof. Golf Management Seminar  
*Prerequisite: PGM 444*
- PGM 445 Player Development II Seminar  
*Prerequisite: PGM 447*
- PGM 448 Senior Project in PGM  
*Prerequisite: Satisfactory completion of all Major requirements*

### Upper Division Electives

(3 courses; 13.5 quarter units)

Choose three upper division electives from available offerings within the College of Letters and Sciences. It is strongly recommended that students in the Applied Sport Psychology track select at least two of their required electives from the following 7 courses:

- PSY 427 Biological Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 428 Developmental Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 429 Intro to Personality Theory  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 430 Intro to Psychopathology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 432 Social Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 433 Cognitive Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 446 Positive Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

### ◆ MAJOR IN STRATEGIC COMMUNICATIONS

*Faculty Advisor: Sara Kelly; (858) 642-8056; skelly@nu.edu*

The Bachelor of Arts in Strategic Communications prepares students for leadership positions in public relations, advertising, marketing, and corporate communication. Graduates can use the strategic thinking and message creation skills they acquire to work in any industry, helping organizations create messages for presentations, as well as for print, broadcast, and digital media. The program covers the theory behind and execution of integrated marketing communication campaigns, disseminated in interpersonal, intercultural, organizational, and public settings. Students learn through academic work, case studies, and hands-on experience creating messages across media platforms. Completion of the program enables graduates to succeed in positions that require strategic thinking and planning, project management, content creation, and leadership.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop communication campaign messaging strategies.
- Apply persuasion theory to communication campaigns and media messages.
- Create content that fulfills strategic communications campaign objectives.
- Explain strategic communication plans and present them online.

- Working in a group, create strategic communication messages.
- Apply research data to guide the development of strategic communication campaigns and messages.
- Develop multi-platform, multi-public message dissemination plans.
- Identify communication settings and apply appropriate theoretical precepts and practical skills to formulating messages.

### Degree Requirements

To receive a Bachelor of Arts in Strategic Communications, students must complete at least 180 quarter units as follows: 76.5 units must be completed at the upper-division level, and 45 units must be completed in residence at National University. Students must also complete a minimum 70.5 units of the University's General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Prerequisites

(3 courses; 10.5 quarter units)

- COM 101\* Intro. to Oral Communication  
*Prerequisite: ENG 100, ENG 101*
- ENG 101\* Effective College English II  
(3 quarter units)  
*Prerequisite: ENG 100*
- COM 103\* Public Speaking

or

- COM 120\* Intro to Interpersonal Comm

\* May be used to meet a General Education requirement

### Requirements for the Major

(16 courses; 72 units)

### Core Requirements

(14 courses; 63 units)

- COM 300 Interpersonal Communication  
*Prerequisite: ENG 101, and COM 101, COM 103, or COM 220*
- COM 305 Intercultural Communication  
*Prerequisite: ENG 101, and COM 101, COM 103, or COM 220*
- COM 310 Communication Theory  
*Prerequisite: ENG 101, and COM 100, COM 103, or COM 220*
- COM 315 Communication Research Methods  
*Prerequisite: ENG 101, and COM 100, COM 103, or COM 220*
- COM 324 Critical Thinking and Ethics  
*Prerequisite: ENG 101*
- COM 334 Persuasion  
*Prerequisite: ENG 101*
- COM 344 Organizational Communication  
*Prerequisite: ENG 101*
- COM 354 Professional Presentations  
*Prerequisite: ENG 101*
- COM 364 Communication Technologies  
*Prerequisite: ENG 101*
- COM 385 Interactive Storytelling  
*Prerequisite: ENG 101*
- COM 394 Strategic Writing  
*Prerequisite: ENG 101, and COM 101, COM 103, or COM 220*
- COM 400 Mediated Messaging  
*Prerequisite: COM 354, COM 385, and COM 394*
- COM 404 Media Management  
*Prerequisite: COM 400*
- COM 499 Communication Program Capstone  
*Prerequisite: Completion of 13 core and advanced core courses.*

## Advanced Core Requirements

(2 courses, 9 units)

Please choose one of the following sequences.

### For Advertising

COM 410A Advertising Strategies

*Prerequisite: COM 334, and COM 394*

COM 411A Advertising Campaigns

*Prerequisite: COM 410A, or MKT 443, and COM 365, or COM 400*

### For Public Relations

COM 420A Public Relations Strategies

*Prerequisite: COM 334*

COM 421A Public Relations Campaigns

*Prerequisite: COM 400, and COM 420A*

### For Interactive

COM 430A Interactive Strategies

*Prerequisite: COM 334*

COM 431A Interactive Campaigns

*Prerequisite: COM 400, and COM 430A*

## ■ BACHELOR OF SCIENCE

### ◆ MAJOR IN BIOLOGY

*Faculty Advisor: Michael Maxwell; (858) 824-9223; mmaxwell@nu.edu*

The Bachelor of Science in Biology offers personal and academic fulfillment and growth as students discover the amazing world of biology. This degree prepares students for graduate and professional study, careers in life science education, research, health sciences, and applied biology. The BS Biology provides a solid foundation in all levels of biological organization, from molecules to ecosystems. Such a comprehensive curriculum is crucial to meeting modern challenges in science, which include new and emerging diseases, rapid advances in our understanding of genetics, physiology and biodiversity, threats to species and ecosystem functioning, and global population increase and sustainability. A degree in biology is common preparation for careers in the various medical professions, genetics, molecular and cell biology, biotechnology, microbiology, conservation biology, evolutionary biology, ecology, animal and plant science, as well as science writing, editing and education.

Students who wish to include an interdisciplinary approach to their academic training should look closely at the benefits provided by this major. In addition to meeting requirements for BS Biology, this degree allows for the integration of study in the life sciences with coursework in the physical and earth sciences, as well as applied fields such as forensics. Furthermore, in keeping with the commitment of the College of Letters and Sciences to the complete academic development of its students, science courses involve writing and diversity components, as well as fundamental critical thinking components.

### Bachelor of Science in Biology to Master of Forensic Science Transition program

The BS Biology to MFS transition program allows students who are enrolled in the BS Biology with a cumulative grade point average of at least 3.0 and who are within completing their last six courses to register for two courses in the MFS program as electives for the bachelor's degree. The two graduate courses are restricted to those that do not require a prerequisite. Students must complete all transition program coursework with a grade of B or better. The number of courses required to earn an MFS degree for transition program students is reduced from 12 to as few as 10 courses. Graduate-level coursework taken as part of the Biology program cannot be applied as graduate credit to the Master of Forensic Science program, nor will it transfer as graduate level credit to any other university because it becomes part of the undergraduate degree program. Students must enroll in and complete the first class in the Masters degree within 6 months of the conferral date of their undergraduate degree. The MFS program must be completed within 4 years with no break in enrollment of 12 months or more. Further rules and requirements for Transition programs are located in the university catalog.

### Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Discuss biological processes at all of levels of organization: molecular,

cellular and microbial, organismal, population, and ecosystem.

- Explain the importance of unifying concepts in biology, including cell theory, genetics, and evolution.
- Describe the structure and function of Earth's organisms, as well as their roles in the natural world.
- Apply the scientific method in laboratory-based and field-based inquiry.
- Demonstrate effective oral, visual, and written communication and quantitative skills, including the critical analysis of data and scientific literature.
- Demonstrate computer and technology literacy, including the ability to access databases within the context of course research and project development.
- Evaluate historical developments and research in biology, as well as current and contemporary research and challenges.

### Degree Requirements

To receive a Bachelor of Science, Major in Biology, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper division level and a minimum 70.5 units of the university General Education Requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

\* Completion of BIO 100, 100A, 201, 201A, 202, 202A, 203, 203A is equivalent to the course sequence BIO 161, 162, 163, 100A for fulfillment of the BS Biology degree.

### Preparation for the Major

(16-17 courses; 60-61.5 quarter units)

MTH 210\* Probability and Statistics

*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

MTH 215\* College Algebra & Trigonometry

*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

or

MTH 216A\* College Algebra I (3 quarter units)

*Prerequisite: Accuplacer test placement evaluation, MTH 12A, and MTH 12B*

and

MTH 216B\* College Algebra II (3 quarter units)

*Prerequisite: MTH 216A*

CHE 141\* General Chemistry 1

*Prerequisite: MTH 215 or equivalent, CHE 101*

CHE 142\* General Chemistry 2

*Prerequisite: CHE 141*

CHE 143 \*General Chemistry 3

*Prerequisite: CHE 142*

CHE 101A\* Introductory Chemistry Lab (1.5 quarter units)

*Prerequisite: CHE 101, or CHE 141 for science majors*

BIO 161\* General Biology 1

BIO 162\* General Biology 2

*Prerequisite: BIO 161*

BIO 163\* General Biology 3

*Prerequisite: BIO 161, BIO 162*

BIO 100A\* Survey of Bioscience Lab (1.5 quarter units)

*Prerequisite: BIO 100, or BIO 161 for science majors*

PHS 171\* General Physics 1

*Prerequisite: MTH 215, or MTH 216A, and MTH 216B*

PHS 172\* General Physics 2

*Prerequisite: PHS 171*

PHS 173 \*General Physics 3

*Prerequisite: PHS 171, PHS 172*



- PHS 104A\* Introductory Physics Lab (1.5 quarter units)  
*Prerequisite: PHS 104, or PHS 171 for science majors*
- CHE 150 Introductory Organic Chemistry  
*Prerequisite: CHE 101, and CHE 101A*
- CHE 150A Introductory Organic Chem Lab (1.5 quarter units)  
*Prerequisite: CHE 150*

\* May be used to meet General Education requirements

### Requirements for the Major

(12 courses; 42 quarter units)

- BIO 330 Ecology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*
- BIO 305 Genetics  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*
- BIO 310 Evolution  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A*
- BIO 406 Cellular Biology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A, Corequisite: BIO 406A*
- BIO 406A Cellular Biology Lab (1.5 quarter units)  
*Corequisite: BIO 406, Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*
- BIO 407 Molecular Biology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A, Corequisite: BIO 407A*
- BIO 407A Molecular Biology Lab (1.5 quarter units)  
*Corequisite: BIO 407, Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*
- BIO 414 Invertebrate Zoology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A, Corequisite: BIO 414A*
- BIO 414A Invertebrate Zoology Lab (1.5 quarter units)  
*Corequisite: BIO 414*
- BIO 416 Vertebrate Zoology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A, Corequisite: BIO 416A*
- BIO 416A Vertebrate Zoology Laboratory (1.5 quarter units)  
*Corequisite: BIO 416*
- BIO 440 Botany  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*

### Upper-Division Electives

(7 courses; 31.5 quarter units)

Students may select only 300-, 400-, or 500-level courses in the College of Letters and Sciences to complete the total of 76.5 quarter units of upper division for the degree. Suggested upper-division courses are given below.

- BIO 420 Animal Behavior  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A*
- BIO 450 Natural History of California  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, BIO 100*
- BIO 480 Studies in Field Biology
- CHE 350 Organic Chemistry I  
*Prerequisite: CHE 142*
- CHE 351 Organic Chemistry II  
*Prerequisite: CHE 350*
- CHE 360 Biochemistry I  
*Prerequisite: CHE 350, CHE 350A, CHE 351, CHE 351A*

- CHE 361 Biochemistry II  
*Prerequisite: CHE 360*
- EES 322 Oceanography
- EES 335 Environmental Science
- EES 336 Natural Resource Conservation
- MTH 317 Mathematical Modeling  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, and MTH 210*
- SCI 303 GIS: Geographic Info Systems
- SCI 400 History of Science  
*Prerequisite: One 4.5 quarter unit science course from the natural sciences.*
- SCI 490 Guided Study (variable units)

Approved transition program students may select up to two FSC courses from below to meet up to 9.0 quarter units of the elective requirement.

- FSC 630 Forensic Pathology I
- FSC 633 Advanced Forensic Toxicology
- FSC 634 Forensic Serology and DNA
- FSC 635 Forensic Anthropology
- FSC 642 Forensic Pathology II  
*Prerequisite: FSC 630*

### ◆ MAJOR IN MATHEMATICS

*Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu*

The Bachelor of Science in Mathematics provides a strong foundation in mathematics and its applications. Designed to help address our nation's increasing need for mathematical scientists, technicians and especially teachers, the program emphasizes reflective and conceptual understanding and technique.

First, it provides the fundamental mathematical knowledge to formulate and solve problems. Computer science courses are encouraged, since the use of computers has been instrumental in the expansion of these opportunities. Students who want a basic mathematics degree can culminate their program with the project courses.

Second, the program trains mathematics teachers who want to provide quality mathematical instruction to students in primary or secondary schools. The single-subject teaching concentration was created for this purpose.

The Department of Mathematics and Natural Sciences is committed to the complete academic development of its students. Consequently, where practical, all mathematics and science courses are writing intensive and incorporate a diversity component. Students are advised that all mathematics courses encourage critical thinking by their very nature. Moreover, all mathematics courses require that the student purchase and use a scientific calculator for the operations of the subject matter. Some courses require a more advanced graphing calculator and computer software.

### Single-Subject Mathematics Preparation Program

The Single-Subject Mathematics Preparation Program is approved by the Commission on Teacher Credentialing. Students who complete the program will not be required to take the California Subject Examination for Teachers (CSET) in mathematics in order to receive their teaching credential. The program emphasizes a strong foundation in mathematical content together with activities designed to help future teachers assume leadership roles in an increasingly complex educational world. Interested students should complete the following application process: • Send a letter to the Department Chair requesting admission to the program and copies of transcripts to the Lead Mathematics Faculty for evaluation. • Upon enrollment, submit two essays for the Mathematics Portfolio (Instructions for the development and completion of a Mathematics Portfolio are sent upon receipt of the request letter. The portfolio is completed for review by the Department Chair or Lead Faculty two months before the last class.) • In addition to the major program requirements, students must complete two classes MTH 304 and MTH 410.

The study of mathematics must encompass the discipline in its broadest sense. The future mathematician should develop in an academic environment that stresses scholarship, diversity, and growth through a rigorous and focused curriculum

of advance mathematics that incorporates: problem solving, mathematics as communication, reasoning, and mathematical connections. The Bachelor of Science in Mathematics program is dedicated to providing such sound preparation and training to a diverse population of nontraditional learners whose goal is to work professionally in mathematics or teach Mathematics in California public schools.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication
- Develop fundamental knowledge in geometry
- Model real world problems with a variety of algebraic and transcendental functions
- Use advanced statistics and probability concepts and methods

### Degree Requirements

To receive a Bachelor of Science in Mathematics degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

#### Preparation for the Major

(6 courses; 27 quarter units)

MTH 210*	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
MTH 215*	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
MTH 220*	Calculus I <i>Prerequisite: MTH 215, or Accuplacer test placement, or evaluation by a lead faculty</i>
MTH 221	Calculus II <i>Prerequisite: MTH 220</i>
MTH 222	Calculus III <i>Prerequisite: MTH 221</i>
MTH 223	Calculus IV <i>Prerequisite: MTH 222</i>

\* May be used to meet a General Education requirement

#### Requirements for the Major

(17 courses; 76.5 quarter units)

MTH 311	Topics from Geometry <i>Prerequisite: MTH 215</i>
MTH 325	Discrete Mathematics <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B</i>
MTH 435	Linear Algebra <i>Prerequisite: MTH 220, and MTH 325 or CSC 209 and CSC 310</i>
MTH 433	Differential Equations <i>Prerequisite: MTH 223, and MTH 435</i>

MTH 411	Number Theory <i>Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301</i>
MTH 416	Algebraic Structures <i>Prerequisite: MTH 435, and MTH 325</i>
MTH 417	Foundations of Geometry <i>Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311</i>
MTH 418	Statistical Analysis <i>Prerequisite: MTH 210, and MTH 220</i>
MTH 432	Advanced Calculus <i>Prerequisite: MTH 223</i>
MTH 412	History of Mathematics <i>Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B</i>
MTH 440	Numerical Analysis <i>Prerequisite: MTH 220</i>
MTH 441	Abstract Algebra <i>Prerequisite: MTH 416</i>
MTH 442	Functions of Complex Variables <i>Prerequisite: MTH 223</i>
MTH 438	Applied Mathematical Modeling <i>Prerequisite: MTH 433, MTH 416, and MTH 432</i>
MTH 460	Problem Solving Strategies <i>Prerequisite: MTH 416, and MTH 417</i>
MTH 461	Methods of Teaching Math <i>Prerequisite: MTH 311, MTH 325, MTH 412, and MTH 460</i>
MTH 450A	Mathematics Project Course I <i>Prerequisite: Completion of Mathematics Core for B.S. and interview with Department Chair.</i>

#### Additional Requirement for Single Subject Preparation students only (9 quarter units)

MTH 304	Math Practicum and Portfolio <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or placement evaluation</i>
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301</i>

#### ◆ MAJOR IN ORGANIZATIONAL BEHAVIOR

Faculty Advisor: Charles Tatum; (858) 642-8476; ctatum@nu.edu

The behavior of individuals and groups in an organization directly affects the success of the organization. Knowledge of human behavior, psychology and business is critical in helping people lead productive lives and contribute to the achievement of organizational goals and objectives. The Bachelor of Science in Organizational Behavior provides a solid foundation for applying knowledge to the workplace and increasing the effectiveness of both individuals and work teams.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Ability to write a comprehensive paper in APA style that covers the empirical and theoretical study of a specific topic related to the major.
- Knowledge of ethics, responsibility, and legal obligations and apply these principles to personal and professional situations.
- Competency in applying group psychology and group dynamics to team building and cooperative/collaborative tasks.
- Knowledge of human resource development and training as applied to organizational effectiveness, performance management, motivation, and achieving individual, group, and organizational goals.
- Knowledge of the history and precursors of organizational theory and management practice and to articulate this in writing from a psychological perspective.
- Entry level skills and techniques in diagnosing, planning, implementing, and managing organizational change and technological innovation.

- Mastery of human communication and conflict resolution skills applied in diverse settings with diverse populations.
- Capacity to recognize multiple cultural perspective and their implication for work place success.
- Ability to apply basic methods of collection and interpretation of behavioral and organizational quantitative and qualitative data.

### Degree Requirements

To receive a Bachelor of Science in Organizational Behavior, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper division level, 45 of which must be completed in residence at National University and a minimum 70.5 units of general education. In the absence of transfer credit additional general electives may be needed to fulfill the total unit requirement for the degree.

### Bachelor of Science in Organizational Behavior/Master of Arts in Human Behavior (BSOB/MAHUB) Transition Program

Students who are currently enrolled in the BSOB degree program and have at least a GPA of 3.0 and are within six courses of graduation, may request the BSOB/MAHUB transition program through their admissions advisor and once approved may then take two of the following three MAHUB classes as electives during the BSOB program: HUB601A, HUB646, and HUB601D. To be eligible, students must apply for and begin the MAHUB program within six months of completing the BSOB program. Students may choose up to two graduate-level MAHUB courses for which all prerequisites are met (if any). The number of courses required to earn a MAHUB is reduced from 12 to as few as 10 courses. Graduate-level coursework taken as part of the transition program cannot be transferred as graduate level credit to this or any other university. Students must complete the graduate level coursework taken as part of the BSOB degree with a grade of "B" or better. Students must complete the MAHUB program within four years with no break exceeding 12 months.

### Requirements for the Major

(9 courses; 40.5 quarter units)

HUB 440 Organizational Development  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

HUB 410 Psychology for Managers  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

HUB 500 Cross-Cultural Dynamics  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

MGT 422 Team Bldg, Interspers Dynamics

or

HUB 400 Group Structure & Dynamics  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

HRM 409B Survey in HRM & OD

or

PSY 432 Social Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

MGT 400 Ethics in Law, Business & Mgmt

HUB 401 Conflict Resolution  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

or

HUB 420 Human Communication  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

PSY 435 Analysis of Data in Research  
*Prerequisite: MTH 210, PSY 100, ENG 100, and ENG 101*

PSY 480 Senior Project  
*Prerequisite: All other courses required for the major must be completed prior to enrolling in this course.*

### Upper-Division Electives

(7 courses; 31.5 quarter units)

Students can select from the following course prefixes to meet elective requirements: HUB, PSY, SOC, CJA, HCA, HRM, MGT, and COM.

### ■ FOREIGN CREDENTIAL BRIDGE PROGRAM (FOR STUDENTS WITH FOREIGN CREDENTIALS)

The Foreign Credential Bridge Program (FCBP) is designed as a prequalifying year of undergraduate study for students who have earned a recognized three-year bachelor's degree outside of the United States and who wish to earn a master's degree from National University. Students with such foreign credentials who apply to a master's program must complete this fourth year of undergraduate courses prior to beginning graduate level coursework. Eligibility for the FCBP is made by the Office of the Registrar. Students must request a pre-evaluation of their foreign credentials through an admissions advisor or through the International Programs Office (for those with student visas).

### Degree Requirements

This bridge program requires a residency minimum of 48 quarter units of study. Students must fulfill the requirements in the areas listed below. These requirements may be met by coursework taken in the bachelor's degree or at another regionally accredited institution. If they are so fulfilled, the content of the area will be waived, but the student will still need to meet the overall unit requirement of the program through open elective credit.

### AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

#### CATEGORY 1: Writing

(10.5 quarter units required)

ENG 100 Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101 Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

ENG 240 Advanced Composition  
*Prerequisite: ENG 100, and ENG 101*

or

ENG 334A Technical Writing  
*Prerequisite: ENG 100, and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)*

#### CATEGORY 2: Oral Communication

(4.5 quarter units required)

COM 101 Intro to Oral Communication

COM 103 Public Speaking

### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

MTH 210 Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

MTH 215 College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

MTH 216A College Algebra I (3 quarter units)  
*Prerequisite: Accuplacer test placement evaluation, MTH 12A, and MTH 12B*

MTH 216B College Algebra II (3 quarter units)  
*Prerequisite: MTH 216A*

### AREA D: ARTS AND HUMANITIES

(13.5 quarter units required)

ART 100 Introduction to Art History  
*Prerequisite: ENG 100, and ENG 101*

ART 200 Visual Arts

HIS 233	World Civilizations I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 234	World Civilizations II <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 100	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 345	Mythology <i>Prerequisite: LIT 100</i>
MUS 100	Fundamentals of Music
MUS 327+	World Music <i>Prerequisite: ENG 100, and ENG 101</i>
PHL 100	Introduction to Philosophy <i>Prerequisite: ENG 100, and ENG 101</i>

+ Diversity Enriched Offering

**AREA E: SOCIAL AND BEHAVIORAL SCIENCES**  
(13.5 quarter units required)

COM 380	Democracy in the Info. Age <i>Prerequisite: ENG 100, and ENG 101</i>
ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
HIS 220A +	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B +	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 300	Roots of Western Civilization <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 350 +	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>
POL 201	American Politics <i>Prerequisite: ENG 100, and ENG 101</i>
PSY 100	Introduction to Psychology
SOC 100 +	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
SOC 260	Cultural Anthropology <i>Prerequisite: ENG 100, and ENG 101</i>

+ Diversity Enriched Offering

**AREA F: PHYSICAL AND BIOLOGICAL SCIENCES**  
(6 quarter units required)

(Note: One science lab is required at 1.5 quarter units.)

BIO 100	Survey of Bioscience
BIO 100A	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100, or BIO 161 for science majors</i>
CHE 101	Introductory Chemistry <i>Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
CHE 101A	Introductory Chemistry Lab (1.5 quarter units) <i>Prerequisite: CHE 101, or CHE 141 for science majors</i>
EES 103	Fundamentals of Geology
EES 103A	Fundamentals of Geology Lab (1.5 quarter units) <i>Prerequisite: EES 103</i>
PHS 104	Introductory Physics <i>Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
PHS 104A	Introductory Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 104, or PHS 171 for science majors</i>
BIO 201	Human Anatomy & Physiol I

*Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.*

BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>

**MINORS**

● **MINOR IN CREATIVE WRITING** 

*Faculty Advisor: Colin Dickey; (310) 662-2131; cdickey@nu.edu*

The Minor in Creative Writing is designed for students in other majors who wish to develop their creative writing skills.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Discuss the basic conventions of at least two different contemporary creative genres.
- Produce polished, completed works in those genres.
- Read their own work critically and employ revision strategies to improve it.
- Critique the writing of others and offer constructive suggestions for improving it in a collegial setting.
- Produce a significant project in one genre.

**Preparation for the Minor**

(2-3 courses; 9-13.5 quarter units)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>
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\* May be used to meet a General Education requirement

Students will also need to take one or more of the following prerequisites for the upper division requirements:

ENG 201	Fiction Writing I <i>Prerequisite: LIT 100</i>
ENG 202	Poetry Writing I <i>Prerequisite: LIT 100</i>
ENG 203	Screenwriting I <i>Prerequisite: LIT 100, or ART 315</i>

**Requirements for the Minor**

(6 courses; 27 quarter units)

Two of the following:

ENG 301	Fiction Writing II <i>Prerequisite: ENG 201</i>
ENG 302	Poetry Writing II <i>Prerequisite: ENG 202</i>
ENG 303	Screenwriting II <i>Prerequisite: ENG 203</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100, and ENG 101</i>

One of the following:

- LIT 401 Contemporary Fiction  
*Prerequisite: LIT 100*
- LIT 402 Contemporary Poetry  
*Prerequisite: LIT 100*

One of the following:

- ENG 401 Fiction Workshop  
*Prerequisite: ENG 301*
- ENG 402 Poetry Workshop  
*Prerequisite: ENG 302*
- ENG 403 Screenwriting Workshop  
*Prerequisite: ENG 303*

Two of the following:

- ART 315 Film as Art  
*Prerequisite: ENG 100, ENG 101*

or

- COM 360+ Representation in the Media  
*Prerequisite: ENG 100, and/or ENG 101*

or

- COM 385 Interactive Storytelling  
*Prerequisite: ENG 101*

or

Upper division ENG courses

or

Upper division JRN courses

or

Upper division LIT courses

### ● MINOR IN ENGLISH

*Faculty Advisor: John Miller; (714) 429-5146; jmiller@nu.edu*

The Minor in English is designed to provide students with a grounding in some of the major periods, movements, and authors of British and American literature, and the opportunity to pursue further study of topics of interest to them.

#### Requirements for the Minor

(6 courses; 27 quarter units)

Choose at least three of the following courses:

- LIT 311 British Literature I  
*Prerequisite: LIT 100*
- LIT 312 British Literature II  
*Prerequisite: LIT 100*
- LIT 321 American Literature I  
*Prerequisite: LIT 100*
- LIT 322 American Literature II  
*Prerequisite: LIT 100*
- LIT 338 Shakespeare  
*Prerequisite: LIT 100*

Choose the remaining course(s) from available upper-division LIT courses or the following:

- ART 315 Film as Art  
*Prerequisite: ENG 100, ENG 101*
- ENG 301 Fiction Writing II  
*Prerequisite: ENG 201*
- ENG 302 Poetry Writing II  
*Prerequisite: ENG 202*
- ENG 303 Screenwriting II  
*Prerequisite: ENG 203*

- ENG 350 Fundamentals of Linguistics  
*Prerequisite: ENG 100, and ENG 101*

- ENG 375 Nature Writing  
*Prerequisite: ENG 100, and ENG 101*

### ● MINOR IN GLOBAL STUDIES

*Faculty Advisor: Lorna Zukas; (858) 642-8437; llueker@nu.edu*

#### Requirements for the Minor

(6 courses; 27 quarter units)

Please choose any six of the following:

- COM 385 Interactive Storytelling  
*Prerequisite: ENG 101*
- GLS 410 Gender and Global Society  
*Prerequisite: ENG 240*
- GLS 420 Ecological Revolutions  
*Prerequisite: ENG 240*
- GLS 430 The Global Economy  
*Prerequisite: ENG 240*
- HIS 320 Culture of Global Capitalism  
*Prerequisite: ENG 100, ENG 101*
- PHL 320+ World Religions  
*Prerequisite: ENG 100, and ENG 101*
- SCI 300 Geography

### ● MINOR IN HISTORY

*Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu*

#### Requirements for the Minor

(6 courses; 27 quarter units)

Please choose any six of the following:

- HIS 360 American Colonial Experience  
*Prerequisite: ENG 100, ENG 101, and HIS 220A*
- HIS 361 Making and Sundering of Union  
*Prerequisite: ENG 100, ENG 101, and HIS 220A*
- HIS 362 U.S. Between Wars, 1865-1917  
*Prerequisite: ENG 100, ENG 101, and HIS 220B*
- HIS 363 U.S. Since World War I  
*Prerequisite: ENG 100, ENG 101, and HIS 220B*
- HIS 431 The Ancient World  
*Prerequisite: ENG 100, ENG 101, and HIS 233*
- HIS 432 The Classical World  
*Prerequisite: ENG 100, ENG 101, and HIS 233*
- HIS 433 The Post-Classical World  
*Prerequisite: ENG 100, ENG 101, and HIS 233*
- HIS 434 Modern World, 1500 to Present  
*Prerequisite: ENG 100, ENG 101, and HIS 234*

### ● MINOR IN MATHEMATICS

*Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu*

#### Requirements for the Minor

(6 courses; 27 quarter units)

Students must select six upper division (300-400 level) courses in mathematics beyond MTH 221. Students can complete this minor to fulfill requirements for a Bachelor of Arts in Interdisciplinary Studies.

### ● MINOR IN POLITICAL SCIENCE

*Faculty Advisor: Shak Hanish; (858) 642-8494; shanish@nu.edu*

#### Preparation for the Minor

- POL 100\* Introduction to Politics  
*Prerequisite: ENG 100, and ENG 101*

POL 201\* American Politics  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement

### Requirements for the Minor

(6 courses; 27 quarter units)

Choose six courses from the following:

- POL 320 Politics of Social Movements  
*Prerequisite: ENG 100, and ENG 101*
- POL 330 Political Theory  
*Prerequisite: ENG 100, and ENG 101*
- POL 340 Comparative Politics  
*Prerequisite: ENG 100, and ENG 101*
- POL 350 International Relations  
*Prerequisite: ENG 100, and ENG 101*
- POL 360 Public Policy  
*Prerequisite: ENG 100, and ENG 101*
- POL 400 European Politics  
*Prerequisite: ENG 100, and ENG 101*
- POL 410 Middle Eastern Politics  
*Prerequisite: ENG 100, and ENG 101*
- POL 539 Dynamics of World Politics
- SOC 385 Methods of Social Inquiry  
*Prerequisite: ENG 100, ENG 101, and SOC 100*
- SOC 540 Power and Social Change  
*Prerequisite: ENG 100, and ENG 101*

### ● MINOR IN PSYCHOLOGY

*Faculty Advisor: Brenda Shook; (916) 855-4108; bshook@nu.edu*

The minor in psychology represents current trends in the field of psychology and is designed to augment the major in numerous disciplines such as nursing, health, sociology, criminal justice, biology, business, management, and education.

### Requirements for the Minor

(6 courses; 27 quarter units)

- PSY 426 History of Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 427 Biological Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 428 Developmental Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 430 Intro to Psychopathology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 432 Social Psychology  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 441 Psychology  
*Prerequisite: PSY 100*
- PSY 455 Psychology of Bereavement  
*Prerequisite: ENG 100, ENG 101, and PSY 100*
- PSY 457 Forensic Psychology  
*Prerequisite: ENG 100, PSY 100*
- PSY 458 Health Psychology  
*Prerequisite: ENG 100, ENG 101, PSY 100*

### ● MINOR IN SOCIOLOGY

*Faculty Advisor: Margaret Greer; (916) 855-4151; mgreer@nu.edu*

### Requirements for the Minor

(6 courses; 27 quarter units)

To minor in Sociology students must successfully complete six of the following

courses with a grade of C or better.

- SOC 325 Popular Culture  
*Prerequisite: ENG 100, and ENG 101*
- SOC 328 Intercultural Thinking  
*Prerequisite: ENG 100, and ENG 101*
- SOC 344 Marriage, Sex and the Family  
*Prerequisite: ENG 100, and ENG 101*
- SOC 443 Sociology of Deviance  
*Prerequisite: ENG 100, ENG 101, and SOC 100*
- SOC 445 Contemporary Social Problems  
*Prerequisite: ENG 100, and ENG 101*
- SOC 365 Classical Social Theory  
*Prerequisite: SOC 100, and ILR 260*
- SOC 375 Contemporary Social Theory  
*Prerequisite: ENG 100, ENG 101, and SOC 100*
- SOC 385 Methods of Social Inquiry  
*Prerequisite: ENG 100, ENG 101, and SOC 100*
- SOC 455 Organizational Sociology  
*Prerequisite: ENG 100, ENG 101, and SOC 100*
- SOC 500 Cultural Pluralism in the USA  
*Prerequisite: ENG 100, and ENG 101*
- SOC 540 Power and Social Change  
*Prerequisite: ENG 100, and ENG 101*

## GRADUATE DEGREES

### ■ MASTER OF ARTS IN APPLIED LINGUISTICS

*Faculty Advisor: Azita Mokhtari; (858) 642-8598; amokhtari@nu.edu*

The Master of Arts in Applied Linguistics prepares candidates for careers in the fields of: Applied Linguistics, Language Education, Foreign Language Education and English as a Foreign/Second Language. The program provides breadth and depth of knowledge in several areas of Linguistics, English/Foreign language instruction and the specialized knowledge and skills needed to plan and conduct research and/or instruction in Second Language Acquisition, Teaching English as a Foreign/Second Language, Foreign Language Methodology and Applied Linguistics.

The Master of Arts in Applied Linguistics program is recommended for students with Bachelor's degree in: Language & Linguistics, Foreign Languages, English, Literature, and other related fields. The program is equally ideal for anyone who would pursue a master's degree in order to advance their careers; post-secondary teachers of English as Second/Foreign Language, teachers of Foreign Languages both in the USA and abroad, anyone intending to teach ESL or Foreign Languages at two or four year colleges, for government linguists or language instructors interested in advancing their academic careers, and as preparation for Doctoral Studies in related fields. The career opportunities for successful candidates include but are not limited to secondary, post-secondary and private sector instruction in: English as a Second Language (TESL), English as a Foreign Language (TEFL), and Foreign Language Teaching (FLT).

Please note: This degree does not award the applicant with any credential or licensure in K-12 schools.

### Teaching Requirement

This program has a teaching internship component (ALN 690) which requires 60 hours of language teaching. This Internship provides practical teaching experience for students in the Applied Linguistics/TESL/TEFL MA Program, offered on S/U basis only. Prior teaching experience may be used to satisfy the requirements for this Internship. In addition, Teaching Assistantship, language instruction in the private sector or as a volunteer can be used to satisfy the Internship requirement. In the case of students without prior teaching experience, they are required to work with the Lead Faculty to set up an internship opportunity. Teaching experience is required for graduation.

In the rare case where neither: 1- Prior Teaching Experience 2- Teaching Assistantship 3- Teaching Internship position is available to the student, with the consent of the Program Director, ALN 690 may be taken as Practicum to provide

the student with best practices in Foreign/Second Language instruction, in a supervised teaching mode where the student will plan and conduct teaching sessions of varying levels and difficulties, assigned by the instructor. For the waiver request, students need to submit the following: resume with references, employer letter (current/former), or a letter from internship supervisor specifying 60 hours of language teaching.

This requirement can be waived for students who can submit documents that show they satisfy the teaching requirement.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate their capacity for continued learning, growth and scholarly activity in the discipline in general and in their specific field(s) of interest in particular.
- Exhibit professional and technical expertise consistent with professional and ethical standards of disciplinary and/or content-area.
- Evaluate relevant literature, including primary and secondary sources, in Applied Linguistics in a multifaceted and nuanced manner.
- Apply a scholarship-based understanding of key theories and philosophies to a variety of research and teaching areas in Applied Linguistics.
- Plan, manage research-based projects and employ their knowledge of the conventions and methods in the field of Applied Linguistics.
- Create sophisticated and professionally-informed written works or websites related to Applied Linguistics.
- Measure language learners' initial and developing linguistic knowledge and skills.
- Apply aspects of Applied Linguistics methods and methodology when teaching second language learners.

### Degree Requirements

To receive a Master of Arts in Applied Linguistics students without the required teaching experience must complete 49.5 quarter units of graduate credit. Students who apply for and are approved to waive ALN690 must complete a minimum of 45 quarter units of graduate work.

A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution as it applies to this degree and provided the units were not used in earning another advanced degrees. Students should refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

### Required Courses

(11 courses; 49.5 quarter units)

ALN 600	English Phonology/Phonetics
ALN 610	English Syntax
ALN 620	Second Language Acquisition
ALN 630	Sec/Foreign Language Method I <i>Prerequisite: ALN 620</i>
ALN 640	Sec/Foreign Language Method II <i>Prerequisite: ALN 630</i>
ALN 650	Current Issu in Sec Lang Learn <i>Prerequisite: ALN 640</i>
ALN 660	Diachronic Study of Eng Lang
ALN 670	Research Methods in Appl Ling <i>Prerequisite: Successful completion of 7 ALN courses</i>
ALN 680	Sec/Foreign Lang Assessment <i>Prerequisite: Successful completion of 7 ALN courses</i>
ALN 690	Internship <i>Prerequisite: The Internship can only be taken at the end of the coursework and prior to taking the Thesis.</i>
ALN 699	Thesis <i>Prerequisite: ALN 690 with a minimum grade of S</i>

### ■ MASTER OF ARTS IN COUNSELING PSYCHOLOGY

Faculty Advisor: Valerie Alexander; (858) 642-8343; valexand@nu.edu

The Master of Arts in Counseling Psychology degree provides the academic pathway for students who are committed to the practice of professional counseling. The program includes core courses that all MA Counseling Psychology students must take and two Areas of Specialization options. Each student must choose one of the following specializations:

The MA Counseling Psychology – MFT Area of Specialization emphasizes marriage and family therapy and is designed for students who are committed to the practice of individual, couples, family, adolescent, and child psychotherapy. This version of the degree meets the academic requirements necessary to sit for the Marriage and Family Therapist (MFT) License mandated by the Board of Behavioral Sciences in the State of California. Students may take courses from the LPCC Area of Specialization as their electives if they want to qualify for both licenses. They must take one additional theoretical course and complete the additional practicum hours required for the LPCC license in order to meet the educational requirements for both licenses.

The MA Counseling Psychology – LPCC Area of Specialization emphasizes counseling techniques and theories, including those related to career development, and is designed for students who are committed to the practice of individual and group counseling. This version of the degree meets the academic requirements to be eligible for licensing as a Licensed Professional Clinical Counselor (LPCC) by the Board of Behavioral Sciences in the State of California. Students may take courses from the MFT Area of Specialization as their electives if they want to qualify for both licenses or want to qualify to work with couples, families, and/or children as an LPCC.

The degree with either specialization may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about licensure outside of California. The degree also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology.

### Application Requirements

Students interested in enrolling in this program should contact the appropriate campus for further information regarding the application process.

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information as well as the MAC program criteria. All applicants are evaluated for the psychotherapy profession, regardless of career goals. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes.

Students for whom English is not their primary language must take the Test of English as a Foreign Language (TOEFL) exam and receive one of the below scores before beginning the program:

Paper-based - 550  
Computer-based - 213  
Internet Based - 79

Students must submit their TOEFL score with their application.

Students should consult the regional faculty to determine at what point in the sequence they may enter the program. Entrance points may differ in each region.

### Program Fees

For students in the MFT Specialization: \$350 for materials that assist students in the preparation for the California Marriage and Family Therapist examination for licensure.

### Program Requirements

- Students must complete a minimum of 10 hours of individual, marital, family, and group psychotherapy before taking PSY 611B and another 15 hours before graduation for a total of 25 hours.
- Students must obtain a total of 225 hours (MFT) or 280 hours (LPCC) of face-to-face counseling experience at an approved practicum site with a designated practicum site supervisor during the practicum class.
- Students who do not have an undergraduate degree in psychology must

take PSY 501A and PSY 501B as the first two courses in their program. These courses will serve as the elective credit for those students.

- Under exceptional circumstances requests for independent studies in courses without experiential clinical work may be considered for approval by the department.
- Students may not take more than one course per month except in the first month of PSY 680A, 680B, or 680C. In those months students may take a second course.
- Students seeking licensure in California must register with the Board of Behavioral Sciences (BBS) after graduation and fulfill all BBS licensing requirements for the license relevant to the student's MAC specialization.
- Students are also urged to join a professional association. Students in the MFT track should consider joining the California Association of Marriage and Family Therapy and/or the American Association of Marriage and Family Therapists. Students in the LPCC track should consider joining the American Counseling Association. Students must obtain malpractice insurance, which may be obtained through the relevant association listed above or another professional organization.
- Students must complete all coursework within seven years. Any courses taken more than seven years ago must be repeated.

The program is guided by the standards of the California Board of Behavioral Sciences for academic training relevant to licensing as a Marriage and Family Therapist in the State of California (MFT Specialization) or as a Licensed Professional Clinical Counselor (LPCC Specialization), and by contemporary scientific, professional, and public practice. At the completion of the program students will achieve the following outcomes required for successful practice of Marriage and Family Therapy (MFT Specialization) or Professional Clinical Counseling (LPCC Specialization):

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze core psychological concepts that underpin counseling, psychotherapy, and mental health counseling.
- Critically evaluate the relevant methods of research used in the study of behavior and their limitations.
- Critically evaluate the controversies and regions of theoretical uncertainty within the current systems of mental health care.
- Establish professional relationships with diverse clients that provide the evidence-based relational conditions for therapeutic change.
- Uphold current professional standards of ethics, values, and laws related to the practice of professional psychotherapists.
- Demonstrate cultural competence in addressing the mental health needs of people of diverse backgrounds and circumstances, including an appreciation for the wide cultural diversity among California's multiple diverse communities.
- Assess and diagnose psychological distress and/or impairment, mental disorders, and problems in living in diverse individuals and systems within various mental health settings.
- Develop culturally appropriate strategies and treatment plans for successful interventions with diverse client groups in various clinical contexts.
- Demonstrate mastery of the core competencies required of all helping relationships.
- Apply related therapeutic interventions with diverse clients using a variety of psychotherapeutic models.
- Apply a working knowledge of a range of topics important to mental health practice including (but not limited to) psychopharmacology, addictive and compulsive disorders, structured psychological assessment, relational violence, gender and sexuality, and trauma/crisis.
- Apply norms and principles of public mental health work including (but not limited to) case management, collaborative treatment, evidence-based practice, strength-based model, resiliency, and recovery-oriented care to work with clients.
- Integrate professional and personal development through self-reflection and personal psychotherapy, emphasizing personal capacities such as self-awareness, integrity, sensitivity, flexibility, insight, compassion, imagination, and personal presence.

### Degree Requirements

(20 courses; 90 quarter units)

To receive the Master of Arts in Counseling Psychology, students must complete at least 90 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students for whom English is a second language must take and pass an English Language Proficiency exam prior to beginning any coursework. Students should refer to the section on graduate admission for specific information regarding additional application and evaluation requirements.

### Prerequisites for the Major

(2 courses; 9 quarter units)

Students who hold a bachelor's degree in Psychology may request these courses to be waived. Please contact the Lead Faculty. These courses will count towards the 90 quarters units of graduate work.

PSY 501A Foundations in Counseling I

PSY 501B Foundations in Counseling II

### Core Requirements

#### Sequence I

(6 courses; 27 quarter units)

In cohort system locations students will take classes from this sequence then take 3 Area of Specialization courses, Core Course Sequence II, and any electives required. Students in open enrollment locations should consult their regional lead faculty for the sequence of their courses.

PSY 605 Lifespan Development  
*Prerequisite: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

PSY 608 Evidence-Based Practice  
*Prerequisite: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

PSY 610 Case Management  
*Prerequisite: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

PSY 611A Counseling Paradigms I  
*Prerequisite: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

PSY 612A Clinical Assessment I

PSY 612B Clinical Assessment II  
*Prerequisite: PSY 612A*

### LPCC Specialization

Students in the LPCC track will take these courses between Core Sequence I and II.

PSY 653 Research: Paradigms & Critique

PSY 624A Testing and Assessment

CED 612 Career & Academic Counseling

### MFT Specialization

Students in the MFT track will take these courses between Core Sequence I and II.

PSY 636 Child and Adolescent Therapy

PSY 632A Family Therapy

PSY 632B Couples Therapy

### Core Requirements

#### Sequence II

(9 courses; 40.5 quarter units)

PSY 628 Group Therapy

PSY 627 Legal & Ethical Issues

PSY 611B Counseling Paradigms II

PSY 680A Counseling Practicum I  
*Prerequisite: PSY 611B with a minimum grade of S*



PSY 678	Clinical Biopsychology
CHD 640	Treatment of Addictions
PSY 679	Psychology of Trauma
PSY 637	Cultural Competencies
PSY 680B	Counseling Prac II for MFTs <i>Prerequisite: PSY 680A</i>

**or**  
 PSY 680C Counseling Prac II for LPCCs  
*Prerequisite: PSY 680A*

### Approved Electives

(2 courses; 9 quarter units)

Students may choose two of the following electives to complete their program. Students who were required to take PSY 501A and PSY 501B at the beginning of the program have fulfilled their elective credit units with those courses.

CED 612	Career & Academic Counseling
CED 613	Assessment for Ed Counselors <i>Prerequisite: CED 607, and Advancement to Candidacy</i>
IHS 614	Mind-Body Therapy for Healing
AGE 602	Foundations of Gerontology II
AGE 611	Psychology of Older Adults <i>Prerequisite: AGE 602</i>
AGE 613	Counseling Older Adults <i>Prerequisite: AGE 602</i>

### ▲ Specialization in Licensed Professional Clinical Counseling (LPCC)

The MA Counseling Psychology – LPCC Area of Specialization emphasizes professional counseling and is designed for students who are committed to the practice of individual and group psychotherapy as well as vocational counseling. This version of the degree meets the academic requirements necessary to sit for the License in Professional Clinical Counseling (LPCC) mandated by the Board of Behavioral Sciences in the state of California. Students may take courses from the MFT Area of Specialization as their electives if they want to qualify for both licenses. (Note: LPCCs in California are not allowed to work with families or couples without specific training for those populations.)

The MA with LPCC specialization may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about licensure outside of California.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess vocational problems and develop academic plans for diverse clients.
- Apply therapeutic interventions with diverse clients within the context of professional clinical counseling, including attention to vocational issues when necessary.
- Develop culturally appropriate strategies and treatment plans for successful interventions with individuals and groups.

To complete the Specialization in Licensed Professional Clinical Counseling, students must complete the four courses listed below. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### LPCC Specialization

(4 courses; 18 quarter units)

PSY 653	Research: Paradigms & Critique
CED 612	Career & Academic Counseling
PSY 624A	Testing and Assessment

PSY 680C Counseling Prac II for LPCCs  
*Prerequisite: PSY 680A*

### ▲ Specialization in Marriage and Family Therapy (MFT)

The MA Counseling Psychology – MFT Area of Specialization emphasizes marriage and family therapy and is designed for students who are committed to the practice of individual, couples, family, adolescent, and child psychotherapy. This version of the degree meets the academic requirements necessary to sit for the Marriage and Family Therapist (MFT) License mandated by the Board of Behavioral Sciences in the state of California. Students may take courses from the LPCC Area of Specialization as their electives if they want to qualify for both licenses.

The MA with MFT specialization may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about licensure outside of California.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess and diagnose psychological distress and/or impairment, mental disorders, or problems in living in diverse couples, and families within various mental health settings.
- Assess and diagnose psychological distress and/or impairment, mental disorders or problems in living in children and adolescents from diverse backgrounds within various mental health settings.
- Develop appropriate strategies and treatment plans for successful clinical interventions with couples, families, children, and adolescents in various clinical contexts.
- Apply therapeutic interventions with diverse clients within the context of child, couples, and family counseling.

To complete the Specialization in Marriage and Family Therapy, students must complete the four courses listed below. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### MFT Specialization

(4 courses; 18 quarter units)

PSY 636	Child and Adolescent Therapy
PSY 632A	Family Therapy
PSY 632B	Couples Therapy
PSY 680B	Counseling Prac II for MFTs <i>Prerequisite: PSY 680A</i>

### ■ MASTER OF ARTS IN ENGLISH

*Faculty Advisor: Franz Potter; (714) 429-5410; fpotter@nu.edu*

The Master of Arts in English provides a balanced and comprehensive program of graduate study in literature and writing. The program is ideal for teachers who desire a content M.A. beyond the credential. It is also excellent preparation for doctoral studies in English, teaching in the two-year college, or other careers requiring a high degree of literacy.

The curriculum offers a balanced coverage of major approaches to literature, including theoretical, historical, comparative, thematic, multicultural, and genre studies. It provides students with the tools and skills to produce literary scholarship of professional quality and to participate in the ongoing scholarly discussions of issues in the field of literary study.

### Writing Across the Curriculum

The University's Writing Across the Curriculum program offers opportunities for students to participate in meaningful projects that will enhance their career development. These projects include editing and producing the student literary journal, The GNU and working on the WHACK, the Writing Across the Curriculum Newsletter. Contact Sharen Grogan, Director of Writing Across the Curriculum, at sgrogan@nu.edu, for additional information.

In addition, various departmental faculty have opportunities for students to assist them with teaching, scholarly projects, or other activities and students can receive valuable experience and mentoring from working with them. Contact individual faculty members for information.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Research and apply relevant criticism in sustained analyses and interpretations of specific works of fiction, non-fiction, and poetry.
- Evaluate the relevance and validity of different theoretical approaches (e.g., historicist, biographical, etc.) to the understanding of specific works of literature.
- Engage in informed critical discussion, both oral and written, of theoretical issues pertaining to the study of literature.
- Engage in informed critical discussion, both oral and written, of the works and criticism of a specific literary period or movement.
- Participate in rigorous critiques of the scholarly works of others.
- Revise and expand a scholarly paper to submit for publication in a scholarly or literary journal.

### Degree Requirements

(10 courses; 45 quarter units)

To receive the Master of Arts in English, students must complete at least 45 quarter units. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

### Core Requirements

(6 courses; 27 quarter units)

ENG 600 Seminar in Literary Theory

ENG 689 Research and Methodology

ENG 620A Literary Period or Movement I

or

ENG 620B Literary Period or Movement II

ENG 680A Seminar in a Theme I

or

ENG 680B Seminar in a Theme II

ENG 690A Major Author Seminar I

or

ENG 690B Major Author Seminar II

ENG 699 English Capstone Course

or

ENG 663 Capstone Project in Rhet Crit  
*Prerequisite: ENG 656, ENG 657, ENG 655, ENG 671, or ENG 668*

### Specialization Requirements

(4 courses; 18 quarter units)

Select from the following list of courses:

ENG 620A Literary Period or Movement I

or

ENG 620B Literary Period or Movement II

MCW 600 Pedagogy of Creative Writing

MCW 630 Seminar in Fiction

MCW 645 Seminar in Poetry

MCW 650 Seminar in Creative Nonfiction

ENG 660 Seminar in Literary Hypermedia

ENG 655 Composition Pedagogy

ENG 656 History of Rhetoric

ENG 657 Modern Rhetoric

ENG 665 Film Theory

ENG 666 Film History: The Silents

ENG 667 Film History: American Film

ENG 668 Film Genre Studies

ENG 669 World Film

ENG 670 Comparative Literary Studies

ENG 671 Pictures that Speak

ENG 690A Major Author Seminar I

or

ENG 690B Major Author Seminar II

ENG 680A Seminar in a Theme I

ENG 680B Seminar in a Theme II

ENG 685 Great Directors: American

ENG 686 Great Directors: International

ENG 610 Multicultural Literature

ENG 640 Seminar in Poetry

### ▲ Specialization in Gothic Studies

The Master of Arts in English with a Specialization in Gothic Studies provides a balanced and comprehensive program of graduate study in literature as well as a rigorous examination of the historical, theoretical and critical reception of the Gothic, from its origins in the eighteenth century through to a range of contemporary works in both literature and film. The program is appropriate for students seeking preparation for doctoral study or college-level teaching in English and related fields, or general cultural enrichment.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Research relevant criticism in sustained analyses and interpretations of specific works of fiction, non-fiction, and poetry.
- Evaluate the relevance and validity of different theoretical approaches (e.g., historicist, biographical, etc.) to the understanding of specific texts.
- Compare informed critical discussions of theoretical issues pertaining to textual analysis.
- Synthesize current theory and practice in the study of Gothic literature.
- Evaluate the complexities of canon formation.
- Assess informed critical discussions, both oral and written, the works and criticism of the Gothic literary period and movement.

### Program Electives

(4 courses; 18 quarter units)

ENG 620A Literary Period or Movement I - Dark Romanticism

or

ENG 620B Literary Period or Movement II - American Gothic

ENG 640 Seminar in Poetry - Graveyard Poetry

ENG 668 Film Genre Studies - Horror Films

ENG 680A Seminar in a Theme I - Vampires Gothic Literature

or

ENG 680B Seminar in a Theme II - Gothic Prisons/Romantic Spaces  
Female Gothic

or

ENG 690A Major Author Seminar I - Ann Radcliffe

or

ENG 690B Major Author Seminar II - E. A. Poe

### ▲ Specialization in Rhetoric

The Specialization in Rhetoric provides a program of graduate study in literature as well as a wide range of cultural production, from classical oration to contemporary cinema, with particular attention paid to how language and image are used to produce various effects and meanings. Students study literary texts and other cultural artifacts across a variety of media forms, developing readings that are grounded in contextual understanding. They complete course work in literary studies, classical and modern rhetoric, composition pedagogy, media studies, and film studies. The prescribed curriculum contains several variable-topic courses, allowing students to pursue broad program goals in topic areas matched to their individual interests. The program is appropriate for students seeking preparation for doctoral study or college-level teaching in English and related fields, or general cultural enrichment.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce sustained textual analyses and interpretations that are informed by relevant published criticism.
- Evaluate the relevance and validity of different theoretical approaches to the understanding of specific texts.
- Produce rigorous critiques of the scholarly works of others.
- Analyze the processes of canon formation.
- Interrogate and synthesize key theories and practices within Composition Studies.
- Analyze how language and image are used to produce various effects and meanings across a variety of media forms.
- Produce a work of rhetorical criticism suitable for publication in a scholarly journal.

#### Specialization Requirements

(4 courses; 18 quarter units)

Students must select 4 of the 5 courses listed below:

- ENG 656 History of Rhetoric  
ENG 657 Modern Rhetoric  
ENG 655 Composition Pedagogy  
ENG 671 Pictures that Speak  
or  
ENG 668 Film Genre Studies

### ■ MASTER OF ARTS IN FILM STUDIES

Faculty Advisor: Paul Majkut; (619) 200-1180; pmajkut@nu.edu

The Master of Arts in Film Studies curriculum covers the central aspects of film studies, including theory, history, film genre, national film histories, and individual directors. The degree provides the student with the critical vocabulary, tools, and research abilities required to produce professional scholarship in the discipline on topics of current and historical academic interest.

The Program provides students with advanced theoretical, historical, and aesthetic appreciation of cinema. Film Studies, as an independent academic discipline, is among the fastest growing areas in higher education. Film Studies departments are increasingly seeking teachers with advanced education in this discipline. The program prepares the student for doctoral studies in the art of film, for teaching at the community-college level, and for other careers requiring advanced literacy and critical thinking.

Note: The Program includes a number of variable-content courses under the same course number. Variable-content course topics will be found in SOAR and will also appear on student transcripts. The variable-content courses are ENG 668, ENG 669, ENG 685, and ENG 686. These courses may be taken more than once, with different content, to fulfill degree requirements.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze, synthesize, and evaluate film theory, aesthetics, history, and individual American and international directors.

- Research and write in the areas of film theory, aesthetics, history, and individual American and international directors.
- Critique specific films using technical film vocabulary, critical approaches, and film research tools.
- Evaluate the relevance and validity of different theoretical approaches to film studies.
- Engage in informed critical discussion, both oral and written, of theoretical issues pertaining to the study of film.
- Engage in informed critical discussion, both oral and written, of the works and criticism of a specific film or literary period or movement.
- Revise and expand a paper to submit for publication in a scholarly or film journal.

#### Degree Requirements

To receive the Master of Arts in Film Studies, students must complete at least 45 quarter units. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided units were not used in earning another advanced degree. Students should refer to the section in the General Catalog on graduate admission requirements for specific information regarding application and evaluation.

#### Core Requirements

(8 Courses; 36 quarter units)

- ENG 665 Film Theory  
ENG 666 Film History: The Silents  
ENG 667 Film History: American Film  
ENG 668 Film Genre Studies  
ENG 669 World Film  
ENG 685 Great Directors: American  
ENG 686 Great Directors: International  
ENG 698 Film Studies Capstone Course

*Prerequisite: A total of seven core courses and two elective courses as described in the Degree Requirements for the Program must be completed before enrolling in the Capstone course.*

#### Program Electives

(2 courses; 9 quarter units)

Other courses may be taken as electives in the M.A. in Film Studies Program with the approval of the Program Lead Faculty.

### ■ MASTER OF ARTS IN GERONTOLOGY

Faculty Advisor: Allyson Washburn; (415) 440-0693; awashburn@nu.edu

The Master of Arts in Gerontology fosters development of the conceptual and clinical foundations necessary to design and provide strengths-based services to our aging population and to develop methods of inquiry and innovative practices to address the evolving needs of aging persons in their communities. The intended enrollees are mid-career professionals who want to increase their proficiency in this area of specialization or who want to re-specialize, having worked in allied fields.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Design and implement strengths-based strategies to address the challenges and opportunities facing societies and families as members age
- Develop strategies for working with older adults that take into consideration age-related physical, cognitive, and emotional changes
- Solve problems facing older individuals or organizations serving them using knowledge of assessment and evidence-based practice, as well as an understanding of relevant legal and ethical issues
- Examine their own presumptions and biases about older adults and develop a deep appreciation for the paradoxes inherent in the aging process
- Use contemporary modes of information technology and communications media in case management, program assessment, and advocacy

- Advocate for public policies that improve the health and well-being of older adults and their families
- Conduct applied research that addresses challenges or opportunities for older adults and their communities

### Degree Requirements

(12 courses; 54 quarter units)

To earn the Master of Arts in Gerontology, students must complete at least 54 quarter units of graduate work, including an integrative project for 9 quarter units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Core Requirements

(7 courses; 31.5 quarter units)

AGE 601 Foundations of Gerontology I

AGE 602 Foundations of Gerontology II

Please choose three of the following:

AGE 610 Wellness/Engagement in Aging  
*Prerequisite: AGE 602*

AGE 611 Psychology of Older Adults  
*Prerequisite: AGE 602*

AGE 612 Public Policy and Aging  
*Prerequisite: AGE 601*

AGE 613 Counseling Older Adults  
*Prerequisite: AGE 602*

AGE 614 Cross-cultural Practice  
*Prerequisite: AGE 601*

AGE 615 Managing Aging Services  
*Prerequisite: AGE 601*

### Project Requirements

AGE 620 Integrative Project A  
*Prerequisite: AGE 601 with a minimum grade of B-, AGE 602 with a minimum grade of B-*

AGE 630 Integrative Project B  
*Prerequisite: AGE 601 with a minimum grade of B-, AGE 602 with a minimum grade of B-, AGE 620 with a minimum grade of B-*

### Elective Requirements

(5 courses; 22.5 quarter units)

AGE 616 Physical Change and Aging

HUB 601D Creative Leadership

HUB 601B Communication for Managers

BER 600 Intro to Bereavement Studies

BER 604 Dying Patient and the Family  
*Prerequisite: BER 600*

HCA 626 Healthcare Information Systems

HCA 628 HA Human Resources Management

## ■ MASTER OF ARTS IN HISTORY

*Faculty Advisor: Duncan Campbell; (858) 642-8419; dcampbell2@nu.edu*

The Master of Arts in History offers a broad yet focused program of graduate training in historical research and writing. The program is well-suited for teachers who would like a discipline-based Master's degree beyond the credential. It is also excellent preparation for a career with the State Department, teaching History at the community college, doctoral studies in History, or any career in the public or private sectors requiring advanced research, analytical, and writing skills.

The graduate curriculum offers balanced coverage of the major theoretical, regional, comparative, thematic, topical, global, and epochal approaches to the

research and writing of History. Students choose one of two tracks through the program which result in a significant Master's project.

A research track equips students with the advanced research, analytical, and writing skills needed to produce historical scholarship of professional quality and to participate in the transformative and trenchant discussions of professional historians. At the conclusion of their course of study, students will present original research findings either by writing a traditional Master's thesis or creating a Web-based multimedia Master's project. Either option will be the result of extensive historical research. Students interested in producing original scholarship and perhaps attending a PhD program should follow the research track.

Students who are currently history teachers or who aim to teach at the secondary or community college level and have little interest in doctoral studies or advanced research can choose a teaching option, which exposes students to contemporary, cutting-edge debates in American, European, and world history. At the conclusion of their course of study, students present a Master's Portfolio centering on recent and classic scholarship in specific fields of study related to the students' teaching interests.

### Specific Program Admission Requirements

To be admitted to the Master of Arts in History program, students must have a Bachelor of Arts in History or a closely-related field in the social sciences or humanities. If a student does not have Bachelor's in History or a closely related field in the social sciences or humanities, the student must take and pass the following prerequisite classes with a B (3.0) average or better to be admitted to the MA program: HIS 400, HIS 360, HIS 361, HIS 362, HIS 363, and HIS 434. Students with a minor in history may be admitted after approval by the Program Lead Faculty.

For students who completed the Bachelor of Arts in History transition program or the Bachelor of Arts in Global Studies transition program, the University will waive up to two Master of Arts in History courses taken as part of the bachelor's degree (see BA in History or BA in Global Studies transition program) if the grade earned is a "B" or higher. No graduate units will be awarded; instead the University will waive the MA history course(s) taken as part of the bachelor's degree. However, these students must still meet the requirements for the Master of Arts in History program. Students must apply for and begin the MA History program within six months of completing their BA in History or BA in Global Studies program.

### Additional Program and Thesis Information

All students are encouraged to select a Research or Portfolio Advisor early in their program from the program faculty based on areas of interest and planned thesis, multimedia project, or portfolio but they must choose an Advisor approved by the Program Lead Faculty no later than the start of their fifth course. The student's program Faculty Advisor and faculty members teaching HIS 695 and/or HIS 696 will give final approval to the student's research prospectus.

Once their research or portfolio proposal has been approved, students initiate monthly contact with their Advisor, document their progress, and provide drafts of each chapter for review. Students should consult regularly with their Advisor regarding course selection and the progress they are making on their research or portfolio proposal. The program Faculty Advisor and faculty member teaching HIS 698 or HIS 699 will give final acceptance to the Master's thesis, multimedia project, or portfolio as satisfying part of the requirements for the Master of Arts in History degree. Students are awarded an IP grade at the conclusion of HIS 698 or HIS 699 and, if needed, have up to nine months after the end of HIS 698 or HIS 699 to submit a completed thesis, multimedia project, or portfolio.

The expected (normative) time to completion of all requirements for the MA History program is two (2) years.

\*\*\*Please note that HIS 698 and HIS 699 should be taken at the end of the program. To be considered for graduation a MA History candidate must:

1. Submit the completed media/technology project to the course instructor and the Faculty Advisor within one year of the start of HIS 698. The course instructor and the Faculty Advisor are responsible for evaluating the media/technology project and determining whether the candidate has met the requirements for the MA in History as specified in the media/technology project guidelines.

or

2. Submit the completed Master's Thesis or Master's Portfolio to the course instructor and the Faculty Advisor within one year of the start of HIS 699. The course instructor and the Faculty Advisor are responsible for evaluating the

thesis or portfolio and determining whether the candidate has met the requirements for the MA in History as specified in the Thesis or Portfolio guidelines.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the relationship between fact, method, theory, and interpretation of historical accounts.
- Analyze the various ethical and professional issues that emanate from historical scholarship.
- Evaluate and interpret historical texts, in a multifaceted and nuanced manner.
- Develop a scholarship-based understanding of key historiographic theories and philosophies to a variety of historical subjects.
- Pose questions and conduct historical research that engages disciplinary perspectives, uses relevant resources, and contributes to scholarly understanding.
- Create sophisticated and professionally-informed written works or websites in a prose and visual style that is clear and effective.

### Degree Requirements

(12 courses; 54 quarter units)

To receive the Master of Arts in History, students must complete at least 54 quarter units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Coursework transferred from other universities must first have the approval of the Program Faculty Advisor. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

### Program Prerequisites

(6 courses; 27 quarter units)

For those with a B.A. in History or a closely related field, the prerequisites listed below can be waived by filing an e-form waiver with documentation of their degree. See the Graduate Information section of the catalog for more information.

HIS 400	Historical Theories & Methods <i>Prerequisite: ENG 240</i>
HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>
HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 363	U.S. Since World War I <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101, and HIS 234</i>

### Core Requirements

(8 courses; 36 quarter units)

HIS 600	Seminar in History and Theory
HIS 618A	Seminar in Modern Europe I <i>Prerequisite: HIS 600</i>
or	
HIS 618B	Seminar in Modern Europe II <i>Prerequisite: HIS 600</i>
HIS 620A	Seminar in US History I <i>Prerequisite: HIS 600</i>
or	
HIS 620B	Seminar in US History II <i>Prerequisite: HIS 600</i>
HIS 630	Seminar in World History <i>Prerequisite: HIS 600</i>

HIS 695	Directed Research Methods <i>Prerequisite: HIS 600, HIS 618A, or HIS 618B, HIS 620A, or HIS 620B, HIS 630</i>
HIS 692	Methods and Sources <i>Prerequisite: HIS 600, and HIS 695</i>
HIS 697	Guided Thesis/Project Research <i>Prerequisite: HIS 600, and HIS 692, and HIS 695</i>
HIS 698	Media/Technology Project <i>Prerequisite: HIS 695, and HIS 696, and four classes from the list. HIS 618A, or HIS 618B, HIS 620A, or HIS 620B, HIS 630, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678, HIS 688</i>
or	
HIS 699	Thesis <i>Prerequisite: HIS 695 and four classes from the list. HIS 618A, or HIS 618B, HIS 620A, or HIS 620B, HIS 630, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678, HIS 688</i>

### Program Electives

(4 courses; 18 quarter units)

HIS 618A	Seminar in Modern Europe I <i>Prerequisite: HIS 600</i>
or	
HIS 618B	Seminar in Modern Europe II <i>Prerequisite: HIS 600</i>
HIS 620A	Seminar in US History I <i>Prerequisite: HIS 600</i>
or	
HIS 620B	Seminar in US History II <i>Prerequisite: HIS 600</i>
HIS 640	Seminar in Comparative History <i>Prerequisite: HIS 600</i>
HIS 645A	Special Topics in History I <i>Prerequisite: HIS 600</i>
HIS 645B	Special Topics in History II <i>Prerequisite: HIS 600</i>
HIS 649A	Seminar in a Period/Movement I <i>Prerequisite: HIS 600</i>
HIS 649B	Seminar in a Period/Movement I <i>Prerequisite: HIS 600</i>
HIS 658	Seminar in Modern China <i>Prerequisite: HIS 600</i>
HIS 668	Seminar in Modern Middle East <i>Prerequisite: HIS 600</i>
HIS 678	Seminar in Modern Africa <i>Prerequisite: HIS 600</i>
HIS 688	Seminar in Latin America
HIS 696	History and Applied Media <i>Prerequisite: HIS 600, HIS 695</i>

### ■ MASTER OF ARTS IN HUMAN BEHAVIOR

*Faculty Advisor: Charles Tatum; (858) 642-8476; ctatum@nu.edu*

The Master of Arts in Human Behavior is designed for people desiring greater knowledge of the behavioral sciences. The degree exposes the student to a wide array of behavioral topics covering personal, social and organizational issues. The program is intended for students who have specific ambitions in the fields of supervision, management, and administration, but should also appeal to students undergoing life transitions, seeking personal or career growth, or requiring preparation for doctoral-level training.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Synthesize and apply communication theory and practice in real-world situations.
- Develop a personal and professional code of ethics based on knowledge and understanding of moral and ethical principles and values.
- Assimilate adult development and human sexuality theories and principles into personal and interpersonal growth.
- Analyze and apply behavioral and organizational change processes to personal, social, and organizational settings.
- Integrate theories of leadership into applied areas of supervision, management, and administration.
- Demonstrate practical competence in the use of behavioral theory, research and assessment.
- Produce written materials (papers, essays, projects, journals, etc.) that analyze, integrate, and critique critical theories, issues and research in human behavior.
- Demonstrate oral fluency (class debates, group discussions, individual presentations, etc.) in articulation of the theory and practice of behavioral science.
- Demonstrate multi-cultural awareness and appreciation of human diversity.

## Degree Requirements

(12 courses; 54 quarter units)

To receive the Master of Arts in Human Behavior, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

For students in the Bachelor of Science in Organizational Behavior transition program, the University will waive up to two MA in Human Behavior courses taken as part of the bachelor's degree (see BS in Organizational Behavior transition program), but these students must still meet the residency requirements for the MA in Human Behavior. The number of courses waived is dependent on the courses taken and grades earned in the transition program.

## Core Requirements

(10 courses; 45 quarter units)

HUB 648	Personal Growth & Comm.
HUB 646	Personal and Pro. Ethics
HUB 641	Stages of Adult Development
HUB 639	Issues in Sexuality
HUB 601A	Organizational Behavior
HUB 642	Theories of Behavior Change
HUB 601D	Creative Leadership
HUB 650	Behavioral Research
HUB 670	Research Applications <i>Prerequisite: HUB 650</i>
HUB 680	Integrative Project <i>Prerequisite: HUB 650, HUB 670</i>

## Program Electives

(2 courses; 9 quarter units)

Students can select graduate elective courses from the following course prefixes: AGE, CHD, HRM, HUB, MKT, MGT, PAC and SOC (HUB 660, CHD 601, PAC600 and SOC 604 are highly recommended). In addition, some education and psychology courses are acceptable with the approval of the Chair of the Department of Psychology. (Note: Due to enrollment restrictions, special permission by the Chair of the Department of Psychology is required to take CHD 640 or any courses designated PSY 600 or above).

## ■ MASTER OF ARTS IN PERFORMANCE PSYCHOLOGY

*Faculty Advisor: Doug Barba; (760) 268-1588; dbarba@nu.edu*

The Master of Arts in Performance Psychology program focuses upon the intersection of performance psychology techniques, counseling, peak performance, and sport science. The coursework covers theory, research, and applied techniques across the fields of business, exercise physiology, the fine arts, military and combat psychology, and sport psychology. Coursework contributes to students' academic requirements for certification by the Association for Applied Sport Psychology (AASP), which is the premier sport, exercise and health psychology organization in North America offering sport psychology certification to its members.

By participating in practical and tailored hands-on learning experiences, graduates are able to apply their knowledge to settings including university and professional athletes, fine arts performance settings, corporate settings, children in school and community sports organizations, coaching, and teaching.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the means by which psychological factors influence performance.
- Analyze empirical and theoretical research related to the major.
- Apply theoretically sound performance enhancement assessments and techniques with individual performers and teams representing various competitive arenas.
- Integrate theoretical perspectives from counseling and sport psychology and related fields into performance settings.
- Apply counseling skills to working relationships with clients and athletes.
- Apply ethical principles in a professional and culturally appropriate manner.

## Degree Requirements

(14 courses; 63 quarter units)

To receive a Master of Arts in Performance Psychology degree, students must complete at least 63 quarter units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission procedures for specific information on admission and evaluation.

## Core Requirements

(14 courses; 63 quarter units)

PSY 602	Sport/Performance Psychology
HUB 601A	Organizational Behavior
HUB 641	Stages of Adult Development
PSY 603	Performance Psy Alt Population
PSY 614	Counseling in Performance Psy
PSY 613	Performance Consulting Skills <i>Prerequisite: PSY 602, and PSY 603</i>
HUB 650	Behavioral Research
HUB 642	Theories of Behavior Change
PSY 604	Performance Psy Corporate Pops
PSY 607	Ethics in Performance Psy
PSY 606	Motor Behavior
PSY 609	Psychopathology
PSY 639	Consulting Practice Dev.
PSY 615	Fieldwork <i>Prerequisite: Successful completion of all core requirements</i>

## ■ MASTER OF ARTS IN STRATEGIC COMMUNICATIONS

*Faculty Advisor: Sara Kelly; (858) 642-8056; skelly@nu.edu*

The Master of Arts in Strategic Communications prepares students to assume professional positions in organizations that must meet the challenges of operating in an increasingly complex and interdependent global environment. It equips

graduates with both theoretical and practical approaches to developing strategic communications programs that enable organizations to meet their goals and objectives. Each course provides an essential stepping stone on the way to planning, executing, and evaluating effective strategic communications efforts.

The objective of the program is to develop effective, strategically sophisticated professionals who possess the full complement of analytical and practical tools to lead communication efforts. It fosters strategic thinking, logical analysis, and solution generation. Upon completion of the degree, graduates will have the skills to develop and implement communications initiatives using both traditional and emerging channels such as social networks, blogs, podcasts, and mobile media.

Graduates will acquire an array of intellectual, managerial, and communication skills and competencies, including: an understanding of communications opportunities; the ability to carry out analyses of organizational communications needs; the knowledge to conduct audience analysis, as well as formative and evaluative research; the training to develop, implement, and evaluate appropriate strategies and tactics to reach multiple publics; and professional-level writing and presentation skills.

At the completion of the Master of Arts in Strategic Communications, graduates will emerge with a deep understanding of the theories of communication and persuasion, an ability to lead and participate in the team development of organizational communication strategies, and the practical skills to plan, produce, and evaluate strategic communications programs and campaigns.

This degree requires that students be able to write in English at an advanced level. If writing skills need improvement, the student may be required to enroll in a writing course before continuing in the program. Applicants for whom English is a second language are encouraged to take the Accuplacer English as a Second Language Placement Test.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce multi-public, multi-channel communication campaign planning documents.
- Manage communication campaigns by producing budgets, task lists, and schedules.
- Apply formative research to develop communication campaigns and messages.
- Create persuasive campaigns that meet professional ethical standards.
- Evaluate communication campaigns by conducting summative research.
- Deliver professional communication presentations online.
- Demonstrate leadership and collaborative skills by participating in group tasks and presentations as leader and team member.

### Degree Requirements

To receive a Master of Arts in Strategic Communications, students must complete at least 45 quarter units of graduate work, of which a minimum of 40.5 quarter units must be taken in residence at National University. Students can transfer up to 4.5 quarter units at the graduate level from a regionally accredited institution in the areas of communication or business, provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and matriculation.

### Core Requirements

(9 courses; 40.5 quarter units)

COM 600	Comm in Global Environment
COM 610	Integrated Marketing Comm
COM 615	Research Methods
COM 620	Crisis Communications
COM 625	Campaign & Program Management
COM 630	Campaign & Program Evaluation
	<i>Prerequisite: COM 610, COM 615</i>

COM 640	Persuasion
COM 650	Legal and Ethical Issues
COM 660	Capstone Project

### Elective

(1 course; 4.5 quarter units)

Students may take any graduate-level COM course with the approval of the program lead faculty, provided that they have completed all prerequisites for that course.

### ■ MASTER OF FINE ARTS IN CREATIVE WRITING

*Faculty Advisor: Frank Montesonti; (858) 642-8559; fmontesonti@nu.edu*

The Master of Fine Arts in Creative Writing offers students the opportunity to master advanced skills in carrying out independent and sustained activity in creative writing in the areas of fiction, literary nonfiction, poetry, and screenwriting. Guided development of each writer's talents culminates in a final project, a publishable quality thesis in the area of specialty. This final project should demonstrate a critical application of specialist knowledge in the chosen specialty and should make an independent contribution to existing work in that area. This program is excellent preparation for a professional career in writing, working in the areas of publishing or filmmaking, and is the minimal academic qualification appropriate for those who desire to teach writing at the college or university level.

Faculty in the MFA in Creative Writing program maintain a strong commitment to scholarly value and the active support of students in their passion for literature, film and writing. Creative writing students are expected to make important contributions to the publication of the student literary journal, The GNU, and actively participate in seminars designed to foster creative and critical debate. Courses are directed to the refinement of creative practice and academic excellence. Faculty are experienced and published writers in their fields and offer supervision in the areas of fiction, poetry, literary nonfiction, and screenwriting.

**Application Requirements:** To be considered for admission, applicants must meet the University graduate admission requirements listed in the general catalog. In addition, applicants in creative writing should submit portfolios of their writing directly to: fmontesonti@nu.edu. The portfolio should include 20-40 pages of fiction or literary nonfiction (usually two to three short stories or essays), or 10-20 pages of poetry, or a completed screenplay, or a substantial sample of work in several forms.

Based on the portfolio, applicants may be advised to complete one or more of the following undergraduate courses prior to enrolling in the advanced writing workshops:

LIT 443	World of the Short Story <i>Prerequisite: LIT 100</i>
LIT 446	Studies in Poetry <i>Prerequisite: LIT 100</i>
LIT 450	Studies in the Novel <i>Prerequisite: LIT 100</i>
LIT 456	Studies in Drama <i>Prerequisite: LIT 100</i>

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate various aesthetic theories of fiction, literary nonfiction, poetry, or screenwriting.
- Formulate practical and theoretical models of teaching and learning the writing of fiction, literary nonfiction, poetry and screenwriting.
- Critique specific works of literature and screenwriting.
- Develop publishable-quality writing in fiction, literary nonfiction, poetry, or screenwriting.
- Evaluate different literary formats.
- Implement craft principles of plot, characterization, style, point of view, narrative technique, and language in the creation of fiction.
- Implement craft principles of plot, characterization, style, point of view, narrative technique, and language in the creation of literary nonfiction.

- Implement craft principles of language, style, themes, technique, rhythm, and form in the creation of poetry.
- Implement craft principles of plot, characterization, style, point of view, narrative technique, language, form, dialogue, and other issues of screenwriting.

### Degree Requirements

(13 courses; 58.5 quarter units)

To receive the MFA in Creative Writing, students must complete at least 58.5 quarter units; a total of 13.5 quarter units may be granted for equivalent work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

### Core Requirements

(5 courses; 22.5 quarter units)

Students are required to take MCW 600 and MCW 610, one seminar in their chosen specialty, and two additional courses of their choice in different areas.

MCW 600 Pedagogy of Creative Writing

MCW 610 Textual Strategies

and choose three of the following courses:

MCW 630 Seminar in Fiction

MCW 645 Seminar in Poetry

MCW 650 Seminar in Creative Nonfiction

MCW 685 Basics of Screenwriting

MCW 600 is four weeks; all other writing workshops and seminars are eight weeks in duration.

### Core Specialized Study

(2 courses; 9 quarter units)

Students are expected to take a minimum of two seminars in their specialty. All advanced creative writing courses are conducted by teachers who are accomplished creative writers sensitive to the efforts of writing. Classes are conducted as workshops, with student work comprising much of the text for the course.

MCW 630A Advanced Workshop in Fiction  
*Prerequisite: MCW 630*

and

MCW 630B Adv Workshop in Fiction  
*Prerequisite: MCW 630*

or

MCW 640A Advanced Workshop in Poetry  
*Prerequisite: MCW 645*

and

MCW 640B Advanced Workshop in Poetry  
*Prerequisite: MCW 645*

or

MCW 650A Adv Workshop in Lit Nonfiction  
*Prerequisite: MCW 650*

and

MCW 650B Adv Workshop in Lit Nonfiction  
*Prerequisite: MCW 650*

or

MCW 680A Adv Workshop in Screenwriting  
*Prerequisite: MCW 685*

and

MCW 680B Adv Workshop in Screenwriting  
*Prerequisite: MCW 685, and MCW 680A*

### Elective Requirements

(4 courses; 18 quarter units)

Approved courses (other courses may be approved by lead program faculty)

ENG 600 Seminar in Literary Theory

ENG 610 Multicultural Literature

ENG 620A Literary Period or Movement I

ENG 620B Literary Period or Movement II

ENG 640 Seminar in Poetry

ENG 660 Seminar in Literary Hypermedia

ENG 655 Composition Pedagogy

ENG 670 Comparative Literary Studies

ENG 680A Seminar in a Theme I

ENG 680B Seminar in a Theme II

ENG 690A Major Author Seminar I

ENG 690B Major Author Seminar II

ENG 665 Film Theory

ENG 666 Film History: The Silents

ENG 667 Film History: American Film

ENG 668 Film Genre Studies

ENG 669 World Film

ENG 685 Great Directors: American

ENG 686 Great Directors: International

The remaining two electives may be from the above list, or additional MCW workshops that the student has not already taken as part of her/his specialized study. These include:

MCW 630A Advanced Workshop in Fiction  
*Prerequisite: MCW 630*

MCW 630B Adv Workshop in Fiction  
*Prerequisite: MCW 630*

MCW 640A Advanced Workshop in Poetry  
*Prerequisite: MCW 645*

MCW 640B Advanced Workshop in Poetry  
*Prerequisite: MCW 645*

MCW 650A Adv Workshop in Lit Nonfiction  
*Prerequisite: MCW 650*

MCW 650B Adv Workshop in Lit Nonfiction  
*Prerequisite: MCW 650*

MCW 680A Adv Workshop in Screenwriting  
*Prerequisite: MCW 685*

MCW 680B Adv Workshop in Screenwriting  
*Prerequisite: MCW 685, and MCW 680A*

MCW 635 Writing for Young Adults

### Thesis Courses

(2 courses; 9 quarter units)

The thesis must be a mature, substantial body of work e.g. a collection of stories, essays, or poems, a novel, or a full-length screenplay. The thesis will include an aesthetic statement (minimum 2000 words) in which the writer discusses her/his evolution as an artist and the evolution of the work. The student will choose a mentor for the thesis, and will work with the mentor in an individualized manner, decided upon through conference with the mentor.

MCW 660 Thesis I (Practicum)  
*Prerequisite: Requires completion of all MFA CW portfolio core, specialized study and elective courses*



### Language Requirement

There is no language requirement for this program. It is possible, however, to pursue a series of electives in a particular language when such study is demonstrably essential to the student's creative work. The candidate must work out a specific program in conjunction with the lead program faculty.

### ■ MASTER OF FORENSIC SCIENCES

Faculty Advisor: Ismail Sebetan; (858) 642-8419; isebetan@nu.edu

The Master of Forensic Sciences (MFS) is a specialized professional degree designed for law enforcement, lab personnel, attorneys, investigators, and other professionals seeking to upgrade their existing skills, as well as individuals who are interested in pursuing a career in the forensic sciences, law, law enforcement, private or governmental laboratories, jails and corrections, and the Medical Examiner's Office. The field of forensics focuses on the application of scientific methods to the resolution of legal problems.

The Master of Forensic Sciences degree program offers two areas of specialization. Students are required to take one specialization.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain basic human anatomy, components of death investigation and techniques used for analysis of diseases and trauma, identification of unknown dead bodies; and to professionally interact with the forensic pathologist and medico-legal death investigators.
- Apply the technical procedures and methods of collection, preservation, chain of custody, analysis, comparison and report preparation of the biological, trace and toxicological evidentiary evidence.
- Analyze the basic principles and the role of crime scene investigators in forensic and legal procedures.
- Apply the basic principles of forensic photography and explain the legal issues related to forensic photography and courtroom or trial presentation.
- Evaluate the legal and psychological issues involved in competency to stand trial, diminished capacity, and insanity defenses.
- Apply profiling knowledge and crime scene analysis methods to crime scene variables.
- Utilize theories, techniques and practices to all criminal and civil investigations.
- Use investigative techniques in the processing and interpretation of evidence of computer and multimedia forensics.
- Analyze the legal, ethical, and constitutional tensions between the interests of society, and the rights of individuals in connection with various criminal procedures and contexts.
- Integrate scientific research methodology to explore issues in forensic science.

### Degree Requirements

(12 courses; 54 quarter units)

To receive an MFS, students must complete at least 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

For students in the BS in Criminal Justice Administration/MFS transition program, the University will waive the forensic sciences course(s) taken as part of the bachelor's degree (see BS in Criminal Justice transition program), but these students must still meet the residency requirements for the MFS.

Students must have an undergraduate degree in a laboratory science in order to enroll in the MFS with a specialization in criminalistics. The MFS with a specialization in investigation does not have a specific major requirement for the undergraduate degree.

### Core Requirements

(8 courses; 36 quarter units)

FSC 630	Forensic Pathology I
FSC 642	Forensic Pathology II <i>Prerequisite: FSC 630</i>
FSC 643	Forensic Psychology
FSC 648**	Forensic Photography
FSC 631	Major Case Investigation
FSC 647	Crime Scene Investigation
FSC 654	Criminal Profiling
FSC 662*	Supervised Research Project <i>Prerequisite: Satisfactory completion of 8 FSC core courses.</i>

\*\* Students will be required to obtain their own photographic equipment, which must meet the requirements of the course. All digital cameras to be used must meet the same standards as film based forensic cameras, which includes: interchangeable lenses, manual settings for shutter and aperture, and the ability to use an external, off camera electronic flash attachment.

\* This is a two-month, one-meeting-per week course with a significant research component. Grading is by H, S, or U. Students who do not complete the Research Project within the two month period are eligible, at the discretion of the instructor, to receive a grade of IP with a maximum of a one time six-month extension. Students who do not complete the project at the end of the extension period will need to retake FSC 662. No grade of I (Incomplete) can be given for this course.

### ▲ Specialization in Criminalistics

This AOS in Criminalistics requires that students have an undergraduate degree in physical science or approval of the lead faculty. The specialization courses include Trace Evidence, Advanced Forensic Toxicology, Advanced Forensic Serology and DNA, and Forensic Anthropology and Archeology, as well as coursework in: Forensic Medicine and Pathology; Psychology, Psychiatry, and the Law; Major Case Investigation; Crime Scene Investigation; and Criminal Investigation Analysis (Profiling). The program culminates in a supervised master's research project directed by full-time faculty and a committee of associate and core adjunct faculty selected by students from their program.

### Program Requirements

(4 courses; 18 quarter units)

FSC 632	Trace Evidence
FSC 633	Advanced Forensic Toxicology
FSC 634	Forensic Serology and DNA
FSC 635	Forensic Anthropology

### ▲ Specialization in Investigation

This AOS in Investigation is designed to provide graduate education in the most current and advanced forensic investigative techniques available in the field, with a wide understanding of the concepts underlying the forensic sciences. This program is suitable for those students who are interested in pursuing a career in forensic crime and death investigations. The program also allows individuals who are currently working in forensic investigation areas to develop and upgrade their individual educational skills. The specialization courses include Advanced Criminalistics, Electronic Crime Scene Investigation: Computer Forensics, Constitution and Criminal Procedure, and Advanced Fingerprint Analysis. The program also includes forensic-related writing and research. The program culminates in a supervised master's research project directed by fulltime faculty and a committee of associate and core adjunct faculty selected by students from their program.

### Program Requirements

(4 courses; 18 quarter units)

FSC 620	Advanced Criminalistics
FSC 621	Digital Evidence
FSC 622	Law and Criminal Procedure
FSC 623	Fingerprint Analysis

### Program Electives

For electives, students can take courses with the pre-approval of the Faculty Advisor who should be consulted prior to scheduling of any elective. The following are recommended:

FSC 661 Internship in Forensic Science  
(1.5 quarter units)

FSC 651 Topics in Forensic Sciences

### ■ MASTER OF SCIENCE IN BIOLOGY

Faculty Advisor: Michael Maxwell; (858) 824-9223; mmaxwell@nu.edu

The Master of Science in Biology trains students in graduate-level research and analysis in the fascinating field of biology. The program prepares students for careers in biological research, project management, life science education, scientific writing, and advanced degrees at the doctorate level. The MS Biology develops students as biologists who participate in arriving at solutions to modern challenges, including advances in biotechnology and genomics, physiology, biodiversity, and threats to species and ecosystem functioning.

The MS in Biology curriculum provides comprehensive coverage of the hierarchical levels of biological organization, from molecules to ecosystems. Over the course of the program, students formulate an original research question, examine the question at various biological levels, and conduct research to produce a master's thesis suitable for peer-reviewed presentation. Students develop thesis projects in consultation with program faculty. The thesis process provides training in advanced research methods and design, analysis, and scientific writing to enable students to participate in the field of biology as professional scholars.

### Application Requirements

To be considered for admission, applicants must meet the University qualifications for graduate programs. In addition, students must have a Bachelor's degree in the biological sciences, or a closely-related field.

### Additional Program Information and Requirements

All students are expected to begin the program of study by first enrolling in BIO 600, and taking subsequent seminar courses in numerical sequence (BIO 610-650). This sequence is designed to have students formulate a working thesis topic and repeatedly examine it at different levels of biological organization, to iteratively generate new ideas and perspectives on the topic. All students are expected to select a thesis advisor early in the program, based on areas of interest and faculty availability. Students must obtain approval of their choice of thesis advisor from the Program Lead Faculty by the end of their fifth course in the program. Each student is expected to consult regularly with the thesis advisor regarding the thesis topic.

The Master's thesis in biology is an original research contribution, based on data collected by the student under the supervision of the thesis advisor (i.e., laboratory and/or field work), or based on data and information extracted and analyzed from existing literature and sources. Students must present a thesis proposal to their thesis advisor before the end of the course BIO 660 (Research Design). This proposal must be approved for thesis work by the end of the course BIO 680 (Thesis Formulation). Thesis work primarily occurs during the course sequence BIO 691-693. Thesis progress is overseen by the thesis advisor. The thesis advisor, with two other faculty members, form the thesis committee that evaluates the finished thesis. Students are expected to identify their complete thesis committee before the end of the course BIO 680 (Thesis Formulation).

Thesis research, analysis, and write-up is expected to occur during the course sequence BIO 691-693. BIO 693 is eligible for "In Progress" grading, which allows for this particular course to extend up to 12 months for completion. The student's thesis is to be submitted to the thesis committee for review by the end of BIO 693.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate primary research in biology, including the identification of strengths and weaknesses of studies, as well as the framing of alternative explanations of data and results.
- Propose testable scientific hypotheses in biology.
- Design a viable research program in biology that tests scientific questions and hypotheses, including the design of experiments.
- Conduct original research in biology, in a laboratory or field setting, or

literature-based research.

- Analyze research results and data.
- Create written work for evaluation by scientific peers.

### Degree Requirements

To receive a Master of Science in Biology, students must complete at least 49.5 quarter units of graduate coursework. A total of 9.0 graduate quarter units may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

### Core Requirements

(11 courses; 49.5 quarter units)

BIO 600 Contemporary Issues in Biology

BIO 610 Seminar in Molecular Biology  
*Prerequisite: BIO 600*

BIO 620 Seminar in Cell Biology  
*Prerequisite: BIO 610*

BIO 630 Seminar in Organismal Biology  
*Prerequisite: BIO 620*

BIO 640 Seminar in Ecology  
*Prerequisite: BIO 630*

BIO 650 Seminar in Evolution  
*Prerequisite: BIO 640*

BIO 660 Research Design  
*Prerequisite: BIO 650*

BIO 680 Thesis Formulation  
*Prerequisite: BIO 660*

BIO 691 Thesis Research 1  
*Prerequisite: BIO 680*

BIO 692 Thesis Research 2  
*Prerequisite: BIO 691*

BIO 693 Thesis Research 3  
*Prerequisite: BIO 692*

### ■ MASTER OF SCIENCE IN MATHEMATICS FOR EDUCATORS

Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu

The Master of Science in Mathematics for Educators is a strong graduate program in mathematics designed for people holding teaching single subject credentials in mathematics or a bachelor's degree in mathematics and very close areas.

This program is appropriate for students who want a broad background in pure mathematics including those who desire to be prepared for teaching in a community college or in the first two years of a college program. It is also aimed at high-school teachers who would like to expand their mathematics background and improve their credentials. The program will give students greater expertise in both mathematics and mathematics education.

This program does not confer any state certification as a teacher.

Over the course of the program, students formulate an original research question, examine the question at various mathematics and mathematics education branches, and conduct research to produce a master's thesis suitable for peer-reviewed presentation. Students develop thesis projects in consultation with program faculty. The thesis process provides training in research methods and design, analysis, and scientific writing to enable students to participate in the field of mathematics and mathematics education at the entrance professional research level.

### Application Requirements

To be considered for admission, applicants must meet the University qualifications for graduate programs. In addition, students must have teaching credentials in mathematics and/or a bachelor's degree in mathematics or very close areas.

### Additional Program Information and Requirements

All students are expected to begin the program of study by first enrolling in MTH

610 course, and taking subsequent MTH 620-670 courses. This sequence is designed to have students formulate a working thesis topic and repeatedly examine it at different levels and branches of mathematics and mathematics education, to iteratively generate new ideas and perspectives on the topic. All students are expected to select a thesis advisor early in the program, based on areas of interest and faculty availability. Students must obtain approval of their choice of thesis advisor from the Program Lead Faculty by the end of their sixth course in the program. Each student is expected to consult regularly with the thesis advisor regarding the thesis topic.

The Master's thesis in this program is an original research contribution, based on information gathered by the student under the supervision of the thesis advisor and based on data and information extracted and analyzed from existing literature and sources. Students must present a thesis proposal to their thesis advisor before the end of the course MTH 670. This proposal must be approved for thesis work by the end of the course MTH 681 (Research in Mathematics and Mathematics Education I). Thesis work primarily occurs during the course sequence MTH 681-683. Thesis progress is overseen by the thesis advisor. The thesis advisor, with two other faculty members, forms the thesis committee that evaluates the finished thesis. Students are expected to identify their complete thesis committee before the end of the course MTH 681 (Research in Mathematics and Mathematics Education I).

Thesis research, analysis, and write-up are expected to occur during the course sequence MTH 681-683. MTH 683 is eligible for "In Progress" grading, which allows for this particular course to extend up to 12 months for completion. The student's thesis is to be submitted to the thesis committee for review by the end of MTH 683.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Based on acquired advanced mathematical abilities analyze and evaluate main principles of general mathematics and mathematics education.
- Evaluate primary research in mathematics education and related areas, including the identification of strengths and weaknesses of studies.
- Analyze the research results and data on curricular materials, content, teaching methods, and new trends in mathematics education.
- Propose and employ new robust and theoretically grounded approaches, methods and curricular related researches in teaching mathematics.
- Conduct original research in mathematics education and related mathematical content areas.

### Degree Requirements

To receive a Master of Science in Mathematics for Educators, students must complete at least 45 quarter units of graduate coursework. A total of 4.5 graduate quarter units may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

### Program Prerequisites

(5 courses; 22.5 units)

MTH 411	Number Theory <i>Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301</i>
MTH 435	Linear Algebra <i>Prerequisite: MTH 220, and MTH 325</i>
MTH 416	Algebraic Structures <i>Prerequisite: MTH 435, and MTH 325</i>
MTH 417	Foundations of Geometry <i>Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311</i>
MTH 418	Statistical Analysis <i>Prerequisite: MTH 210, and MTH 220</i>

### Core Requirements

(10 courses; 45 quarter units)

MTH 610	Topics in Modern Algebra <i>Recommended Preparation: MTH 416, MTH 435, MTH 411</i>
MTH 620	Number Systems <i>Prerequisite: MTH 610</i>
MTH 630	Fundamentals of Geometry <i>Prerequisite: MTH 620, Recommended Preparation: MTH 417</i>
MTH 640	Real Analyses <i>Prerequisite: MTH 630, MTH 620</i>
MTH 650	Topics in Functional Analysis <i>Prerequisite: MTH 640</i>
MTH 660	Mathematical Statistics <i>Recommended Preparation: MTH 438, Prerequisite: MTH 650</i>
MTH 670	Mathematics Curriculum <i>Prerequisite: MTH 610, MTH 620, MTH 630, MTH 660</i>
MTH 681	Research in Math and Math Ed I <i>Prerequisite: MTH 670</i>
MTH 682	Research in Math and Math Ed 2 <i>Prerequisite: MTH 681</i>
MTH 683	Research in Math and Math Ed 3 <i>Prerequisite: MTH 682</i>

## CERTIFICATE PROGRAMS

### ● UNDERGRADUATE CERTIFICATE IN ALCOHOL AND DRUG ABUSE COUNSELING

*Faculty Advisor: Donald Posson; (702) 531-7832; dposson@nu.edu*

The certificate in Alcohol and Drug Abuse Counseling is designed to meet California state standards for certification of alcohol and drug abuse counselors. This program is approved by CAADAC's education foundation CA Foundation for Advancement of Addiction Professionals. This program may not meet the requirements for certification in other states. For complete information on the CAADAC certification, or to order a CAADAC Handbook visit, [www.caadac.org](http://www.caadac.org) or call (916) 368-9412.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients with alcohol and drug abuse and/or dependence issues.
- Demonstrate entry level counseling skills in working with individuals, groups, and families relative to alcohol and drug abuse and/or dependence issues.
- Assess and diagnose clients using DSM IV-TR alcohol and drug abuse and dependence criteria.
- Develop a treatment plan based on a biopsychosocial assessment of the individual's strengths, weaknesses, problems, and needs.
- Develop case management plans for clients that bring services, agencies, resources, or people together with a planned framework of action.
- Evaluate the effectiveness of treatment approaches.
- Provide client education to individuals, groups, and families on alcohol and drug abuse and dependence.
- Interact with counselors and other professionals in regard to client treatment and services.
- Adhere to established professional codes of ethics and standards of practice.

### Certificate Requirements

To receive the certificate, students must complete at least 45 quarter units, 31.5 of which must be taken in residence at National University and complete a 255 hour practicum experience working with clients at an approved practicum site. Refer to the section on undergraduate admission requirements for specific information regarding application, placement evaluation and matriculation.

Upon application students must sign the ADC Student Agreement before beginning their coursework. Students must obtain malpractice insurance prior to beginning their work with clients. Students attend live practicum classes one Saturday a month during the seven month clinical practicum at a National University campus. Students must attend live Internet class sessions. Students will have their choice of attending either the live Internet session or reviewing the recording of the session afterwards. Students must have a headset with a microphone that plugs into the USB port on the computer.

### Prerequisites for the Certificate

(1 course; 4.5 quarter units)

SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*

+ Diversity Enriched Offering

### Certificate Requirements

(10 courses; 45 quarter units)

PSY 100\* Introduction to Psychology

ADC 205 Intro to Substance Abuse  
*Prerequisite: PSY 100, SOC 100*

ADC 215 Physiology of Substance Abuse  
*Prerequisite: PSY 100, SOC 100*

ADC 225 Law and Ethics  
*Prerequisite: PSY 100, SOC 100*

ADC 235 Case Management  
*Prerequisite: PSY 100, SOC 100*

ADC 245 Individual Counseling I  
*Prerequisite: PSY 100, SOC 100, ADC 205*

ADC 255 Individual Counseling II  
*Prerequisite: ADC 245*

ADC 265 Group & Family Counseling  
*Prerequisite: PSY 100, SOC 100*

ADC 275 Personal & Professional Growth  
*Prerequisite: PSY 100, SOC 100*

ADC 285 Practicum in Substance Abuse  
*Prerequisite: Satisfactorily complete 5 courses in the certificate, and Program lead faculty approval*

\* May be used to meet a General Education requirement

### ■ SUBJECT MATTER AUTHORIZATION IN INTRODUCTORY MATHEMATICS FOR SINGLE OR MULTIPLE SUBJECT TEACHING CREDENTIAL

*Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu*

Holders of a Single or Multiple Subject Teaching Credential issued by the California Commission on Teacher Credentialing (CTC) may add a Subject Matter Authorization in Introductory Mathematics. Introductory subjects authorize the holder to teach the subject matter content typically included in curriculum guidelines and textbooks approved for study in grades 9 and below. A teacher with an introductory authorization can teach a class in which the curriculum is for grades 9 and below (but the students in the class may be in grades 10-12).

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ reasoning skills and effective strategies for solving problems
- Use language and mathematical symbols to communicate mathematical ideas
- Employ algebra and number theory ideas

### Authorization Requirements

An applicant will qualify for an Introductory Mathematics subject matter authorization upon the completion of 48 quarter units of non-remedial collegiate course-

work as specified. The introductory subject matter authorization (included within the forty eight quarter units) requires a minimum of four quarter units (or three semester units) in each of the specific content areas listed under the subject below:

Introductory Mathematics requirements include

- Algebra
- Advanced Algebra
- Geometry
- Probability or Statistics
- Development of the Real Number System or Introduction to Mathematics.

The following are required:

1. Course work must be college level mathematics or higher.
2. Algebra courses must be for credit, applicable towards a degree, and, if completed at the community college level, transferable to a four-year institution to be acceptable. Note: Elementary algebra courses may not be used to meet these requirements. If the course in question is titled elementary algebra or similar then the student will need to submit a course description/syllabus to verify the acceptability.
3. As both algebra and advanced algebra are required, there are several options available to meet both areas. The requirement is algebra content at two different levels.
  - a. An individual completes a college algebra course; the “advanced” course may be another level of algebra such as linear algebra. An individual may not use another college algebra course, an elementary algebra course, or the same level algebra course completed at another college or university.
  - b. An individual completes a college or other level algebra course (other than elementary algebra); the “advanced” course may be a “higher” level math course such as trigonometry or calculus.
4. Courses in calculus will clear the specific course requirements (one for each content area being cleared) in algebra, advanced algebra, geometry, and development of the real number system but the applicant must still have the required 48 quarter units. Note: Calculus courses will not clear the probability and statistics content area.
5. If the applicant has only one or two courses in calculus and no course work in algebra, geometry, or real number systems, the applicant will need to either submit course descriptions so that it can be confirmed whether or not those areas were covered by the calculus course(s) or complete additional course work in the required content areas.
6. Personal enrichment-type mathematics courses are not acceptable.
7. One mathematics-based computer course is acceptable as additional units toward the required 48 quarter units.

The following courses are strongly recommended to satisfy the requirements for the Introductory Mathematics authorization. The listed sequences are general, and are subject to change depending on the applicant’s transcript and choice. All applicants must submit his/her transcript (s) via an Admissions or Credential Advisor for faculty evaluation before starting any course work. The transcript will then be analyzed by the Mathematics Lead Faculty and an appropriate sequence will be identified and communicated to the applicant in writing and placed in the student’s educational record.

### Introductory Mathematics Requirement Areas

#### Algebra and Advanced Algebra

(3 courses; 7.5-12 quarter units)

#### Sequence 1

MTH 204\* Mathematics for Science  
*Prerequisite: MTH 12A, and MTH 12B, or Accuplacer test placement*

#### and

MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

#### or

MTH 216A\* College Algebra I (3 quarter units)

*Prerequisite: Placement evaluation*

and

MTH 216B\* College Algebra II (3 quarter units)  
*Prerequisite: MTH 216A*

or

### Sequence 2

MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

or

MTH 216A\* College Algebra I (3 quarter units)  
*Prerequisite: Accuplacer test placement evaluation, MTH 12A, and MTH 12B*

and

MTH 216B\* College Algebra II (3 quarter units)  
*Prerequisite: MTH 216A*

MTH 220\* Calculus I  
*Prerequisite: MTH 215, or Accuplacer test placement, or evaluation by a lead faculty*

### Geometry

(1 course; 4.5 quarter units)

MTH 301\* Fundamentals of Mathematics II  
*Prerequisite: MTH 209A, or Accuplacer test placement evaluation*

or

MTH 311 Topics from Geometry  
*Prerequisite: MTH 215*

### Probability and Statistics

(1 course; 4.5 quarter units)

MTH 210\* Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

\* May be used to meet a General Education requirement

### Development of the real number system or introduction to mathematics

(1 course; 4.5 quarter units)

MTH 209A\* Fundamentals of Mathematics I  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

or

MTH 411 Number Theory  
*Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301*

\* May be used to meet a General Education requirement

### Elective Course requirements

(5-6 courses; 22.5-27 quarter units)

The following are recommended elective courses that could be selected as needed to reach a total of 48 quarter units.

MTH 220\* Calculus I  
*Prerequisite: MTH 215, or Accuplacer test placement, or evaluation by a lead faculty*

MTH 221 Calculus II  
*Prerequisite: MTH 220*

MTH 222 Calculus III  
*Prerequisite: MTH 221*

MTH 223 Calculus IV  
*Prerequisite: MTH 222*

MTH 317 Mathematical Modeling  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, and MTH 210*

MTH 325 Discrete Mathematics  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B*

MTH 410 Technology in Math Education  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301*

MTH 412 History of Mathematics  
*Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B*

MTH 418 Statistical Analysis  
*Prerequisite: MTH 210, and MTH 220*

MTH 435 Linear Algebra  
*Prerequisite: MTH 220, and MTH 325*

MTH 417 Foundations of Geometry  
*Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311*

\* May be used to meet a General Education requirement

## GRADUATE CERTIFICATES

### ● GRADUATE CERTIFICATE IN FORENSIC AND CRIME SCENE INVESTIGATIONS

*Faculty Advisor: Ismail Sebetan; (858) 642-8419; isebetan@nu.edu*

The Certificate in Forensic and Crime Scene Investigation (FCSI) is designed to prepare individuals to enter the field of forensic and crime scene investigation and for those currently in the field as law enforcement personnel, criminal investigators, evidence technicians, forensic nurses, prosecutors, attorneys, judges and other members of the multidisciplinary team involved in criminal investigation who would like to further develop their skills and expertise.

Students who wish to pursue a master's degree can apply some or all the academic credits awarded in the certificate program toward the MFS degree, assuming they meet the GPA and other requirements of that degree program.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate understanding of basic human anatomy, components of death investigation and techniques used for analysis of diseases and trauma, and identification of unknown dead bodies.
- Differentiate the characteristic features of the various types of violent death with the circumstances under which those deaths occur and to meaningfully interact with the forensic pathologist and medico-legal death investigators.
- Demonstrate and describe the basic principles and the role of crime scene investigators in forensic and legal procedures.
- Identify, collect, transport, preserve, and explain the evidentiary value of physical evidence including chain of custody.
- Explain and use the investigative techniques utilized in the processing, and interpretation of evidence of computer and multimedia (video, image, audio) forensics, and the application of the field in both the criminal and civil arenas.
- Analyze the constitutional tensions between the interests of society, on the one hand, and the rights of individuals, on the other, in connection with various criminal procedures and contexts.
- Demonstrate understanding of friction ridge skin differential development and how it applies to the classification of fingerprints and the methodology used in forensic individualization.

### Certificate Requirements

(7 courses; 31.5 quarter units)

FSC 630 Forensic Pathology I

FSC 642 Forensic Pathology II  
*Prerequisite: FSC 630*

FSC 647 Crime Scene Investigation

FSC 620	Advanced Criminalistics
FSC 621	Digital Evidence
FSC 622	Law and Criminal Procedure
FSC 623	Fingerprint Analysis

## CERTIFICATE PROGRAMS IN THE NATIONAL UNIVERSITY GOLF ACADEMY

Students pursuing golf management certificate programs can apply credit towards associate or bachelor degrees. 100 level courses are available to eligible high school students attending the Virtual High School. Dual credit towards high school completion and college credit can be earned.

Responding to one of the fastest growing recreational sports industries, the Professional Golf Management Certificate will provide learners a fundamental understanding of the knowledge and skills required for introductory level positions within the golf industry and for golf enthusiasts seeking career options in the expanding arena. The Advanced Professional Golf Management Certificate will prepare candidates for progressive accelerated management opportunities associated with the supervision of golf operations and marketing.

The courses focus upon common managerial and administrative competencies unique to supporting a wide realm of recreational and professional support positions in the field of golf.

The Professional Certificate in Golf Management provides:

1. A broad-based core of administrative competencies coupled with essential sports management fundamentals oriented to the field of golf,
2. An introductory understanding of the processes that enable specific administrative functions in the recreation and golf industry; and
3. A foundation in applied academic rudiments to include critical thinking, writing, and communication skills required in today's recreational golf industry.

### ● UNDERGRADUATE CERTIFICATE IN ADVANCED PROFESSIONAL GOLF MANAGEMENT

Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify fundamental business support activities, theoretical and practical, related to golf management
- Recognize ethical issues as they apply to cross-functional management activities in the golf industry
- Identify current and emerging trends in the golf industry in marketing, branding, finance, issues of sustainability, and the evolving customer base
- Recognize the importance of diversity and multiculturalism in the global golf industry
- Demonstrate undergraduate-level written communication skills
- Demonstrate oral communications and presentation skills
- Apply analytical and critical thinking skills in understanding the complex network of challenges and opportunities associated with the burgeoning recreational golfing market
- Prepare students for preparation in apprentice golf professional positions.

#### Certificate Requirements

(8 courses; 36 quarter units)

PGM 200*	Personnel Dev & Human Relation
PGM 201	Hospitality & Resort Mgmt
PGM 202*	Sustainable Golf & Turf Mgmt (6 quarter units)
PGM 203	Instruction & Player Dev
PGM 204	Sports Marketing and Promotion
PGM 210	Modern Swing Concepts

PGM 215	Facilities Ops & Green Apps
PGM 220	Adv Sem. Instr. Player Develop

\* May be used to meet a General Education requirement

### ● UNDERGRADUATE CERTIFICATE IN PROFESSIONAL GOLF MANAGEMENT

Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify fundamental business support activities, theoretical and practical, related to golf management;
- Recognize ethical issues as they apply to cross-functional management activities in the golf industry;
- Identify current and emerging trends in the golf industry in marketing, branding, finance, issues of sustainability, and the evolving customer base;
- Recognize the importance of diversity and multiculturalism in the global golf industry;
- Demonstrate undergraduate-level written communication skills;
- Demonstrate oral communications and presentation skills;
- Apply analytical and critical thinking skills in understanding the complex network of challenges and opportunities associated with the burgeoning recreational golfing market; and
- Prepare students for preparation in apprentice golf professional positions.

#### Certificate Requirements

(8 courses; 36 quarter units)

PGM 100*	History of Sport
PGM 101*	Philosophy of Coaching
PGM 102	Facility Operations
PGM 103	Acctg and Business Practices
PGM 104	Tournament Operations
PGM 216	Mental Prep & Short Game
PGM 213	Merchandising & Invent Mgmt
PGM 214	Supervising & Delegating

\* May be used to meet a General Education requirement



# SCHOOL OF BUSINESS AND MANAGEMENT

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P 858.642.8400 • F 858.642.8740 • E [sobm@nu.edu](mailto:sobm@nu.edu)

Dean, Ronald P Uhlig,  
Ph.D. Physics, University of Maryland

- 132 Degrees Offered**
- 133 Degrees Offered by Department**
- 134 Faculty**
- 136 Undergraduate Degree Programs**
- 147 Minors**
- 148 Graduate Degree Programs**
- 158 Certificate Programs**





# DEGREE PROGRAMS OFFERED

## UNDERGRADUATE DEGREES

### Associate of Arts

*With a Major in:*

- Hospitality and Customer Service [☑](#)
- Property Management

### Associate of Science

*With a Major in:*

- Business [☑](#)

### Bachelor of Arts

*with Majors in:*

- Integrated Marketing Communication [☑](#)
- Management [☑](#)  
*with Concentrations in:*
  - » Alternative Dispute Resolution [☑](#)
  - » Business Law [☑](#)
  - » Economics [☑](#)
  - » Entrepreneurship [☑](#)
  - » Hospitality and Casino Management [☑](#)
  - » Human Resource Management [☑](#)
  - » Marketing [☑](#)
  - » Project Management [☑](#)

### Bachelor of Business Administration

*with Concentrations in:*

- Accountancy [☑](#)
- Alternative Dispute Resolution [☑](#)
- Business Law [☑](#)
- Economics [☑](#)
- Entrepreneurship [☑](#)
- Finance [☑](#)
- Hospitality and Casino Management [☑](#)
- Human Resource Management [☑](#)
- Marketing [☑](#)
- Professional Golf Management [☑](#)
- Project Management [☑](#)

### Bachelor of Science

*with Majors in:*

- Accountancy [☑](#)
- Financial Management [☑](#)
- Hospitality and Casino Management [☑](#)
- Organizational Leadership [☑](#)

## MINORS

- Accountancy [☑](#)
- Business Administration [☑](#)
- Business Studies [☑](#)
- Economics [☑](#)

## Transition Programs

- Bachelor of Arts in Management to Master of Global Management
- Bachelor of Business Administration to Master of Business Administration
- Bachelor of Science in Accountancy to Master of Business Administration

## GRADUATE DEGREES

### Global Master of Business Administration (offered in Spanish) [☑](#)

### Master of Accountancy [☑](#)

### Master of Arts

*with Fields of Study in:*

- Human Resource Management [☑](#)  
*with Areas of Specialization in:*
  - » Organizational Development and Change Management [☑](#)
  - » Organizational Leadership [☑](#)

### Master of Business Administration [☑](#)

*with Specializations in:*

- Financial Management [☑](#)
- Human Resources Management [☑](#)
- Integrated Marketing Communication [☑](#)
- International Business [☑](#)
- Management Accounting [☑](#)
- Marketing [☑](#)
- Mobile Marketing and Social Media [☑](#)
- Organizational Leadership [☑](#)
- Professional Golf Management [☑](#)

### Master of Global Management [☑](#)

### Master of Science

*with Fields of Study in:*

- Management Information Systems [☑](#)
- Organizational Leadership [☑](#)  
*With specialization in:*
  - » Community Development [☑](#)
- Sustainability Management [☑](#)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Accountancy [☑](#)
- Basic Human Resource Management [☑](#)
- Basic Sales and Marketing [☑](#)
- Basics of Casino Management [☑](#)
- Finance [☑](#)
- Hospitality and Casino Management [☑](#)
- Human Resource Management [☑](#)
- Marketing [☑](#)

### Graduate Level

- Accountancy [☑](#)
- International Business [☑](#)

The following programs are also listed in the School of Engineering, Technology and Media Section

### Master of Science in Management Information Systems [☑](#)

### Master of Science in Sustainability Management [☑](#)

[☑](#) Entire program can be completed online.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

## DEPARTMENT OF ACCOUNTING AND FINANCE

### Associate of Science

*With a Major in:*

- Business [📄](#)

### Bachelor of Business Administration

*with Concentrations in:*

- Accountancy [📄](#)
- Alternative Dispute Resolution [📄](#)
- Business Law [📄](#)
- Economics [📄](#)
- Entrepreneurship [📄](#)
- Finance [📄](#)
- Hospitality and Casino Management [📄](#)
- Human Resource Management [📄](#)
- Marketing [📄](#)
- Professional Golf Management [📄](#)
- Project Management [📄](#)

### Bachelor of Science

*with Majors in:*

- Accountancy [📄](#)
- Financial Management [📄](#)

### Minors

- Accountancy [📄](#)
- Business Administration [📄](#)
- Business Studies [📄](#)
- Economics [📄](#)

### Master of Accountancy [📄](#)

### Master of Business Administration [📄](#)

*with Specializations in:*

- Financial Management [📄](#)
- Human Resources Management [📄](#)
- Integrated Marketing Communication [📄](#)
- International Business [📄](#)
- Management Accounting [📄](#)
- Marketing [📄](#)
- Mobile Marketing and Social Media [📄](#)
- Organizational Leadership [📄](#)
- Professional Golf Management [📄](#)

### Master of Science

*with Fields of Study in:*

- Sustainability Management [📄](#)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Accountancy [📄](#)
- Finance [📄](#)

### Graduate Level

- Accountancy [📄](#)

## DEPARTMENT OF LEADERSHIP AND HUMAN RESOURCE MANAGEMENT

### Associate of Arts

*With a Major in:*

- Hospitality and Customer Service [📄](#)
- Property Management [📄](#)

### Bachelor of Science

*with Majors in:*

- Hospitality and Casino Management [📄](#)
- Organizational Leadership [📄](#)

### Master of Arts

*with Fields of Study in:*

- Human Resource Management [📄](#)  
*with Areas of Specialization in:*
  - » Organizational Development and Change Management [📄](#)
  - » Organizational Leadership [📄](#)

### Master of Science

*with Fields of Study in:*

- Management Information Systems [📄](#)
- Organizational Leadership [📄](#)  
*With specialization in:*
  - » Community Development [📄](#)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Basic Human Resource Management [📄](#)
- Basics of Casino Management [📄](#)
- Hospitality and Casino Management [📄](#)
- Human Resource Management [📄](#)

## DEPARTMENT OF MANAGEMENT AND MARKETING

### Bachelor of Arts

*with Majors in:*

- Integrated Marketing Communication [📄](#)
- Management [📄](#)  
*with Concentrations in:*
  - » Alternative Dispute Resolution [📄](#)
  - » Business Law [📄](#)
  - » Economics [📄](#)
  - » Entrepreneurship [📄](#)
  - » Hospitality and Casino Management [📄](#)
  - » Human Resource Management [📄](#)
  - » Marketing [📄](#)
  - » Project Management [📄](#)

### Global Master of Business Administration (offered in Spanish) [📄](#)

### Master of Global Management [📄](#)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Basic Sales and Marketing [📄](#)
- Marketing [📄](#)

### Graduate Level

- International Business [📄](#)

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# SCHOOL OF BUSINESS AND MANAGEMENT

## ■ ASSOCIATE OF ARTS

### ◆ MAJOR IN HOSPITALITY AND CUSTOMER SERVICE

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

The Associate of Arts in Hospitality and Customer Service degree is intended to prepare students to work in the rapidly expanding field of hospitality services. Combining general business and management courses with hospitality and customer service courses, students will be prepared for an entry level position or advancement within the industry. In addition to acquiring general business and management skills, students will become familiar with the hospitality service environment. While working in collaborative teams, actual customer service scenarios from industry will be discussed and analyzed through problem resolution processes. This program will prepare graduates to develop and lead world class hospitality services and value-added customer partnerships.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate professionally and effectively with various levels of organizational leadership, customers, and team members in a variety of formats to include oral, visual, and written.
- Identify current hospitality management guest service concepts recognized as industry standards.
- Describe critical thinking skills and techniques in supervisory decision-making processes.
- Explain quality management for service organizations, and a clear sense of what is required to build effective teams in the hospitality industry.
- Identify the human aspects of the quality service in the hospitality industry to include key concepts of cultural awareness and ethics in today's organizations.
- Demonstrate an understanding of team problem solving tools and quality management for service organizations.

#### Degree Requirements

To receive the Associate of Arts degree with a major in Hospitality and Customer Service students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. All students must complete a minimum 34.5 units of the Associate of Arts General Education requirements as part of the 90 quarter units. Please refer to the section on undergraduate admissions for further information on admission and evaluation.

#### Preparation for the Major

(4 courses; 15 quarter units)

ENG 100\* Effective College English I  
(3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101\* Effective College English II  
(3 quarter units)  
*Prerequisite: ENG 100*

COM 103\* Public Speaking

ILR 260\* Information Literacy  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement

#### Requirements for the Major

(10 courses; 45 quarter units)

BUS 100 Intro to Business

HRM 200 Intro to Basic Human Resources

MKT 200 Basic Marketing

ECO 100 Intro to Economics

HCM 200 Basic Accounting

HOS 200 Introduction to Hospitality

HOS 220 Intercultural Competence

HOS 230 Emotional Intelligence

HOS 240 Hospitality Services Mgmt.

HOS 250 Exceptional Customer Service

### ◆ MAJOR IN PROPERTY MANAGEMENT

Faculty Advisor: Bruce Buchowicz; (619) 563-7290; bbuchowicz@nu.edu

The Associate of Arts in Property Management program prepares students for entry level positions in property management, both commercial and residential (single and multi-unit). This degree program provides a focused business foundation for the challenges faced by professional property managers. Key study areas include: management, planning, budgeting, marketing, contracts and lease negotiations, maintenance and compliance, and risk management. The program provides an excellent basis for future professional growth.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss the principles of property management.
- Explain the principles of contract and lease administration.
- Demonstrate a working knowledge of risk management principles.
- Demonstrate a working application of planning and marketing tools for property management.
- Demonstrate an awareness of safety, environmental, and regulatory compliance requirements, and the adoption of ethical practices for the property management industry.

#### Degree Requirements

To receive the Associate of Arts degree in Property Management students must complete at least 90 quarter units of which 31.5 quarter units must be completed in residence. All students must complete a minimum 34.5 units of the Associate of Arts General Education requirements. In the absence of transfer credit, students may need to complete additional general electives to satisfy total units required for the degree. Refer to the section on undergraduate information section for specific information on admission and evaluation.

#### Requirements for the Major

(14 courses; 63 quarter units)

#### Foundation Core Requirements

(6 courses; 27 quarter units)

ACC 201 Financial Accounting Funds.

ECO 203 Principles of Microeconomics

BUS 100 Intro to Business

HRM 200 Intro to Basic Human Resources

ITM 205 Office Productivity Software

MKT 200 Basic Marketing

#### Property Management Core Requirements

(8 courses; 36 quarter units)

PMA 200 Property Management Concepts

PMA 210 Contracts & Lease Negotiations

PMA 220 Risk Management

PMA 230 Property Planning & Marketing

PMA 240 Budgeting

PMA 250 Property Maintenance

PMA 260 Safety/Environment Compliance

PMA 270 Property Management Software

## ■ ASSOCIATE OF SCIENCE

### ◆ MAJOR IN BUSINESS

Faculty Advisor: Wali Mondal; (619) 563-7297; wmondal@nu.edu

The Associate of Science in Business program is designed to prepare students for entry level management positions. The degree completion provides a transition path to a Bachelor of Business Administration (B.B.A.) degree. The curriculum includes courses in general business, accounting, economics, legal studies, management and marketing. With a goal to maximizing student success, the program is designed with two pre-requisites as part of general education requirements: introductory business mathematics and internet literacy. Other courses may be taken in any sequence.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the types of business organizations and their basic functions.
- Describe the legal structure and tax implications of different types of business organizations such as sole proprietorship, partnership and corporation.
- Explain the functions of basic management relating to planning and implementing an organization's strategic behavior.
- Explain the changing nature of business in a global economy.
- Explain the basic accounting, finance, and management functions of business organizations.
- Explain how marketing decisions can help maximize profits.
- Describe the legal and ethical issues surrounding the business community.

#### Degree Requirements

To receive an Associate of Science in Business degree, students must complete at least 90 quarter units consisting of all courses as articulated below along with the required minimum 34.5 units of the Associate of Science General Education. In the absence of transfer credit, students may need to take additional general electives to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

#### Prerequisites for the Major

(2 courses; 9 quarter units)

ILR 260\* Information Literacy  
*Prerequisite: ENG 100, and ENG 101*

MNS 205\* Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

\* May be used to meet a General Education requirement

#### Requirements for the Major

(8 courses; 36 quarter units)

Students must complete administrative exam.

#### Foundation Courses

BUS 100 Intro to Business

ACC 201 Financial Accounting Funds.

ACC 202 Managerial Accounting Funds.  
*Prerequisite: ACC 201*

ECO 100 Intro to Economics

#### Core Courses

LAW 304 Legal Aspects of Business I

MKT 200 Basic Marketing

FIN 310 Business Finance  
*Prerequisite: ACC 201*

MGT 309C Prin. of Mgmt & Organizations

## ■ BACHELOR OF ARTS

### ◆ MAJOR IN INTEGRATED MARKETING COMMUNICATION

Faculty Advisor: Susan Silverstone; (619) 563-7312; ssilvers@nu.edu

This program is a blend of the concepts of marketing principles, which include advertising, sales promotion, public relations, and direct marketing, working together as a unified force with the integration of communication using the latest communication technology. Graduates will be able to demonstrate an ability to seek and integrate high-quality research for the purpose of evaluating their own insights into the professional and academic study of communication and media studies while also understanding the roles that communication plays in developing individuals and social institutions. The BA in Integrated Marketing Communication prepares learners for careers in marketing, sales, advertising, fundraising, PR, and other persuasive fields. It combines a business degree with advanced communication skills for traditional and Web 2.0 platforms—including print, broadcast, social, personal, and mobile media.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply appropriate theoretical precepts and practical skills in communication.
- Demonstrate effective communication skills consistent with a professional marketing environment.
- Develop a strategic communication program, gathering and utilizing data from the conduct of appropriate market research.
- Evaluate global marketing strategies for products and services, utilizing contemporary buyer behavior
- Apply persuasion theory to the development of media messages.
- Develop multi-platform, multi-public message disseminations plans.
- Integrate program content to develop a basic marketing plan that contains all essential elements, including ethical considerations.

#### Degree Requirements

To receive a Bachelor of Arts in Integrated Marketing Communication, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

#### Prerequisites for the Major

(2 courses; 7.5 quarter units)

ENG 101\* Effective College English II  
(3 quarter units)  
*Prerequisite: ENG 100*

MKT 302A Marketing Fundamentals

\* May be used to meet a General Education requirement

#### Core Requirements

(16 courses; 72 quarter units)

COM 305 Intercultural Communication  
*Prerequisite: ENG 101, and COM 100, COM 103, or COM 220*

COM 354 Professional Presentations  
*Prerequisite: ENG 101*

COM 364 Communication Technologies  
*Prerequisite: ENG 101*

COM 324 Critical Thinking and Ethics  
*Prerequisite: ENG 101*

COM 334 Persuasion  
*Prerequisite: ENG 101*

MKT 430 Intro to Global Marketing  
*Prerequisite: MKT 302A*

MKT 434 Intro to Market Research  
*Prerequisite: MKT 302A*

COM 420A	Public Relations Strategies <i>Prerequisite: COM 334</i>
COM 411A	Advertising Campaigns <i>Prerequisite: COM 410A, or MKT 443, and COM 365, or COM 400</i>
MKT 441	Channel and Value Networks <i>Prerequisite: MKT 302A</i>
<b>or</b>	
MKT 448	Not-For-Profit Marketing <i>Prerequisite: MKT 302A</i>
MKT 446	Introduction to Services Mkt <i>Prerequisite: MKT 302A</i>
MKT 445	e-Marketing <i>Prerequisite: MKT 302A</i>
COM 430A	Interactive Strategies <i>Prerequisite: COM 334</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>
COM 365	Integrated Marketing Comm <i>Prerequisite: ENG 101, and COM 364, and MKT 302A, or COM 315</i>
MKT 480	Marketing Capstone <i>Prerequisite: Completion of 31.5 quarter units of upper-division core requirements, MKT 302A</i>

### ◆ MAJOR IN MANAGEMENT

*Faculty Advisor: Richard Weaver; (619) 563-7314; rweaver@nu.edu*

The Bachelor of Arts in Management provides students a business related degree with an emphasis on managing organizations and personnel in a multicultural and global setting. To achieve maximum flexibility, the major in management program minimizes prerequisites, enabling students to take the required courses in any sequence. Students are also offered several areas of concentration.

#### The Bachelor of Arts in Management / Master of Global Management (BAM/MGM) Transition Program

The Bachelor of Arts in Management/Master of Global Management (BAM/MGM) Transition Program allows currently enrolled BAM students with a cumulative grade point average of at least a 3.0, who are within completing their last six courses, to register for two MGM courses as electives for their BAM degree. Students can take the following two courses: MGT601M and MGT630. The number of additional courses to complete to earn the MGM is reduced from 13 to 11 courses based on grades earned. To be eligible for the Transition Program, students must apply for the MGM and begin their program of study within six months after completing their final BAM course. Students must complete the 13-course MGM program (including the two courses in the Transition Program) within four years with no break exceeding 12 months. Students must complete graduate-level coursework taken as part of the BAM degree with a grade of B or better. The coursework will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the basic functions of management and their practical implications on the operations of the organization.
- Analyze and evaluate management, leadership, and motivation theories.
- Identify organizational behavior, communications, and change theories and their practical implications.
- Explain the effect of international business environmental factors (legal, economic, and cultural) on the conduct of global business.
- Explain the principles and theories of ethical decision-making and their practical implications in the everyday conduct of business.

#### Degree Requirements

To receive a Bachelor of Arts in Management, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements.

In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section of undergraduate admission procedures for specific information regarding admission and evaluation.

#### Preparation for the Major

(2 courses; 9 quarter units)

ECO 203\* Principles of Microeconomics

ECO 204\* Principles of Macroeconomics

\* May be used to meet a General Education requirement

#### Requirements for the Major

(11 courses; 49.5 quarter units)

LAW 304 Legal Aspects of Business I

MGT 309C Prin. of Mgmt & Organizations

MKT 302A Marketing Fundamentals

BKM 400 Business Knowledge Mgmt Strat

MGT 430 Survey of Global Business  
*Prerequisite: ECO 203, and ECO 204*

ODV 420 Intro to Organizational Behavior

MGT 451 Production & Ops Management I

MGT 400 Ethics in Law, Business & Mgmt

LED 400 Introduction to Leadership

HRM 409B Survey in HRM & OD

MGT 442 Strategic Business Management

#### Upper-Division Electives

(5 courses; 22.5 quarter units)

Students may choose to take any one of the concentrations listed below or appropriate elective courses to satisfy the total upper-division units for the degree in the following prefix areas: ACC, BKM, ECO, FIN, HRM, LAW, MGT, MKT, MNS, LED, and ODV. Students planning to do an internship for academic credit must take BUS 491 as an elective.

#### ▲ Concentration in Alternative Dispute Resolution

*Faculty Advisor: Jack Hamlin; (619) 563-7254; jhamlin@nu.edu*

This concentration is designed for those students majoring in business administration or management who may seek entry into the Alternative Dispute Resolution (ADR) field. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

#### Requirements for the Concentration

(4 courses; 18 quarter units)

Choose 4 from the following:

ADR 400 Alternative Dispute Resolution

ADR 405 Negotiation Fundamentals

ADR 410 Facilitation Fundamentals

ADR 415 Mediation Fundamentals

ADR 420 Communication & Conflict

ADR 425 Issues in Conflict Management

ADR 430 Ethics and Neutrality

### ▲ Concentration in Business Law

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

This concentration is designed for students undertaking the Bachelor of Business Administration (BBA) or BA Management (BAM) degree. The concentration will provide students who have an interest in a career in law, business or government, with an understanding of the complex legal issues that exist in today's business environment.

#### Requirements for the Concentration

(6 courses; 27 quarter units)

Choose six courses from the following:

LAW 400	Current Legal Issues
LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
LAW 440	Comparative International Law
LAW 445	Administrative Law for Business
LAW 455	Public Contracting
ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals

### ▲ Concentration in Economics

Faculty Advisor: Wali Mondal; (619) 563-7297; wmondal@nu.edu

Economics is often called the foundation of business disciplines. This concentration is designed for those students who are interested in learning how a society makes economic decisions in allocating its scarce resources. Students will also learn how individuals, businesses and the government work together toward achieving the goals of a society. The concentration is designed for students who can progress to higher levels of economic knowledge after taking the principles of macroeconomics and the principles of microeconomics. The concentration has been designed to provide adequate levels of quantitative skills with a view to analyzing economic data. This analytical ability will help students succeed in graduate studies in all business disciplines including Finance, Management and Marketing. The concentration will also prepare students for a successful experience in the law school or other professional training.

Students earning a BAM degree with concentration in Economics may find a wide array of employment opportunities in local, state and federal government, in private sector, and in international organizations including the United Nations organizations and the Peace Corps. For guidance and recommendations concerning the concentration in Economics, please contact the above-named Faculty.

#### Requirements for the Concentration

(5 courses; 22.5 quarter units)

##### Core Requirements

(3 courses; 13.5 quarter units)

ECO 301	Intermediate Microeconomics <i>Prerequisite: ECO 203, ECO 204</i>
ECO 302	Intermediate Macroeconomics <i>Prerequisite: ECO 204</i>
ECO 303	Data Analysis <i>Prerequisite: ECO 203, ECO 204</i>

##### Electives

(2 courses; 9 quarter units)

Please select 2 courses from the following list

ECO 304	Economic Growth <i>Prerequisite: ECO 203, ECO 204</i>
ECO 410	Seminar on Capitalism <i>Prerequisite: ECO 203, ECO 204</i>
ECO 415	Labor Economics <i>Prerequisite: ECO 203, and ECO 204</i>

ECO 420 International Economics  
*Prerequisite: ECO 203, and ECO 204*

ECO 447 Money and Banking  
*Prerequisite: ECO 203, and ECO 204*

### ▲ Concentration in Entrepreneurship

Faculty Advisor: Gary Zucca; (209) 475-1441; gzucca@nu.edu

This concentration is designed for those students who seek to gain practical knowledge in starting, managing, or running a business. The concentration is aimed at providing students with the specialized knowledge of entrepreneurship, e-business, small business management, and family business. Entrepreneurship is one of the core concentrations in many schools of business. Completing this concentration will enable students to compete in the marketplace for employment or to start new business ventures.

According to the U.S. Department of Commerce, California is a leader in small business and family business. This concentration will enable students to gain knowledge on various aspects of small business and family business including venture capital, risk management, registration of new business, security issues, bankruptcy, estate planning, and philanthropy. This knowledge, combined with knowledge gained in the BAM program, will significantly enhance the earning potential of a student. Students are strongly advised to contact the Faculty Advisor for guidance and recommendations regarding academic preparation for this minor.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify the origin and development of entrepreneurship
- Analyze risk taking and innovation
- Describe marketing of goods and services
- Comprehend financial plan and control of small business
- Apply the basics of e-commerce through technology
- Analyze E-Commerce servers and clients
- Distinguish family business from other forms of business
- Examine the impact of family business both nationally and globally

#### Requirements for the Concentration

(4 courses; 18 quarter units)

MGT 481	Foundations of Entrepreneurship
MGT 482	Small Business Management
MGT 483	E-Business
MGT 484	Family Business Management

### ▲ Concentration in Hospitality and Casino Management

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

This concentration is designed for those majoring in management who seek entry or advancement in the management of hospitality and casino industries. There is a wide and growing range of opportunities for graduates including management, marketing and community relations in hotels, restaurants, tourism facilities, and visitors bureaus.

#### Requirements for the Concentration

(7 courses; 31.5 quarter units)

SMG 432	Leisure Services Management
HCM 400	Princ of Hosp & Casino Acct
HCM 430	Prin of Hosp & Casino Staffing
HCM 450	Native Am Tribal Comm Developm
HCM 440	Cultural Diversity & Hosp Mgt
HCM 420	Hospitality and Casino Mkt
HCM 410	Hospitality and Gaming Law



### ▲ Concentration in Human Resource Management

Faculty Advisor: Bernadette Baum; (619) 563-7287; bbaum@nu.edu

This concentration provides education, knowledge and skills that apply to every level of an organization. This degree program is excellent preparation for students attracted to a career in the increasingly important field of human resource management.

#### Requirements for the Concentration

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in Human Resource Management. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses in the order listed below at or near the end of their program after completing the upper-division BA/Management core courses.

HRM 433 Pay & Benefit Admin, & HR Tech

HRM 439 Legal, Reg, & Labor Relation C

ODV 410 OD, Career Systems, & Training

HRM 432 Recruit, Selection, Promo, Ret

and two Upper-Division Elective courses in the following prefix areas: HRM, LED, ODV.

### ▲ Concentration in Marketing

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

This concentration is organized around a managerial framework that gives students an understanding of the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. There is a wide range of opportunities in marketing, including marketing management, marketing research, purchasing manager/buyer, market analysis, product/branch manager, retailing, sales promotion, and international marketing.

Students must successfully complete the following courses for a concentration in marketing, with at least four of them in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper division core courses.

#### Requirements for the Concentration

(6 courses; 27 quarter units)

MKT 420 Principles of Consumer Behavior  
*Prerequisite: MKT 302A*

MKT 430 Intro to Global Marketing  
*Prerequisite: MKT 302A*

MKT 434 Intro to Market Research  
*Prerequisite: MKT 302A*

MKT 443 Introduction to Advertising  
*Prerequisite: MKT 302A*

Plus any two of the following courses

MKT 440A Sales Techniques & Methodology  
*Prerequisite: MKT 302A*

MKT 441 Channel and Value Networks  
*Prerequisite: MKT 302A*

MKT 442A Intro to Public Relations

MKT 445 e-Marketing  
*Prerequisite: MKT 302A*

MKT 446 Introduction to Services Mkt  
*Prerequisite: MKT 302A*

MKT 447 Marketing for Entrepreneurs  
*Prerequisite: MKT 302A*

### ▲ Concentration in Project Management

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

This concentration is designed for students who seek specialized knowledge in the field of project management by preparing them for careers in industry. The undergraduate curriculum prepares people who choose a career in the discipline and elect to go on to their professional certification in Project Management and/or their MBA.

Project Management is one of the most emphasized management roles by organizations as a career path. The concentration can position a student to realize job opportunities that increase his or her potential for future earnings.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Compare and distinguish between projects and the on-going nature of operations.
- Explain the elements of project initiation, project implementation and termination.
- Design the project and define work breakdown structure, develop budgets and schedules, resource allocations, and project control techniques.
- Apply cost accounting concepts to a project according to its contractual parameters, and track the project according to its planned milestones and measurement of value.
- Formulate a plan to create an infrastructure of parallel projects that builds critical chains to multitask efforts.

#### Requirements for the Concentration

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in Project Management. Students must complete at least five of the courses in residence at National University (two of which must be PMB 400 and PMB 410). It is recommended that students take the courses needed for the Concentration in Project Management at or near the end of their program.

#### Prerequisite

(1 course; 4.5 quarter units)

MGT 451 Production & Ops Management I

#### Concentration Core Requirements

(6 courses; 27 quarter units)

PMB 400 Project Management Essentials  
*Prerequisite: MGT 451*

PMB 410 Project Planning and Control  
*Prerequisite: MGT 451, PMB 400*

PMB 420 Program Management  
*Prerequisite: MGT 451, PMB 400*

PMB 430 Project Accting Fundamentals  
*Prerequisite: MGT 451, PMB 400*

PMB 440 Contract Management  
*Prerequisite: MGT 451, PMB 400*

MGT 422 Team Bldg, Intersp Dynamics

## ■ BACHELOR OF BUSINESS ADMINISTRATION

Faculty Advisor: Brian Simpson; (619) 563-7313; bsimpson@nu.edu

The Bachelor of Business Administration (BBA) degree prepares students for career opportunities and advancement in business and industry. Successful completion of lower- and upper-division BBA requirements ensures that graduates comprehend the relationships among marketing, quantitative theory, accountancy, economic principles and financial, human and organizational management. The BBA gives students an opportunity to specialize in designated fields by pursuing concentrations and minors, or to choose an individualized set of general BBA electives.

### Bachelor of Business Administration/Master of Business Administration (BBA/MBA) Transition Program

Students must complete graduate-level coursework taken as part of the BBA degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Lastly, students must apply for and begin the MBA program within six months after completing their final BBA course. Students must complete their MBA program within four years with no break exceeding 12 months.

Students in the BBA transition program may take up to three MBA classes as electives during the BBA. Students may choose from the following courses: MKT 602, MGT 605, ECO 602.

The number of courses required to earn an MBA degree for transition program students is reduced from 14 to as few as 11 courses, depending on classes selected and grades earned.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply ethical and legal principles to a business environment
- Demonstrate skills and knowledge in the areas of business math, economics, accounting, finance, and operations management needed to make sound business decisions
- Apply knowledge in the fields of management, information systems, and marketing to different business environments
- Integrate the knowledge acquired in the program to analyze a business, identify its strengths and weaknesses, and determine what changes can be made for improvement
- Conduct independent research relevant to business-related issues
- Demonstrate written and oral presentation skills expected of a business-school graduate
- Develop a global business perspective based on the knowledge of foreign business environments and cultures

### Degree Requirements

To receive a BBA, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### Preparation for the Major

(6 courses; 27 quarter units)

MNS 205*	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
LAW 304	Legal Aspects of Business I

\* May be used to meet a General Education requirement

### Requirements for the Major

(9 courses; 40.5 quarter units)

BIM 400	Info Mgmt in Organizations
MGT 309C	Prin. of Mgmt & Organizations
MGT 400	Ethics in Law, Business & Mgmt
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>

MNS 407	Management Science <i>Prerequisite: MNS 205</i>
MKT 302A	Marketing Fundamentals
MGT 430	Survey of Global Business <i>Prerequisite: ECO 203, and ECO 204</i>
MGT 451	Production & Ops Management I
BUS 480	Integrated Business Policy <i>Prerequisite: Completion of at least 9 BBA preparation and upper-division core courses.</i>

### Upper-Division Electives

(6 courses; 27 quarter units)

Students may choose to take one of the BBA Concentrations listed below, and/or appropriate elective courses to satisfy the total units for the degree with the following prefixes: ACC, BKM, BUS, ECO, FIN, HRM, LAW, LED, MGT, MKT, ODV, or HUB.

### Recommended Electives

BUS 491	Internship Project <i>Prerequisite: 31.5 quarter units in business or business related courses and a 2.5 GPA</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
HRM 409B	Survey in HRM & OD
HRM 432	Recruit, Selection, Promo, Ret
HRM 439	Legal, Reg, & Labor Relation C
IBU 540	International Experience
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
MGT 422	Team Bldg, Interpers Dynamics
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>

### ▲ Concentration in Accountancy

*Faculty Advisor: Consolación Fajardo; (916) 855-4137; cfajardo@nu.edu*

This concentration is designed for those majoring in business administration with its broad base of business-related disciplines, but who also wish to gain the intermediate-level accounting knowledge and skills appropriate for careers in the accounting and finance departments of a business, nonprofit, or government entity.

Students are encouraged to seek a nationally recognized accounting designation such as the CMA (Certified Management Accountant) or CFM (Certified in Financial Management). Those who are considering a CPA designation (Certified Public Accountant) are best served by enrolling in the B.S. in Accountancy degree program.

Students are strongly advised to contact the Faculty Advisor for guidance and recommendations as to academic preparation that will best meet their career objectives.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use information technologies and computerized accounting software for financial accounting and reporting.
- Apply generally accepted accounting principles to measure and report information related to accounting for assets, liabilities, and equities, revenue and expenses, and cash flows of business enterprises and governmental and not-for-profit entities.

- Interpret cost data and prepare managerial accounting reports.

### Requirements for the Concentration

(6 courses; 27 quarter units)

Students must successfully complete the required courses as specified below. Please note: all students must have successfully completed ACC 201 with a grade of “C” or better before enrolling in any of the six required accounting courses.

ACC 300	Applied Tech for Accountants <i>Prerequisite: ACC 201</i>
ACC 434	Government and Nonprofit Acct <i>Prerequisite: ACC 201</i>
ACC 433A	Managerial Accounting I <i>Prerequisite: ACC 201</i>
ACC 433B	Managerial Accounting II <i>Prerequisite: ACC 433A</i>
ACC 410A	Intermediate Accounting I <i>Prerequisite: ACC 201</i>
ACC 410B	Intermediate Accounting II <i>Prerequisite: ACC 410A</i>

### ▲ Concentration in Alternative Dispute Resolution

*Faculty Advisor: Jack Hamlin; (619) 563-7254; jhamlin@nu.edu*

This concentration is designed for those students majoring in business administration or management who may seek entry into the Alternative Dispute Resolution (ADR) field. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

### Requirements for the Concentration

(4 courses; 18 quarter units)

Choose 4 from the following:

ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals
ADR 410	Facilitation Fundamentals
ADR 415	Mediation Fundamentals
ADR 420	Communication & Conflict
ADR 425	Issues in Conflict Management
ADR 430	Ethics and Neutrality

### ▲ Concentration in Business Law

*Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu*

This concentration is designed for students undertaking the Bachelor of Business Administration (BBA) or BA Management (BAM) degree. The concentration will provide students who have an interest in a career in law, business or government, with an understanding of the complex legal issues that exist in today’s business environment.

### Requirements for the Concentration

(6 courses; 27 quarter units)

Choose six courses from the following:

LAW 400	Current Legal Issues
LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
LAW 440	Comparative International Law
LAW 445	Administrative Law for Business
LAW 455	Public Contracting
ADR 400	Alternative Dispute Resolution

ADR 405 Negotiation Fundamentals

### ▲ Concentration in Economics

*Faculty Advisor: Wali Mondal; (619) 563-7297; wmondal@nu.edu*

Economics is often called the foundation of business disciplines. This concentration is designed for those students who are interested in learning how a society makes economic decisions in allocating its scarce resources. Students will also learn how individuals, businesses and the government work together toward achieving the goals of a society. The concentration is designed for students who can progress to higher levels of economic knowledge after taking the principles of macroeconomics and the principles of microeconomics. The concentration has been designed to provide adequate levels of quantitative skills with a view to analyzing economic data. This analytical ability will help students succeed in graduate studies in all business disciplines including Finance, Management and Marketing. The concentration will also prepare students for a successful experience in the law school or other professional training.

Students earning a BBA degree with concentration in Economics may find a wide array of employment opportunities in local, state and federal government, in private sector, and in international organizations including the United Nations organizations and the Peace Corps.

For guidance and recommendations concerning the concentration in Economics, please contact the above-named Faculty.

### Requirements for the Concentration

(5 courses; 22.5 quarter units)

#### Core Requirements

(3 courses; 13.5 quarter units)

ECO 301	Intermediate Microeconomics <i>Prerequisite: ECO 203, ECO 204</i>
ECO 302	Intermediate Macroeconomics <i>Prerequisite: ECO 204</i>
ECO 303	Data Analysis <i>Prerequisite: ECO 203, ECO 204</i>

#### Electives

(2 courses, 9 quarter units)

Please select 2 courses from the following list

ECO 304	Economic Growth <i>Prerequisite: ECO 203, ECO 204</i>
ECO 410	Seminar on Capitalism <i>Prerequisite: ECO 203, ECO 204</i>
ECO 415	Labor Economics <i>Prerequisite: ECO 203, and ECO 204</i>
ECO 420	International Economics <i>Prerequisite: ECO 203, and ECO 204</i>
ECO 447	Money and Banking <i>Prerequisite: ECO 203, and ECO 204</i>

### ▲ Concentration in Entrepreneurship

*Faculty Advisor: Gary Zucca; (209) 475-1441; gzucca@nu.edu*

This concentration is designed for those students who seek to gain practical knowledge in starting, managing, or running a business. The concentration is aimed at providing students with the specialized knowledge of entrepreneurship, e-business, small business management, and family business. Entrepreneurship is one of the core concentrations in many schools of business. Completing this concentration will enable students to compete in the marketplace for employment or to start new business ventures.

According to the U.S. Department of Commerce, California is a leader in small business and family business. This concentration will enable students to gain knowledge on various aspects of small business and family business including venture capital, risk management, registration of new business, security issues, bankruptcy, estate planning, and philanthropy. This knowledge, combined with knowledge gained in the BBA program will significantly enhance the earning po-

tential of a student. Students are strongly advised to contact the Faculty Advisor for guidance and recommendations regarding academic preparation for this minor.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify the origin and development of entrepreneurship
- Analyze risk taking and innovation
- Describe marketing of goods and services
- Comprehend financial plan and control of small business
- Apply the basics of e-commerce through technology
- Analyze E-Commerce servers and clients
- Distinguish family business from other forms of business
- Examine the impact of family business both nationally and globally

### Requirements for the Concentration

(4 courses; 18 quarter units)

MGT 481	Foundations of Entrepreneurshi
MGT 482	Small Business Management
MGT 483	E-Business
MGT 484	Family Business Management

### ▲ Concentration in Finance

Faculty Advisor: Gurdeep Chawla; (408)236-1138; gchawla@nu.edu

Career opportunities in finance are in three interrelated areas: financial institutions, including banks, insurance companies, credit unions and similar organizations; investments, including the sale of securities or security analysis; and financial management in all types of commercial and not-for-profit organizations. This concentration prepares students for future managerial responsibilities in these areas with an emphasis on the financial management of organizations.

Students must successfully complete the following courses for a concentration in finance. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper-division BBA core courses.

### Requirements for the Concentration

(6 courses; 27 quarter units)

FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
FIN 442	Investments <i>Prerequisite: FIN 310, and FIN 440</i>
FIN 443	Working Capital Management <i>Prerequisite: FIN 310</i>
FIN 444	Risk Management & Insurance <i>Prerequisite: FIN 310</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 447	Financial Planning <i>Prerequisite: FIN 310, and FIN 442</i>

### ▲ Concentration in Hospitality and Casino Management

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

This concentration is designed for those majoring in management who seek entry or advancement in the management of hospitality and casino industries. There is a wide and growing range of opportunities for graduates including management, marketing and community relations in hotels, restaurants, tourism facilities, and visitors bureaus.

### Requirements for the Concentration

(7 courses; 31.5 quarter units)

SMG 432	Leisure Services Management
HCM 400	Princ of Hosp & Casino Acct
HCM 430	Prin of Hosp & Casino Staffing
HCM 450	Native Am Tribal Comm Developm
HCM 440	Cultural Diversity & Hosp Mgt
HCM 420	Hospitality and Casino Mkt
HCM 410	Hospitality and Gaming Law

### ▲ Concentration in Human Resource Management

Faculty Advisor: Bernadette Baum; (619) 563-7237; bbaum@nu.edu

This concentration provides education, knowledge and skills that apply to every level of an organization. This degree program is excellent preparation for students attracted to a career in the increasingly important field of human resource management.

### Requirements for the Concentration

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in Human Resource Management. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses in the order listed below at or near the end of their program after completing the upper-division BA/Management core courses.

HRM 433	Pay & Benefit Admin, & HR Tech
HRM 439	Legal, Reg, & Labor Relation C
ODV 410	OD, Career Systems, & Training
HRM 432	Recruit, Selection, Promo, Ret

and two Upper-Division Elective courses in the following prefix areas: HRM, LED, ODV.

### ▲ Concentration in Marketing

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

This concentration is organized around a managerial framework that gives students an understanding of the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. There is a wide range of opportunities in marketing, including marketing management, marketing research, purchasing manager/buyer, market analysis, product/branch manager, retailing, sales promotion, and international marketing.

Students must successfully complete the following courses for a concentration in marketing, with at least four of them in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper-division BBA core courses.

### Requirements for the Concentration

(6 courses; 27 quarter units)

MKT 420	Principles of Consumer Behavior <i>Prerequisite: MKT 302A</i>
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>
Plus any two of the following courses	
MKT 440A	Sales Techniques & Methodology <i>Prerequisite: MKT 302A</i>
MKT 441	Channel and Value Networks <i>Prerequisite: MKT 302A</i>
MKT 442A	Intro to Public Relations

MKT 445	e-Marketing <i>Prerequisite: MKT 302A</i>
MKT 446	Introduction to Services Mkt <i>Prerequisite: MKT 302A</i>
MKT 447	Marketing for Entrepreneurs <i>Prerequisite: MKT 302A</i>

### ▲ Concentration in Professional Golf Management

*Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu*

This emphasis is designed to prepare students for entry into the field of professional golf management and coaching. These courses are designed to include practical experiences in coaching, instruction, and player development as well as introduce students to contemporary issues in golf management.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Present a case study analysis of a financial situation presently being faced in the golf industry and explore methods for facing the challenges presented in the case study.
- Articulate a philosophy and approach to instruction and player development.
- Utilize basic turf grass science and apply that knowledge to an environmentally sensitive golf facility.

Use common methods of analysis to measure a facility's financial performance.

#### Requirements for the Concentration

(4 courses; 18 quarter units)

PGM 444	Instruction/Player Develop. <i>Prerequisite: satisfactory completion of 8 core courses</i>
PGM 447	Prof. Golf Management Seminar <i>Prerequisite: PGM 444</i>
PGM 445	Player Development II Seminar <i>Prerequisite: PGM 447</i>
PGM 448	Senior Project in PGM <i>Prerequisite: satisfactory completion of ALL Major requirements</i>

### ▲ Concentration in Project Management

*Faculty Advisor: George Agrimis; 858-642-8273; gagrimis@nu.edu*

This concentration is designed for students who seek specialized knowledge in the field of project management by preparing them for careers in industry. The undergraduate curriculum prepares people who choose a career in the discipline and elect to go on to their professional certification in Project Management and / or their MBA.

Project Management is one of the most emphasized management roles by organizations as a career path. The concentration can position a student to realize job opportunities that increase his or her potential for future earnings.

#### Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Compare and distinguish between projects and the on-going nature of operations.
- Explain the elements of project initiation, project implementation and termination.
- Design the project and define work breakdown structure, develop budgets and schedules, resource allocations, and project control techniques.
- Apply cost accounting concepts to a project according to its contractual parameters, and track the project according to its planned milestones and measurement of value.
- Formulate a plan to create an infrastructure of parallel projects that builds critical chains to multitask efforts.

#### Requirements for the Concentration

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in Project Management. Students must complete at least five of the courses in residence at National University (two of which must be PMB 400 and PMB 410). It is recommended that students take the courses needed for the Concentration in Project Management at or near the end of their program.

#### Prerequisite

(1 course; 4.5 quarter units)

MGT 451 Production & Ops Management I

#### Concentration Core Requirements

(6 courses; 27 quarter units)

PMB 400	Project Management Essentials <i>Prerequisite: MGT 451</i>
PMB 410	Project Planning and Control <i>Prerequisite: MGT 451, PMB 400</i>
PMB 420	Program Management <i>Prerequisite: MGT 451, PMB 400</i>
PMB 430	Project Accting Fundamentals <i>Prerequisite: MGT 451, PMB 400</i>
PMB 440	Contract Management <i>Prerequisite: MGT 451, PMB 400</i>
MGT 422	Team Bldg, Interpers Dynamics

## ■ BACHELOR OF SCIENCE

### ◆ MAJOR IN ACCOUNTANCY

*Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu*

The major in Accountancy academically prepares students for a wide range of accounting-related careers, including public accounting, corporate accounting, internal auditing, accounting in not-for-profit organizations, and job opportunities with state and local government agencies such as the Internal Revenue Service, Defense Contract Audit Agency, FBI and others. All students are advised to contact a full-time accounting faculty member for a brief interview by phone or personal visit for the purpose of reviewing the student's career objectives.

#### Bachelor of Science in Accountancy to Master of Business Administration (BS ACC/MBA) Transition Program

Students who are currently enrolled in the Bachelor of Science in Accountancy program, have at least a cumulative GPA of 3.0, and are within six courses of graduation may register for the BS ACC/MBA transition program. Students in the BS ACC/MBA transition program may take up to three MBA classes as electives during the BS ACC. Students can select any three graduate-level accounting courses for which required course prerequisites (if any) have been met, or may select from the following MBA core courses: ECO 602, MKT 602, and MGT 605. Students must complete graduate-level coursework taken as part of the BS ACC degree with a grade of B or better. This coursework, which counts as electives in the BS ACC, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must apply for and begin the MBA program within six months after completing their final BS ACC course. The number of courses required to earn an MBA degree for transition program students is reduced from 14 to as few as 11 courses, depending on classes selected and grades earned. Students must complete their MBA program within four years with no break exceeding 12 months.

#### Online Course Availability

All of the coursework in this program can be taken online. Most online courses offer one or two live voice/visual evening sessions per week, in which instructors orally explain important concepts, visually illustrate problem-solving techniques, and respond to student questions. These sessions are recorded so that students who are unable to attend at the scheduled time can play back the video recording at a convenient time.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use information technologies and computerized accounting software for financial accounting and reporting.
- Apply generally accepted accounting principles to measure and report information related to accounting for the assets, liabilities, equities, revenues and expenses, and cash flows of business enterprises and governmental and not-for-profit entities.
- Prepare tax returns and reports for individuals and business enterprises.
- Interpret cost data and prepare managerial accounting reports.
- Apply generally accepted auditing standards in the audit of public and private entities.
- Apply ethical and legal concepts to accounting and tax related issues.
- Demonstrate effective communication of accounting information.

## Degree Requirements

To receive a Bachelor of Science with a major in Accountancy, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

## Requirements for the Major

(17 courses; 76.5 quarter units)

## Preparation for the Major

(4 courses; 18 quarter units)

MNS 205\* Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

ECO 203\* Principles of Microeconomics

ECO 204\* Principles of Macroeconomics

ACC 201\*\* Financial Accounting Funds.

\*\* Eligible for Credit-By-Exam waiver: contact Faculty Advisor

\* May be used to meet a General Education requirement

## Prerequisite for all Accounting Courses

Students must have completed ACC 201 or its equivalent with a minimum grade of C within two years of taking any of the following accounting courses, unless a grade of 75 or better is received on an appropriate challenge exam.

## Core Business Requirements

(5 courses; 22.5 quarter units)

LAW 304 Legal Aspects of Business I

BIM 400 Info Mgmt in Organizations

MGT 309C Prin. of Mgmt & Organizations

FIN 310 Business Finance  
*Prerequisite: ACC 201*

and

MGT 430 Survey of Global Business  
*Prerequisite: ECO 203, and ECO 204*

or

MKT 302A Marketing Fundamentals

or

MNS 407<sup>^</sup> Management Science  
*Prerequisite: MNS 205*

<sup>^</sup> (Recommended for students considering the CPA or CMA designation)

## Core Accounting Requirements

(12 courses; 54 quarter units)

ACC 300 Applied Tech for Accountants  
*Prerequisite: ACC 201*

ACC 434 Government and Nonprofit Acct  
*Prerequisite: ACC 201*

ACC 433A Managerial Accounting I  
*Prerequisite: ACC 201*

ACC 433B Managerial Accounting II  
*Prerequisite: ACC 433A*

ACC 410A Intermediate Accounting I  
*Prerequisite: ACC 201*

ACC 410B Intermediate Accounting II  
*Prerequisite: ACC 410A*

ACC 410C Intermediate Accounting III  
*Prerequisite: ACC 410B*

ACC 431 Advanced Accounting  
*Prerequisite: ACC 410C*

ACC 432A Taxation-Individual  
*Prerequisite: ACC 431*

ACC 432B Taxation-Business  
*Prerequisite: ACC 432A*

ACC 435A Auditing I  
*Prerequisite: ACC 431*

ACC 435B Auditing II  
*Prerequisite: ACC 435A*

## ◆ MAJOR IN FINANCIAL MANAGEMENT

Faculty Advisor: Gurdeep Chawla; (408) 236-1138; gchawla@nu.edu

The Major in Financial Management is designed to prepare students for positions in the field of corporate financial management and related areas. The program provides both practical and theoretical training in financial decision-making and the creation of wealth through the art and science of managing financial resources. Students also develop a broad perspective of the global economic and financial environment.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the financial objectives of an organization and apply quantitative, qualitative and problem-solving skills in order to achieve those objectives.
- Describe ethical, legal, and global issues that impact an organization's financial position.
- Discuss the theoretical and practical aspects of corporate finance.
- Explain the structure and operation of financial markets domestically and internationally.
- Demonstrate oral and written communication skills needed by financial managers.
- Evaluate corporate long-term projects based on the capital budgeting techniques.
- Examine the financial position of an organization and make financial decisions.
- Evaluate financial products and services offered by the financial institutions.

## Degree Requirements

To receive a Bachelor of Science with a major in Financial Management, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

## Preparation for the Major

(6 courses; 27 quarter units)

ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
MNS 205*	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
LAW 304	Legal Aspects of Business I

\* May be used to meet a General Education requirement

## Requirements for the Major

(16 courses; 72 quarter units)

### Core Business Requirements

(5 courses; 22.5 quarter units)

MGT 309C	Prin. of Mgmt & Organizations
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
MKT 302A	Marketing Fundamentals
ACC 410A	Intermediate Accounting I <i>Prerequisite: ACC 201</i>
ACC 410B	Intermediate Accounting II <i>Prerequisite: ACC 410A</i>

### Core Finance Courses

(11 courses; 49.5 quarter units)

FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
FIN 442	Investments <i>Prerequisite: FIN 310, and FIN 440</i>
FIN 443	Working Capital Management <i>Prerequisite: FIN 310</i>
FIN 444	Risk Management & Insurance <i>Prerequisite: FIN 310</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 447	Financial Planning <i>Prerequisite: FIN 310, and FIN 442</i>
FIN 449	Analysis of Financial Statemen <i>Prerequisite: FIN 310</i>
FIN 453	Finance and Banking <i>Prerequisite: FIN 310</i>
FIN 454	Capital Structure & Financing <i>Prerequisite: FIN 310</i>
FIN 455	Valuation of a Corporation <i>Prerequisite: FIN 310</i>
FIN 456	Financial Project (Capstone) <i>Prerequisite: FIN 310, FIN 440, FIN 442, FIN 443, FIN 444, FIN 446, FIN 447, FIN 449, FIN 453, FIN 454, FIN 455</i>

## ◆ MAJOR IN HOSPITALITY AND CASINO MANAGEMENT

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

The Bachelor of Science in Hospitality and Casino Management degree is intended to prepare students to work in the rapidly expanding field of Tribal Government Gaming Enterprises. This term includes all aspects of the casino operations and all ancillary departments that are tied into the infrastructure of such casino resorts. Combining general business and management courses with casino specific skill level and management courses, students will be prepared for an entry level position or advancement within the industry. In addition to acquiring general business and management skills, students

will become familiar with the hospitality environment; understand the basic regulatory issues, including the terminology and implications for game protection. Working in collaborative teams, actual scenarios from industry will be discussed and analyzed through problem resolution processes. This program will prepare graduates to develop and lead world class hospitality services and value-added customer partnerships.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate professionally and effectively with various levels of organizational leadership, customers, and team members in a variety of formats to include oral, visual, and written.
- Demonstrate broad-based skills including casino specific management and leadership skills, Minimum Internal Control Standards (MICS) and marketing concepts, and the unique role of Tribal Government Gaming Enterprises within the business and hospitality industry.
- Apply current hospitality and casino management guest service concepts and customer loyalty strategies recognized as industry standards.
- Utilize information and knowledge resources to maximize workplace learning, problem solving, and decision-making.
- Employ the major components of security and surveillance methods to include game protection, asset protection, and fair gaming procedures.
- Apply critical thinking skills and techniques in managerial decision-making processes.
- Demonstrate team problem solving tools, quality management for service organization, and a clear sense of what is required to build effective teams in the hospitality and gaming industry.
- Synthesize business policy, market opportunity, and organizational development linking technology policy with organizational strategy.
- Analyze the organizational and human aspects of the quality service in the hospitality industry to include key concepts of ethics, change management, communication, and managing resistance within today's organizations.

## Degree Requirements

To receive a Bachelor of Science with a Major in Hospitality and Casino Management, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

## Requirements for the Major

(13 courses; 58.5 quarter units)

### Technology Foundation Course

(1 course; 4.5 quarter units)

BKM 400 Business Knowledge Mgmt Strat

### Business Foundation Courses

(4 courses; 18 quarter units)

MGT 309C Prin. of Mgmt & Organizations

HRM 409B Survey in HRM & OD

HCM 420 Hospitality and Casino Mkt

HCM 400 Princ of Hosp & Casino Acct

### Hospitality and Casino Core Courses

(7 courses; 31.5 quarter units)

HCM 401 Intro to Casino Management

HCM 402 Service in the Casino Industry

HCM 405 Casino Operations Management

HCM 415 Gaming Rules and Regulations

HCM 425 Management of Gaming Revenues

- HCM 435 Casino Security/Surveillance  
 HCM 445 Player Development Program

### Capstone Project

(1 course; 4.5 quarter units)

Select one of the following:

HCM 480 Casino Internship

or

HCM 490 Capstone Project

### Upper Division Elective Requirement

(3 courses; 13.5 quarter units)

Students may choose appropriate elective courses to satisfy the total upper division units needed for the degree with the following prefixes: ACC, BKM, BUS, ECO, FIN, HRM, LAW, LED, MGT, MKT, ODV or HCM.

### ◆ MAJOR IN ORGANIZATIONAL LEADERSHIP

Faculty Advisor: Michelle Browning; (310) 662-2144; mbrownin@nu.edu

The Bachelor of Science in Organizational Leadership provides students who are interested in starting, or who are currently working in, business enterprises with theoretical and applied knowledge of leadership theories and frameworks. Building understanding of the difference between leading small organizations and more traditional large corporations and agencies will be examined.

The premise that leadership is a process and can be learned through understanding theory, analyzing scenarios, case studies and complex problems will provide the opportunity for students to acquire their learning experientially.

The Bachelor of Science in Organizational Leadership is designed to give students the opportunity to develop the skills needed to be an effective leader in team and group settings within organizations. It is intended to help students move from an authoritarian paradigm to one of collaboration and integration.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a personal leadership approach.
- Compare and contrast the concepts of leadership and power.
- Identify challenges and advantages of diverse groups in organizations.
- Analyze negotiating styles of leaders and evaluate their effectiveness.
- Examine the strategies leaders use to motivate and evaluate members of groups and teams.
- Analyze and evaluate aspects of leadership in organizational culture and global environments.
- Evaluate the ethical implications of leadership decisions and strategies.
- Compare and analyze strategies and frameworks used by leaders to initiate change in organizations.
- Explain how the classic studies have informed the understanding and application of leadership and organizational theory.
- Apply appropriate technology to leadership decision making in organizations.
- Communicate orally and in writing using proper business communication formats.

### Degree Requirements

To receive a Bachelor of Science in Organizational Leadership, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

### Non-Leadership Course Requirements

(4 courses; 18 quarter units)

LAW 304 Legal Aspects of Business I

MGT 309C Prin. of Mgmt & Organizations

HRM 409B Survey in HRM & OD

or

ODV 410 OD, Career Systems, & Training

COM 334 Persuasion

*Prerequisite: ENG 101*

or

COM 354 Professional Presentations

*Prerequisite: ENG 101*

or

MKT 442A Intro to Public Relations

### Leadership Courses in the Major

(10 courses; 45 quarter units)

LED 400 Introduction to Leadership

LED 410 Leading Diverse Groups & Teams

LED 420 Adaptive Leadership in Change

LED 430 Conflict/Negotiation for Ldrs

LED 440 Ldrship Overview of Org. Func.

LED 450 Advanced Group Dynamic Theory

*Prerequisite: LED 400, and LED 410*

LED 460 Ethics and Decision Making

LED 470 Classic Studies of Leadership

LED 480 Research for Leaders

*Prerequisite: LED 410, and LED 420*

LED 490 Leadership Capstone Project

*Prerequisite: Completion of six of the preceding courses*

### Upper-Division Electives

(2 courses, 9 quarter units)

Students select from upper-division courses with the following prefixes: ECD, ECO, FIN, HCM, HRM, MGT, ODV, SMG, and SOC.

### ● MINORS

#### ● MINOR IN ACCOUNTANCY

Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu

The Minor in Accountancy program is designed for students whose objective is to prepare for entry in the accounting field. Those aspiring to sit for the CPA or CMA exams should take the Bachelor of Science Major in Accountancy program.

### Requirements for the Minor

(7 courses; 31.5 quarter units)

To receive a Minor in Accountancy students must complete the following six courses for which the upper division accounting required prerequisites have been successfully completed.

### Prerequisite for the Minor

(1 course; 4.5 quarter units)

ACC 201 Financial Accounting Funds.

### Requirements for the Minor

(6 courses; 27 quarter units)

ACC 300 Applied Tech for Accountants

*Prerequisite: ACC 201*

ACC 434 Government and Nonprofit Acct

*Prerequisite: ACC 201*

ACC 433A Managerial Accounting I



ACC 433B Managerial Accounting II  
*Prerequisite: ACC 433A*

ACC 410A Intermediate Accounting I  
*Prerequisite: ACC 201*

ACC 410B Intermediate Accounting II  
*Prerequisite: ACC 410A*

### ● MINOR IN BUSINESS ADMINISTRATION

*Faculty Advisor: Brian Simpson; (619) 563-7313; bsimpson@nu.edu*

#### Requirements for the Minor

(11 courses; 49.5 quarter units)

#### Prerequisites for the Minor

(5 courses; 22.5 quarter units)

ACC 201 Financial Accounting Funds.

ACC 202 Managerial Accounting Funds.  
*Prerequisite: ACC 201*

ECO 203\* Principles of Microeconomics

ECO 204\* Principles of Macroeconomics

MNS 205\* Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

\* May be used to meet a General Education requirement

#### Core Requirements

(6 courses; 27 quarter units)

FIN 310 Business Finance  
*Prerequisite: ACC 201*

MGT 309C Prin. of Mgmt & Organizations

MNS 407 Management Science  
*Prerequisite: MNS 205*

HRM 409B Survey in HRM & OD

MKT 302A Marketing Fundamentals

MGT 430 Survey of Global Business  
*Prerequisite: ECO 203, and ECO 204*

### ● MINOR IN BUSINESS STUDIES

*Faculty Advisor: Brian Simpson; (619) 563-7313; bsimpson@nu.edu*

#### Requirements for the Minor

(11 courses; 49.5 quarter units)

#### Prerequisites for the Minor

(5 courses; 22.5 quarter units)

ACC 201 Financial Accounting Funds.

ACC 202 Managerial Accounting Funds.  
*Prerequisite: ACC 201*

ECO 203\* Principles of Microeconomics

ECO 204\* Principles of Macroeconomics

MNS 205\* Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

\* May be used to meet a General Education requirement

#### Core Requirements

(6 courses; 27 quarter units)

MGT 309C Prin. of Mgmt & Organizations

FIN 310 Business Finance  
*Prerequisite: ACC 201*

LAW 410 Intro to Law & Legal Analysis

MGT 430 Survey of Global Business  
*Prerequisite: ECO 203, and ECO 204*

MKT 302A Marketing Fundamentals

MNS 407 Management Science  
*Prerequisite: MNS 205*

### ● MINOR IN ECONOMICS

*Faculty Advisor: Wali Mondal; (619) 563-7297; wmondal@nu.edu*

The minor in Economics is designed for students with no background in Economics. Students will learn how a society makes economic decisions in allocating its scarce resources. Students will also learn how individuals, businesses and the government work together towards achieving the goals of a society. The minor consists of courses which are applied in nature so that students with a diverse background may find it beneficial. Students with a background in Economics may find a wide array of employment opportunities in local, state and federal government, in private sector, and in international organizations including the United Nations organizations and the Peace Corps. The minor will also help students succeed in graduate studies in all business disciplines including Finance, Management and Marketing, and will help those willing to pursue law degree or other professional training. For guidance and recommendations concerning the minor in Economics, please contact the above named faculty.

#### Requirements for the Minor

(8 courses; 36 quarter units)

#### Prerequisites for the Minor

(2 courses; 9 quarter units)

ECO 203\* Principles of Microeconomics

ECO 204\* Principles of Macroeconomics

\* May be used to meet a General Education requirement

#### Core Requirements

(4 courses; 18 quarter units)

ECO 304 Economic Growth  
*Prerequisite: ECO 203, ECO 204*

ECO 305 Business Economics  
*Prerequisite: ECO 203, ECO 204*

ECO 420 International Economics  
*Prerequisite: ECO 203, and ECO 204*

ECO 447 Money and Banking  
*Prerequisite: ECO 203, and ECO 204*

Plus any two of the following

(2 courses; 9 quarter units)

ECO 303 Data Analysis  
*Prerequisite: ECO 203, ECO 204*

ECO 410 Seminar on Capitalism  
*Prerequisite: ECO 203, ECO 204*

ECO 415 Labor Economics  
*Prerequisite: ECO 203, and ECO 204*

IBU 540 International Experience

## GRADUATE DEGREE PROGRAMS

### ■ GLOBAL MASTER OF BUSINESS ADMINISTRATION

*Faculty Advisor: Ramon Corona; (619) 563-7291; rcorona@nu.edu*

La Maestría en Administración de Negocios es un programa que proporciona a los estudiantes adultos las teorías y habilidades necesarias para la toma de decisiones y negociaciones a nivel ejecutivo. La orientación de este programa es multidisciplinaria, incluyendo un análisis económico, político y cultural en la planeación estratégica, y el desarrollo de negocios nacionales e internacionales. Asimismo, se enfatiza la aplicación de principios éticos en las organizaciones.

El programa consiste en una serie de cursos que componen los diversos aspectos de un negocio en el ámbito global, tanto a nivel operativo, como conceptual y de liderazgo, y está diseñado para el ejecutivo (gerente o director) de una empresa pequeña, mediana o global, que busca aprender conceptos de administración, mer-

cadotecnia, finanzas, liderazgo, etc., con un enfoque de aplicación inmediata en su organización. Asimismo, este programa es ideal para ejecutivos experimentados que buscan actualizar sus conocimientos y habilidades en áreas como mercadotecnia global o vía Internet (e-marketing), finanzas internacionales, etc., a fin de garantizar su competencia en el mercado.

### Prerrequisitos para ingresar al programa

Haber completado un programa de pregrado (licenciatura), y obtenido el título, en una universidad debidamente acreditada. El departamento escolar de National University (Office of the Registrar) analizará la documentación proporcionada y determinará la validez de los estudios del solicitante, y autorizará o no, su ingreso al programa.

Asimismo, el estudiante deberá comprobar su nivel de dominio del idioma español, ya sea que haya estudiado su pregrado (Licenciatura) en un país donde el idioma oficial sea el español y que los cursos los haya estudiado en español, o mediante la autorización del asesor académico del programa después de una entrevista con el estudiante.

### English Description

Offered online and conducted entirely in Spanish language, the Global MBA in Spanish program provides adult learners with the theories and the skills needed for executive decision-making and negotiation. The focus of this program is on multidisciplinary approaches, including economic, political, and cultural analyses in the strategic planning and development of national and international business. Moreover, the ethical application for executives in organizations is emphasized.

The program consists of a series of courses covering the various business components in a global environment, both at an operational level, as well as conceptual and leadership, and it is geared towards the business executive (Manager or Director) of a small, medium or large global company who needs to learn key concepts and applications in the fields of Management, Marketing, Finance, Leadership, etc. focusing in an immediate application in his/her work or business. Furthermore, this program is ideal for experienced executives who need to update their knowledge and skills in fields such as Global Marketing, E-Marketing, Global Finance, and the like, so they remain competitive in the marketplace.

### Program Admission Requirements

To have completed a Bachelor's degree (including certificate or título) from an accredited institution. The Office of the Registrar will analyze the documentation provided and determine eligibility to the degree as well as the validation of the student's academic background.

The applicant must also demonstrate proficiency in the Spanish language such as required for a graduate program, either by having taken the courses of the Bachelor's program in Spanish language or by approval of the faculty advisor after a telephone or CLP interview with the student.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrar conceptos y teorías de Mercadotecnia, Liderazgo, Economía, Finanzas y Administración a la solución de problemas y aprovechar oportunidades de negocios. (Integrate Marketing, Leadership, Economics, Finance and Management concepts and theories to solving business problems and taking advantage of Business opportunities)
- Evaluar y analizar las situaciones de negocios en un contexto global para desarrollar estrategias y planes adecuados. (Evaluate and analyze business situations in a global setting to develop appropriate strategies and plans)
- Comparar el uso de las habilidades de Liderazgo y Negociaciones en un entorno global. (Judge leadership and negotiation skills in a changing Global environment)
- Diseñar y administrar alianzas y socios internacionales. (Design and manage international partnerships and alliances)
- Analizar estados financieros y tomar decisiones financieras y contables bien informadas y adecuadas. (Analyze financial statements and make informed financial and accounting decisions)
- Formular decisiones de negocios éticas y apoyar un ambiente de negocios justo e incluyente. (Formulate ethical business decisions and support a fair and engaging business environment)

### Requisitos para el grado

(11 cursos; 49.5 unidades cuatrimestrales)

A fin de recibir el grado de Global MBA en Español, el estudiante debe completar por lo menos 49.5 unidades de trabajo de posgrado. Un total de 9 unidades de posgrado pueden ser revalidadas por un trabajo de posgrado equivalente en otra institución acreditada, y se aplicaría a este programa siempre y cuando no se hayan utilizado en la obtención de otro grado académico. Los estudiantes se deberán referir a la sección de requisitos de admisión para la solicitud y evaluación.

### Degree Requirements

(11 courses; 49.5 quarter units)

In order to obtain the Global MBA in Spanish degree, students must complete at least 49.5 quarter units of graduate work. A maximum of nine (9) graduate units can be transferred from an accredited institution and used for credits in this program provided that the units have not been used to satisfy the requirements of an awarded degree. Students should refer to the admission requirements section for the application and evaluation details.

### Cursos obligatorios

(11 cursos; 49.5 unidades cuatrimestrales)

GMB 689S Liderazgo y Negociaciones

GMB 620S Negocios Electrónicos

GMB 601S Estadísticas para Negocios

GMB 631S Mercadotecnia Global

GMB 673S Alianzas Estratégicas Globales

GMB 682S Contabilidad Gerencial

GMB 672S Administración del Riesgo Glob

GMB 683S Administración Financiera Glob

GMB 674S Estrategias Competitivas Globa

GMB 602S Administración Estratégica

*Prerequisite: Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en GMB 602S, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el GMB 696S.*

GMB 696S Proyecto MBA

*Prerequisite: haber completado todos los cursos fundamentales*

### ■ MASTER OF ACCOUNTANCY

Faculty Advisor: Russell Parkman; (619) 563-7299; rparkman@nu.edu

The Master of Accountancy (MAcc) academically prepares students for a wide range of accounting-related careers. Some examples include public accounting, corporate accounting, internal auditing, accounting in not-for-profit organizations, and accounting for state and local government agencies such as the Internal Revenue Service, Franchise Tax Board, Defense Contract Audit Agency, FBI, CIA and other agencies. The program is designed for students with little or no previous accounting background who have an undergraduate degree in any discipline, but it is not appropriate for students with an undergraduate degree in accounting. Course content is based largely on the published content specifications of the Uniform CPA Exam. Students who do well in this academic program may choose to invest several hundred hours of study in a recognized CPA Exam review course.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Measure, prepare, analyze, and report accounting information based on generally accepted accounting principles for businesses and for governmental and non-profit entities.
- Utilize current information technologies, methodologies, and systems, to plan, implement, execute, and analyze performance of the organization and its resources.
- Apply tax rules and regulations relating to individuals and business enterprises.
- Analyze cost and managerial accounting data and other qualitative information to prepare reports for external and internal decision-making.

- Utilize auditing principles and procedures applicable to business, governmental, and not-for-profit entities.
- Apply ethical and legal concepts to accounting and tax problems.
- Integrate the knowledge and skills acquired from the program to analyze and solve accounting related issues.
- Demonstrate effective communication of accounting information.

### Degree Requirements

(14 courses; 63 quarter units)

To receive a Master of Accountancy, students must complete at least 63 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Core Requirements

(14 courses; 63 quarter units)

ACC 601M	Foundations of Financial Acc
ACC 657	Accounting Information Systems <i>Prerequisite: ACC 601M</i>
ACC 610M	Financial Accounting I <i>Prerequisite: ACC 601M</i>
ACC 611M	Financial Accounting II <i>Prerequisite: ACC 610M</i>
ACC 612M	Financial Accounting III <i>Prerequisite: ACC 611M</i>
ACC 615M	Advanced Financial Accounting <i>Prerequisite: ACC 612M</i>
ACC 620M	Taxation of Individuals <i>Prerequisite: ACC 615M</i>
ACC 621M	Taxation of Bus & Oth Entities <i>Prerequisite: ACC 620M</i>
ACC 630M	Cost Accounting <i>Prerequisite: ACC 601M</i>
ACC 631M	Advanced Managerial Accounting <i>Prerequisite: ACC 630M</i>
ACC 640M	Acc for Gov't & NFP Entities <i>Prerequisite: ACC 601M</i>
ACC 650M	Auditing Principles <i>Prerequisite: ACC 621M</i>
ACC 651M	Auditing Procedures <i>Prerequisite: ACC 650M</i>
ACC 695M	Cases in Accounting & Auditing <i>Prerequisite: Completion of prior core requirements</i>

### ■ MASTER OF ARTS IN HUMAN RESOURCE MANAGEMENT

Faculty Advisor: Bernadette Baum; (619) 563-7287; bbaum@nu.edu

The Master of Arts in Human Resource Management provides students with both the critical skills and knowledge required to be effective in this continuously growing domain through case study, experiential learning opportunities, and best practices. This program serves to increase skills and abilities for a professional to either serve as a senior management team member or as a consultant to organization leadership on human resource management and organizational change issues.

The program integrates the many facets of human resource management in the 21st century through concept, theory, critical analysis and application of recruitment, staffing, training and development, organizational behavior, performance improvement, compensation, benefits, insurance, technology, legal aspects, labor relations, work groups and teams, organizational change and adaptation, ethical issues, and safety concerns in the workplace. The curriculum, incorporating relevant HRM and ODV technology and best practices for both consultants and internal practitioners, is much more in-depth and geared toward those already in

the field of practice (HRM and ODV) and for business professionals who want to extend their knowledge beyond operations management. This cutting edge program is designed to offer an innovative multidisciplinary approach to the growing field of human resource management and the continuum of organizational change in the 21st century. The MAHRM program is recognized by the society for Human Resource Management (SHRM) as being fully aligned with its curriculum.

### Tracks

It is highly recommended that students complete the core courses prior to moving into the areas of specialization tracks. This will help ensure the students have a solid foundation in human resource management. Operating outside of this recommendation is at the student's own discretion and he or she should seek advisement from a counselor and/or lead faculty of the program.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training, and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Assess and develop methods designed to prevent employer liability and labor relation issues (anti discrimination statutes, employee and labor relations, union, and non-union environment issues).
- Develop a consulting proposal and course of action for an organization regarding a particular organizational challenge and/or change process.
- Recognize, analyze, and effectively address ethical, legal, and safety challenges faced in the workplace.
- Use knowledge acquired in this program to improve one's job performance, develop one's career, and contribute to the achievement of one's organization's goals and objectives.

### Degree Requirements

(12-13 courses; 54-58.5 quarter units)

To receive a Master of Arts in Human Resource Management, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. It is recommended that students take the project course as their last course in the sequence of the program.

### Core Requirements

(9 courses; 40.5 quarter units)

HRM 660	Theory & Practice of HRM
HRM 630	Legal, Ethical & Safety Issues
HRM 637	Workforce Plan, Dev & Outsource
HRM 667	Compensation & Benefits
HRM 633A	Seminar in Employee Relations,
HRM 669	Research Sem in HRM Corp Strat
ODV 600	Theory & Practice of OD
ODV 601	Integrating Performance Mgt, Te
HRM 670	Project/Thesis

### Program Electives

(3 courses; 13.5 quarter units)

To complete their program, students must select electives from any graduate level course offered by the School of Business and Management. Highly recommended in the choice of electives are FIN 600, Finance for Non-Financial Managers,

and MGT 635, The Organizational Consulting Process. In the alternative, students may complete their program by completing the specializations listed below. Completion of specialization in lieu of electives will increase the total number of courses by one.

### ▲ Specialization in Organizational Development and Change Management

Faculty Advisor: Bernadette Baum; (619) 563-7237; bbaum@nu.edu

#### Program Requirements

(4 courses; 18 quarter units)

ODV 606	Seminar in Training & Developm
ODV 608	Research Sem in Current Issues
LED 602	Developing Groups and Teams
ODV 610	Adv Studies in Org Behavior in

### ▲ Specialization in Organizational Leadership

Faculty Advisor: Julia Buchanan; (619) 563-7289; jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, change-oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-for profit organizations.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches for exercising leadership to promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of innovation, adaptation, and orchestrating conflict.
- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and global environment that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority, power, the practice of leadership, and utilize frameworks that serve organizational purposes.

#### Program Requirements

(4 courses; 18 quarter units)

LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics

### ■ MASTER OF BUSINESS ADMINISTRATION

Faculty Advisor: Kamlesh Mehta; (619) 563-7288; kmehta@nu.edu

The mission of the Master of Business Administration (MBA) program is to prepare students for leadership positions in business, and to provide them with the knowledge and skills needed to successfully manage organizations in an ever-changing business environment. The MBA program imparts the conceptual understanding and application of problem-solving tools contained in basic business disciplines, including accounting, economics, data analysis, finance, management, leadership, and marketing. In addition, students are equipped with the skills needed for effective team-building, quantitative and qualitative decision-making, and creative problem-solving. To ensure that MBA program meets the needs of today's leaders and managers, the program is dedicated to the following 5 themes:

1. Relevance  
The Program has been designed based on the demands in both domestic and global market place.
2. Accessibility and Support

Program is available to students both online and onsite. Upon admission to the MBA program students will be assigned to a faculty advisor to assist them throughout the program in making appropriate decisions about educational and career-related issues.

3. Specialization  
Students may design their degree as a general business program or may choose to specialize in a particular discipline.
4. Application  
The MBA program imparts the conceptual understanding and application of problem-solving tools contained in basic business disciplines. It also addresses the interests of the stakeholders of an enterprise and of the communities in which the enterprise is operating.
5. Technology  
In order to fulfill the learning outcomes, classes will integrate current technology in traditional onsite classes as well as in web-enhanced online classes.

#### Contact the Faculty Advisor

All students are advised to contact the Faculty Advisor for a brief visit by phone or in person for the purpose of reviewing the student's career objectives and providing guidance regarding the courses and/or specialization to be selected.

#### MBA Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MBA transition program requirements described in the catalog must complete a minimum of 49.5 quarter units for their MBA degree. The number of units required for the MBA program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

#### Basic English and Math Skills

It is strongly recommended that students who are unsure about having adequate English writing or Math skills take one or both one-hour Accuplacer tests to determine their level of competency. If below the minimum level needed to be comfortable and ensure success in the MBA program, students should seriously consider enrolling in appropriate writing skill courses. If a student has already taken the GRE or GMAT, a score of at least of 480 (verbal) and 570 (quantitative) on the GRE or a score of at least 550 on the GMAT indicates adequate proficiency.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Subject Knowledge - Synthesize information from functional areas within an organization, such as operations, finance, accounting, management, and marketing, as they support decision-making processes throughout an organization.
- Strategic Planning - Evaluate the financial position of an enterprise and plan the use of its financial resources to achieve its objectives.
- Problem Solving - Apply the basic theories of leadership, economics, and business statistics to solving business problems and taking advantage of business opportunities
- Leadership and Governance - Formulate the appropriate business policies and strategies within an environment of change to meet the objectives of the organization's stakeholders.
- Technology - Utilize current methodologies, systems and technology in order to plan, execute and implement the strategies needed for effective management.
- Globalization and Cultural Awareness - Assess the risk and opportunities associated with operating within multi-cultural, global business environment.
- Communication and Presentation - Demonstrate effective written communication and oral presentation skills in a collaborative, problem-solving setting.
- Diversity and Ethics - Assess and manage ethical issues and multicultural diversity.
- Critical Thinking - Examine information, ideas, belief, problems or arguments through an intellectual process that judges relevance, clarity, accuracy, and importance.

## Degree Requirements

(16-19 courses; 63-76.5 quarter units)

To receive an MBA degree, students must complete at least 63 quarter units of graduate credit. A total of 13.5 quarter units of equivalent graduate work may be granted if completed with a grade of "B" or better (3.0 GPA) at another regionally accredited institution as it applies to this degree and provided the units were not used in earning another advanced degree. Please refer to the section on graduate admission procedures for specific information regarding application, evaluation, and the course waiver process.

### Self-Paced Foundation Course (optional)

The following non-credit, self-paced, and self-study course is offered online, free of charge to registered MBA students.

BUS 500A Intermediate Algebra (0 quarter units)

### Two-Week Foundation Courses (Required)

(2 courses; 4.5 quarter units - no graduate level credit granted)

The following two foundation courses are required for all MBA students, but may be waived if a score of 80 percent or above is achieved on a challenge exam. Rather than being self-study and self-paced, these courses are scheduled in normal fashion with qualified instructors. Each is two weeks long: ACC 501 is offered in the first two weeks of an academic month and FIN 501 is offered in the second two weeks. The two courses are offered online and at certain onsite campus locations. Grading is "S" for Satisfactory or "U" for Unsatisfactory. Although these courses are prerequisites for certain core courses and, do not provide academic credit, they have substantial content that is not covered in the related core courses and therefore must be successfully completed or waived by achieving a score of 80% on a challenge exam.

ACC 501\* Accounting Fundamentals  
(1.5 quarter units)

FIN 501 Finance Fundamentals  
(3 quarter units)

*Prerequisite: ACC 501 or ACC 201*

\* Students who have an undergraduate or graduate degree in accountancy are waived of ACC 501. Students who have recently taken a basic course in accounting such as ACC 201 or ACC 601M should consider taking the challenge exam.

### Module I - Tools for Problem-Solving\*

(Core requirements)

(8 courses; 36 quarter units)

MGT 605 Organization Mgmt & Leadership

MKT 602 Marketing Management

MGT 608 Managerial Support systems

MNS 601 Statistics for Business

ECO 607\*\* Economics for Managerial Decis

*Recommended: Prior completion of: BUS 500A*

ACC 604\*\*\* Managerial Accounting

*Prerequisite: ACC 501*

FIN 609A Seminar in Financial Managemen

*Prerequisite: FIN 310, or FIN 501*

ECO 602 Global Context of Business

\*Up to three of the eight Module I courses may be waived by a student who has taken an undergraduate course in a similar subject and can demonstrate sufficient knowledge retention by achieving a score of 84 percent or above on a graduate level challenge exam.

Students may then make up the quarter units needed to meet the 63 quarter units required for the degree by taking an additional graduate level course offered by the School of Business and Management. The fifth course of a five-course specialization would also provide the required quarter units.

\*\* It is strongly recommended that students take BUS500A

\*\*\* Students who successfully complete both ACC630M and ACC631M are waived of ACC604 but must replace the quarter units by taking a graduate level

course offered by the School of Business and Management

### Module II - Application and Integration

(2 courses; 9 quarter units)

Prerequisites: All Module I courses must be completed before taking either of the Module II courses

MGT 602 Strategic Decision-Making

MGT 652 Business Simulation

*Prerequisite: MGT 602*

*MGT652 is a simulation of strategic decision-making, and a thorough knowledge of business strategy theory and models is required to participate productively in this simulation.*

### General Electives

(4 courses; 18 quarter units)

Students may select any graduate courses offered by the School of Business and Management, including BUS 691 Internship Project. As an alternative, students may enroll in an Area of Specialization (see below). Some of the specializations require five rather than four courses. The fifth course is the capstone for the area of specialization that can be used to replace MGT 652 in the Module II. Also, if a student can successfully challenge one of the Module I courses (with approval of the Lead Faculty), the fifth specialization course can be used to replace the quarter units of the waived course.

MGT 601M Principles of Management

LED 601 Ethics and Classic Theories

BKM 600 Knowledge Mgmt for Bus Strateg

IBU 540 International Experience

MGT 625 Managerial Communication

### MBA SPECIALIZATION

#### Requirements for Specialization

(4-7 courses; 18-31.5 quarter units)

In lieu of general electives, students can choose an Area of Specialization. In order to graduate with a specialization, students must complete all courses specified in the desired area in addition to all Module I and Module II requirements except the area of specializations that have a capstone course. In that case students are required to take only MGT602 in the Module II. Students must take at least three fourths of the courses in the area of specialization while in residence.

#### ▲ Specialization in Financial Management

*Faculty Advisor: Gurdeep Chawla; (408) 236-1138; gchawla@nu.edu*

The field of finance has undergone great changes in the last decade and now represents one of the most dynamic activities within companies of all sizes, as well as within nonprofit and governmental organizations. Executives with a background in finance head about one out of every three corporations today.

The financial management program is designed to provide both a sound theoretical and a conceptual framework for financial managers. Special emphasis is placed on growth and diversification policies, evaluation and management of securities portfolios, investment banking and merger strategies, analysis of foreign exchange rate movements, formulation of plans to reduce foreign exchange risk exposure and case and/or research projects dealing with contemporary financial issues.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the financial condition of the company and recommend the proper course of actions.
- Evaluate the capital structure of the company and the impact of that on the raising capital.
- Appraise securities portfolios and investment proposal and evaluate the relationship among the returns for foreign and domestic investment instruments.
- Assess foreign exchange risk and evaluate the exchange rate systems used by the various governments and the governments' intervention in the

foreign exchange markets.

- Evaluate methods of payments for international trade and common trade financing methods.

### Program Requirements

(5 courses; 22.5 quarter units)

FIN 610 Topics in Financial Management  
*Prerequisite: FIN 609A*

FIN 631 Security Analysis & Portfolio  
*Prerequisite: FIN 609A*

FIN 635 International Finance  
*Prerequisite: FIN 609A*

FIN 674 Managing Financial Institution  
*Prerequisite: FIN 609A*

FIN 655 Finance Research Project  
*Prerequisite: FIN 609A, and minimum of 36 quarter units of core courses*

### ▲ Specialization in Human Resource Management

*Faculty Advisor: Bernadette Baum; (619) 563-7287; bbaum@nu.edu*

This area of specialization focuses on managing people, the human resource of the organization. Moving beyond common sense and good interpersonal skills, these courses provide students with the knowledge to recruit, select, train, evaluate and compensate employees. Students learn how changes in the workplace, such as governmental regulations, global competition, developing technologies and organizational transformations, influence the performance and productivity of workers. Technical knowledge and practical skills for dealing with a multicultural workforce offer students new ideas on leadership and effective tools for managing human resource.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Recognize, analyze, and effectively address ethical, legal and safety challenges faced in the workplace, and develop methods designed to prevent employer liability.

### Program Requirements

(4 courses; 18 quarter units)

HRM 660 Theory & Practice of HRM

HRM 630 Legal, Ethical & Safety Issues

HRM 637 Workforce Plan, Dev & Outsource

HRM 667 Compensation & Benefits

### ▲ Specialization in Integrated Marketing Communication

*Faculty Advisor: Susan Silverstone; (619) 563-7312; ssilvers@nu.edu*

This specialization prepares students to take leadership roles in the management and control of marketing messages within and beyond their organizations. Building on the foundation developed in the core classes, courses in this sequence provide learners with essential skills in the marketing communication process. Students gain mastery in conceiving, planning and distributing integrated marketing content for traditional and new media channels, including blogs, social networks and mobile media. They also learn essential quantitative research skills that enable them to evaluate the effectiveness of communication campaigns. Through

coursework and a capstone project, graduates are prepared to fulfill management responsibilities for commercial and nonprofit marketing efforts, including advertising, public relations, fundraising, and other campaigns.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critique integrated marketing communication campaigns by writing analysis paper.
- Conceive integrated marketing communication plans.
- Produce marketing communication messages.
- Create media mix plans that specify content dissemination channels.
- Evaluate effectiveness and return-on investment of communication campaigns.

### Program Requirements

(4 courses; 18 quarter units)

COM 610 Integrated Marketing Comm

COM 615 Research Methods

COM 630 Campaign & Program Evaluation  
*Prerequisite: COM 610, COM 615*

COM 660 Capstone Project

### ▲ Specialization in International Business

*Faculty Advisor: Juan Espana; (619) 563-7294; jespansa@nu.edu*

Business activities have an increasingly global reach. Successful business professionals must have a thorough knowledge of international business environments and be able to operate within individual foreign markets.

In this specialization students have the option to travel to foreign locations where, under the guidance of National University professors, they attend lectures, visit universities, factories and cultural sites, thus achieving full immersion in a foreign environment such as China, Mexico, etc.

Specific issues covered in this specialization include cultural, economic and legal issues, as well as exporting, franchising, licensing, foreign direct investment and outsourcing. Students develop skills in areas such as international risk analysis, international human capital development, international communication, site selection, matching markets, and products/services, etc.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and analyze the factors that shape the international business environment.
- Examine the main differences between domestic and international operations of companies and the implications for functional areas such as human resource management, marketing, R&D, manufacturing, logistics, etc.
- Determine the best approach to enter individual foreign markets based on the selection of appropriate entry modes and competitive strategies.
- Perform in-depth quantitative and qualitative analysis of foreign markets and countries
- Assess the relative attractiveness of foreign markets based on a systematic appraisal of relevant quantitative and other data.

### Program Requirements

(4 courses; 18 quarter units)

Student should choose 4 courses from the following:

MGT 630 Global Business Environment

MGT 637 Comparative Int'l Management

MGT 680 Topics in Int'l Business

IBU 653 Global Bus. & Strat. Planning

IBU 540 International Experience

### ▲ Specialization in Management Accounting

Faculty Advisor: *Russell Parkman*; (619) 563-7299; [rparkman@nu.edu](mailto:rparkman@nu.edu)

Designed for students who wish to prepare for entry into the corporate, not-for-profit, or government sector of the accounting profession, and may be considering candidacy for the Certified Management Accountant (CMA) designation.

Students wishing to prepare for the Certified Public Accountant (CPA) certification should consider the BS in Accountancy or Master of Accountancy program which provide the broader and more in-depth preparation, including income taxes and auditing, needed for the CPA Exam. (CPA Exam candidates in California must have completed 24 semester units (36 quarter units) in accounting or tax courses and 24 semester units (36 quarter units) in business courses which include business law, mathematics, statistics, computer science, and information systems.)

Before taking any of the courses in the Specialization in Management Accounting, students are strongly advised to contact the Faculty Advisor or other member of the accounting faculty for a brief phone interview to review the student's career objectives.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Record and properly categorize common business transactions, make appropriate adjusting journal entries as needed, and prepare financial statements in accordance with U.S. accounting standards.
- Analyze cost and managerial accounting data and other qualitative information to prepare reports for external and internal users.
- Measure, analyze, and report accounting information of governmental and not-for-profit entities.
- Measure, analyze, and report accounting information for business entities.
- Integrate and utilize current information technologies, methodologies, and systems to plan, implement, execute, and analyze performance of the organization and its resources.

#### Program Requirements

(7 courses; 31.5 quarter units)

To receive an MBA with Specialization in Management Accounting, students must complete the following seven courses. Note that ACC604 is waived for students who complete both ACC630M and ACC631M. Additional graduate accounting courses can be used to replace ACC601M and/or any of the Module I courses that have been waived by challenge exam.

ACC 601M\* Foundations of Financial Acc

ACC 630M Cost Accounting  
*Prerequisite: ACC 601M*

ACC 631M Advanced Managerial Accounting  
*Prerequisite: ACC 630M*

ACC 657 Accounting Information Systems  
*Prerequisite: ACC 601M*

ACC 640M Acc for Gov't & NFP Entities  
*Prerequisite: ACC 601M*

ACC 610M Financial Accounting I  
*Prerequisite: ACC 601M*

ACC 611M Financial Accounting II  
*Prerequisite: ACC 610M*

\* This course can only be waived by students who have taken a similar college level course and can demonstrate sufficient knowledge retention by achieving a score of 84 percent or above on a challenge exam

### ▲ Specialization in Marketing

Faculty Advisor: *Mary Beth McCabe*; (619) 563-7316; [mmccabe@nu.edu](mailto:mmccabe@nu.edu)

The Marketing specialization allows students to gain an understanding of how marketing relates to all the other functions of a business and how to integrate marketing into everything the business does. The Marketing pathway aims to promote a comprehensive understanding of the role of marketing management in consumer, industrial markets and service industries in addition to developing

problem-solving and decision-making capabilities in these fields. Marketing concepts provide valuable insights into the various exchange processes involved in consumer, business-to-business, and non-profit settings, around the globe. The purpose of this is to develop a critical and analytical approach to marketing managers' tasks within the context of the organization as a whole.

Students interested in the marketing specialization should be curious about why customers buy what they do and how product development, branding, pricing, and other elements of the marketing mix affect consumer choices. Beyond the first-core marketing management class as part of general MBA program, specialization students are required to take market research, consumer behavior, global marketing, strategic operational marketing and marketing practicum (capstone). Marketing practicum is an integrative course and the capstone for the specialization. The principal outcome of the capstone course will be the completion of a project to integrate various functional areas of marketing. After completing the Marketing AOS---students are expected to develop knowledge, understanding, and cognitive, intellectual, practical and transferable marketing skills.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluation of marketing opportunities and developing successful strategies.
- Synthesis of varying marketing, operations, personnel and financial initiatives.
- Analysis and positioning of a brand and building equity.
- Application of classic and leading-edge marketing principals and theories.
- Understanding of an in-depth knowledge and specific tools derived from the modern marketing world.

#### Program Requirements

(4 courses; 18 quarter units)

MKT 620 Consumer Behavior  
*Prerequisite: MKT 602*

MKT 631 Global Marketing  
*Prerequisite: MKT 602*

MKT 634 Market Research  
*Prerequisite: MKT 602*

MKT 660 Strategic Operational Marketin  
*Prerequisite: MKT 602 MKT 620 MKT 631 and MKT 634*

### ▲ Specialization in Mobile Marketing and Social Media

Faculty Advisor: *Mary Beth McCabe*; (619) 563-7316; [mmccabe@nu.edu](mailto:mmccabe@nu.edu)

The Specialization in Mobile Marketing and Social Media academically prepares MBA students for a range of marketing-related careers, including: mobile marketing managers, project managers, digital brand managers, social media managers, community managers, entrepreneurs, and job opportunities with agencies and related service businesses as well as the public sector such as local, city, regional and national government and non-profit organizations. The specialization in the MBA is designed for students with some, little or no marketing experience with an undergraduate degree in any discipline. Upon completion of the specialization, students will be able to direct content, mobile and social media strategy across an enterprise, large or small. This includes building brand awareness through online channels, interfacing with customers and customer relationship management (CRM) systems, internal partners and vendors, the integration of community elements on and off the organization's website, mobile and social monetization and collaborating with related departments within the organization to execute on key initiatives. Students who complete this specialization will be equipped to lead others in their organizations, providing expert support in mobile marketing and social media related activities to company and vendor partners. Course content is based upon the most current successful marketing business practices and ethical behaviors. A global approach to understanding the turbulent changes in the marketplace and how that affects businesses' products and services is included in the curriculum.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and assess mobile marketing and social media strategies for a business.
- Apply ethical behavior and legal knowledge of mobile marketing and social media.

- Integrate the 3 C's: Communication, Content, and Commerce using current cases in mobile marketing and social media.
- Develop marketing strategies to plan the three M's: Monitoring, Measurement, and Metrics.
- Utilize mobile marketing and social media marketing principles and procedures applicable to business, governmental, and not-for-profit entities.
- Create strategic plans using mobile marketing and social media and develop, implement and evaluate their effectiveness for products or services in a global marketplace.
- Create and present a mobile marketing and social media plan for an existing company in both written and oral forms to faculty, industry experts and classmates.

### Core Requirements

(5 courses; 22.5 quarter units)

MKT 651	Mobile Marketing
MKT 652	Adv Mobile Mkt Strategies <i>Prerequisite: MKT 651</i>
MKT 653	Social Media
MKT 654	Adv Social Media for MKT <i>Prerequisite: MKT 653</i>
MKT 655	Mobile MKT SocialMedia Project <i>Prerequisite: MKT 654, MKT 652</i>

### ▲ Specialization in Organizational Leadership

*Faculty Advisor: Julia Buchanan; (619) 563-7289; jbuchanan@u.edu*

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, change-oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-for profit organizations.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches for exercising leadership to promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of innovation, adaptation, and orchestrating conflict.
- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and global environment that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority, power, the practice of leadership, and utilize frameworks that serve organizational purposes.

### Program Requirements

(4 courses; 18 quarter units)

LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics

### ▲ Specialization in Professional Golf Management

*Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu*

Responding to one of the fastest growing recreational sports industries, the specialization in Professional Golf Management will focus upon the core competencies of Turfscience and Sustainability Systems, Marketing and Profitability in the Golf Industry, General Management, and the Business and Practice of Instruction.

These core competencies will focus upon how the golf industry increasingly recognizes the importance of sound managerial skills, profitability, sustainability, the ability to match a facility mission with the marketplace, and team building in the successful operation of a private, public, resort, or municipal facility. Students assess how changes in the industry and workplace influence productivity and performance, and develop technical knowledge and practical skills for dealing with a changing work environment and multicultural workforce. Students will gain practical knowledge and skills on leadership and effective tools for managing human resources.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply fundamental business activities, theoretical and practical, related to golf management;
- Appraise ethical issues as they apply to cross-functional management activities in the golf industry;
- Select current and emerging trends in the golf industry and apply issues related to marketing, branding, finance, sustainability, and the evolving customer base;
- Defend the importance of diversity and multiculturalism in the global golf industry;
- Prepares graduate-level written work in golf management and demonstrates appropriate oral and written communication skills in the presentation of graduate-level work;
- Perform analytical and critical thinking skills in appraising the complex network of challenges and opportunities associated with the golf industry.

### Program Requirements

(5 courses; 22 quarter units)

PGM 600	General Management
PGM 610	Turfscience and Sustainability
PGM 620	The Business of Instruction
PGM 630	Marketing and Profitability
PGM 690	PGM Project

### MASTER OF GLOBAL MANAGEMENT

*Faculty Advisor: Richard Weaver; (619) 563-7314; rweaver@nu.edu*

The Master of Global Management is appropriate for students currently or intending to be working in organizations which operate internationally or impacted by international organizations. Through a series of relevant business courses, students are prepared to apply program content to improve decision-making skills to become more effective managers.

This program is especially helpful to those who have been or expect to be promoted from more technical fields into management positions. The program integrates many aspects of management to prepare graduates to identify work to be completed and how to engage others in the completion of this work.

### The Bachelor of Arts in Management / Master of Global Management (BAM/MGM) Transition Program

The Bachelor of Arts in Management/Master of Global Management (BAM/MGM) Transition Program allows currently enrolled BAM students with a cumulative grade point average of at least a 3.0, who are within completing their last six courses, to register for two MGM courses as electives for their BAM degree. Students can take the following two courses: MGT601M and MGT630. The number of additional courses to complete to earn the MGM is reduced from 13 to 11 courses. To be eligible for the Transition Program, students must apply for the MGM and begin their program of study within six months after completing their final BAM course. Students must complete the 13-course MGM program (including the two courses in the Transition Program) within four years with no break exceeding 12 months. Students must complete graduate-level course work taken as part of the BAM degree with a grade of B or better. The course work will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program.



## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define problems, use program concepts to frame analysis, generate conclusions from analysis, and make recommendations for positive action.
- Select the most effective managerial alternative after considering the influences of principles of organizational behavior, communication, and motivation.
- Anticipate the impact of cultural similarities and differences on interpersonal and intergroup dynamics.
- Predict forces impacting an organization that arise from global origins.
- Choose the most appropriate action to solve managerial challenges through the application of the steps of planning, organizing, and controlling.
- Recognize ethical dilemmas and make appropriate managerial choices in a context of organizational social responsibility.

## Degree Requirements

To receive a Master of Global Management, students must complete at least 58.5 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

## Core Requirements

(13 courses; 58.5 quarter units)

MGT 601M	Principles of Management
MGT 630	Global Business Environment
MGT 625	Managerial Communication
ODV 600	Theory & Practice of OD
FIN 600	Finance for Non-Financial Mgrs
SOC 604	Culture and Socialization
MKT 602	Marketing Management
MGT 603	Business Operations Management
MGT 604	Project and Program Management
MGT 606	Service Management
MGT 607	Performance Management
MGT 637	Comparative Int'l Management
MGT 612	Global Strategic Project

## Graduate Elective Option

(1 course; 4.5 quarter units)

Students may choose to use the below course in place of one of these core courses: SOC604, MKT631, or MGT637. Students desiring this option must notify their advisor when scheduling the IBU540 class so appropriate notation can be made in the record for graduation.

IBU 540	International Experience
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## ■ MASTER OF SCIENCE IN MANAGEMENT INFORMATION SYSTEMS

Faculty Advisor: Farnaz Sharifrazi; (619) 563-7311; fsharifrazi@nu.edu

Faculty Advisor: Rell Snyder; (714) 429-5282; rsnyder@nu.edu

The Master of Science in Management Information Systems (MSMIS) program is designed to provide students with the requisite management, business, strategic, and technical skills needed to help them apply information systems technology more efficiently and effectively. The MSMIS program's objective is to close this gap by providing the needed education and career development foundations, including oral, written, and presentation skills; technical skills; people and business skills; and ethics and professionalism, which are integrated throughout its individual courses. The curriculum is designed as a set of interrelated building blocks consisting of foundations, core, integration, and career tracks.

## Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree. This program is designed to offer information systems expertise to those from various education backgrounds. Enrolling students must have an undergraduate degree in information systems, information technology, computer science, or software engineering, business or must have approval of the lead faculty and have some background in business and technology.

## Transition program

National University students who completed a transition program as part of their BSIS or BSITM undergraduate degree and who satisfy MSMIS transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSMIS degree. The number of units required for the MSMIS program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use analytical and critical thinking skills to develop organizational project management strategies and strategic solutions for information system processes.
- Perform systems analysis that addresses requirements among information systems technology, people and organizational goals.
- Evaluate current and emerging systems integration and distributed computing alternatives to maximize efficiencies and meet organizational goals.
- Develop decision support system solutions inclusive of knowledge based systems, expert systems and artificial intelligence.
- Illustrate managerial principles and applications of networking and telecommunications.
- Communicate and advise organizations using written and oral skills required for IS professionals.
- Integrate legal, ethical, and global implications in decision making processes.

## Degree Requirements

To receive a Master of Science in Management Information Systems, student must complete 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate work completed at another regionally accredited institution may be transferred to meet stated requirements in the program provided those units were not used in earning another advanced degree. The degree program consists of ten courses plus the two-part MSMIS graduate project (two courses; 4.5 quarter units each) that cannot be taken until all other core courses have been completed or by approval of the lead faculty.

## Core Requirements

(12 courses; 54 quarter units)

CIS 601	Information Systems Strategies
CIS 602	Network Services & Protocols <i>Prerequisite: CIS 601</i>
DAT 604	Database Design and Impl.
CIS 604	Management and Security <i>Prerequisite: CIS 601</i>
LED 606	Information Mgmt for Leaders
MGT 604	Project and Program Management
BKM 600	Knowledge Mgmt for Bus Strateg
BKM 610	Managerial Sup Syst, DSS & ESS
TMG 625	Systems Analysis and Design
CIS 607	Systems Integration <i>Prerequisite: CIS 601</i>
CIS 620A	Master's Research Project I <i>Prerequisite: All core requirements with a GPA of 3.0 approval of lead faculty.</i>
CIS 620B	Master's Research Project II <i>Prerequisite: CIS 620A</i>

## ■ MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP

Faculty Advisor: Julia Buchanan; (619) 563-7289; jbuchanan@nu.edu

The mission of the Master of Science in Organizational Leadership (MSOL) program is to prepare diverse learners to become effective, change-oriented leaders in an international society. The program uses distinctive and challenging curriculum that integrates theory with practice, personal success with service to others, and information technology with creativity, empathy, and democracy.

The Master of Science in Organizational Leadership program prepares individuals from a wide variety of backgrounds and interests into change-oriented leaders. As every industry and profession needs effective and ethical leadership, employers are increasingly targeting candidates that possess the capacity to take initiative, build and cultivate strong teams, orchestrate conflict, and promote innovation to serve organizational purposes. Using a collaborative, integral and holistic approach, this degree builds the skill set to think critically and analytically, learn communication skills that serve a diverse population, and develop the ability to lead change in increasingly global/complex environments. Drawing from work/life experiences, students will learn to frame problems, use systems thinking and plan strategic interventions. Students will acquire knowledge, skills and abilities through experiential learning and critical analysis.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches to exercising leadership in order to harness collective talent, promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of orchestrating conflict, creating innovation, and adaptation.
- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and/or global arena that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority or power and the understanding of leadership and be able to apply diverse leadership skills, utilize frameworks in order to serve organizational purposes.
- Utilize emerging technology, presentation skills and communication both in face to face and virtual environments.
- Utilize dialogue and other forms of inquiry with groups and teams in order to create collective problem solving and strategic plans.
- Create frameworks to determine how decisions made might impact ethical culture, support sustainability practices and serve the organizational purpose.
- Identify quality scholarship and research and demonstrate the potential application of emerging leadership theory and knowledge to real world scenarios and simulations.
- Integrate knowledge and skills from multiple disciplines in order to utilize critical thinking, synthesize information, manage conflict, and create collective problem solving capacity.

### Degree Requirements

(12-14 courses; 54-63 quarter units)

To receive a Master of Science in Organizational Leadership, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission procedures for specific information regarding application and evaluation.

### Core Requirements

(10 courses; 45 quarter units)

LED 601	Ethics and Classic Theories
LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics
LED 610	Analysis and Decision Making

LED 615	Consulting and Assessments
LED 620	World View & Adult Development
LED 680	Leadership Research <i>Prerequisite: LED 601, LED 602</i>
LED 690	Capstone Project <i>Prerequisite: 5 LED courses</i>

### Program Elective

(2 courses; 9 quarter units)

Each student must complete two graduate courses from the School of Business and Management to meet the elective requirement. In lieu of general electives, students can choose to take the Area of Specialization in Community Development. Students must complete all four courses specified in the Specialization.

## ▲ Specialization in Community Development

Faculty Advisor: Julia Buchanan; (619) 563-7289; jbuchanan@nu.edu

The Area of Specialization in Community Development is designed for aspiring change agents and leaders, working in social transformation and community development. In order to prepare leaders to analyze community development projects and practices from within systemic, holistic, and sustainable perspectives, students will be prepared to frame issues and integrate cultural differences within diverse populations. This program is tied to real-world needs, and promotes a constant emphasis on the interplay between theory, reflection, and practice. An Area of Specialization in Community Development is ideal for individuals who desire to develop the understanding of the dynamics of power, politics, and resources in a social transformation and community development context.

The objective of this program is to equip leaders with the ability to become:

1. Scholars with sensitivity and expertise at observing and interpreting culture and community dynamics.
2. Innovators who can develop and implement culturally responsive programs that address social issues.
3. Critical thinkers able to evaluate approaches to meeting the needs of communities.
4. Leaders who inspire with life-changing compassion and transformative vision.

This program will be useful in many areas including the following:

Non-profit organizations, Advocacy groups, Community organizing, Corporate and private foundations, Public education and public health, Environmental organizations, Economic development, Grassroots and Arts organizations, Religious communities, Tribal organizations

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critically analyze social transformation and community development cases and practices from within systemic, holistic, and sustainable perspectives.
- Examine the origins and contemporary implications of cultural differences effecting community environments, and develop intervention methods into diverse cultural contexts.
- Recognize and analyze their own behavior within the dynamics of power, politics, and resources in community development contexts.

### Degree Requirements

This AOS requires that students fulfill the degree requirements for the Master of Science in Organizational Leadership (10 courses, 2 electives) and these required 4 courses. Students can use 2 required electives for this specialization, and then are required to take 2 additional courses.

### Program Requirements

(4 courses; 18 quarter units)

SCD 600	Global Development
SCD 610	Human Environments
SCD 630	Culture and Change
SCD 680	Planning and Evaluation

## ■ MASTER OF SCIENCE IN SUSTAINABILITY MANAGEMENT

Faculty Advisor: Nelson Altamirano; (619) 563-7286; naltamirano@nu.edu

Faculty Advisor: Bangalore Radhakrishnan; (858) 309-3423; bradhakrishnan@nu.edu

This blended program prepares students for the industrial revolution of the 21st century. There is no doubt that we need to re-think our way of living, producing and consuming in order to eliminate the current contradictions between the natural world, the community and the profitability of businesses. In fact, many corporations, cities, states and countries are introducing new policies and programs from an emphasis on pollution control to pollution prevention to sustainable practices. Sustainability in the sense that programs do incorporate all social, ecological and economic conditions, as well as, the general principle of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.

This program is designed to provide methods and theories appropriate to the study of sustainability from business perspectives to practical engineering. After a comprehensive interdisciplinary introduction to sustainability, students are exposed to managerial key ideas and practices with sustainable perspectives: risk assessment, life cycle, lean supply chain, firm excellence and innovation. Students are also exposed to combine engineering and sustainability concepts into the management practices of energy, environment, watershed and buildings. The strength of the program comes from its engineering and management blended nature, as well as its theoretical and practical approach.

### Career Tracks

After completing the MS in Sustainability Management degree, students can enter the job market or pursue further higher educational degrees. Possible types of jobs include: Project Manager, Sustainability Manager, Sustainability Analyst, Sustainable Design Professional, Engineer, Environmental Consultant, Sustainability Consultant, Energy Efficiency Analyst, Operations Manager, Development Specialist, Resource Manager, etc. Students interested in continuing their educational careers can pursue doctoral degrees in sustainability, management, sustainable development, natural resources and sustainability, or other related doctoral degrees.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply scientific knowledge and methods required to evaluate sustainability concepts and systems.
- Design, manufacture, and manage processes in an environmentally conducive manner.
- Analyze engineering and management problems in their social and environmental context.
- Develop economic, environmental, and social sound sustainable decisions.
- Evaluate the impact of products, processes, and activities through life cycle assessment.
- Develop written communication skills required for this profession.
- Demonstrate professional, legal, and ethical responsibility in decision making practices.

### Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Sustainability Management, students must complete 49.5 quarter units of graduate level credit. A total of 9.0 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and evaluation.

### Program Prerequisites

(1 course; 4.5 quarter units)

Candidates for the program must possess a Bachelor's degree in engineering, engineering technology, sciences, business, management or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission is based on

relevant experience and the completion of the following program prerequisite:

CSC 220\* Applied Probability & Stats.  
Prerequisite: MTH 215

\* This course may be waived if its equivalent has been completed at the undergraduate level with a grade of "C" or better.

### Core Requirements

(11 courses; 49.5 quarter units)

SUS 601	Introduction to Sustainability
SUS 602	Enterprise Excellence Prerequisite: CSC 220 or permission from lead faculty.
SUS 603	Sustainable Innovation
SEM 604	Life Cycle and Risk Assessment
SEM 605	Energy Management
SEM 606	Environmental Management
SEM 607	Watershed Management
SEM 608	Sustainable Buildings
SUS 604	Sustainable Supply Chain
SEM 610A	Project I Prerequisite: SUS 601, SUS 602, SUS 603, SEM 604, SUS 604, SEM 605, SEM 606, SEM 607, SEM 608
SEM 610B	Project II Prerequisite: SEM 610A

## UNDERGRADUATE CERTIFICATES

### ● UNDERGRADUATE CERTIFICATE IN ACCOUNTANCY

Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu

Designed for students who wish to prepare for entry into the accounting profession and may be considering one of the recognized professional accounting designations other than the Certified Public Accountant (CPA). CPA Exam candidates should consider the BS in Accountancy or Master in Accountancy which provide much greater in-depth preparation for the CPA Exam. CPA Exam candidates in California must have completed 24 semester units (36 quarter units) in accounting or tax and 24 semester units (36 quarter units) in business which includes business law, mathematics, statistics, computer science, and information systems.

Students who wish to pursue a baccalaureate degree, a second baccalaureate degree, or a master's degree can apply some or all of the academic credits awarded in the certificate program toward that degree, depending upon its requirements and providing the coursework taken is at the same level as the degree program.

Before taking any of the courses in the Certificate in Accountancy program, students are strongly advised to contact a full-time accounting faculty member for a brief interview to review the student's career objectives and provide guidance as to the courses to be selected.

### Certificate Prerequisite

(1 course; 4.5 quarter units)

Available to both undergraduate and graduate students.

(Before taking any other accounting courses in this program, students must complete ACC 201 or its equivalent within two years with a grade of C or better, unless they receive an equivalent grade on an accounting aptitude exam.)

ACC 201 Financial Accounting Funds.

### Certificate Requirements

(6 courses; 27 quarter units)

To receive a Certificate in Accountancy, students must complete any six undergraduate courses with the prefix ACC for which the required prerequisite has been successfully completed. It is strongly recommended that students consult with full-time accounting faculty before enrolling in the Certificate in Accountancy.

## ● UNDERGRADUATE CERTIFICATE IN BASIC SALES AND MARKETING

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmcabe@nu.edu

This program encompasses the foundations of the most important areas in sales and marketing including the fundamentals, advertising, consumer behavior and personal selling. Students will obtain valuable knowledge and skills in marketing and customer service to pursue entry and mid-level positions in a wide range of fields and industries.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend the various elements of the sales and marketing fields and apply them to real-life situations.
- Describe how the Internet is changing marketing for all businesses.
- Identify market segments and target markets.
- Comprehend the basic marketing concepts and the four P's: Price, Promotion, Place and Product.
- Recognize the importance of understanding customer needs and expectations as well as customer service.
- Distinguish the key components of advertising and their impact to the business.
- Demonstrate the ability to use on-line resources to research and prepare written and oral assignments

### Certificate Requirements

(4 courses; 18 quarter units)

MKT 200	Basic Marketing
MKT 210	Intro to Consumer Behavior <i>Prerequisite: MKT 200</i>
MKT 220	Intro to Personal Selling <i>Prerequisite: MKT 200</i>
MKT 230	Basic Advertising Concepts <i>Prerequisite: MKT 200</i>

## ● UNDERGRADUATE CERTIFICATE IN BASIC HUMAN RESOURCE MANAGEMENT

Faculty Advisor: Bernadette Baum; (619) 563-7287; bbaum@nu.edu

The Certificate in Basic Human Resource Management is designed to provide fundamental knowledge and skills for students seeking entry-level and supervisory positions in the field of human resource management. The program provides a basic knowledge of the foundations of managing human resources, including recruitment, selection, retention, compensation, development, and legal compliance in the workplace. The certificate program prepares students for expanded opportunities in diverse industries. Students will obtain valuable knowledge and skills in human resource management that will enable them to contribute to the ongoing process of attracting and retaining individuals who will assist in furthering an organization's interest in achieving its mission.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend the various functions of human resource management.
- Identify and describe the stages of the human resource planning process.
- Describe key issues in the motivation and compensation of employees.
- Explain human resource assessment as it relates to the mission of an organization.
- Recognize common concerns surrounding employer liability in the workplace.
- Interpret employment laws and explain their impact on an organization.
- Apply research techniques to the preparation of written assignments.

### Certificate Requirements

(4 courses; 18 quarter units)

HRM 200	Intro to Basic Human Resources
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HRM 210	Staffing and Development <i>Prerequisite: HRM 200</i>
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HRM 220	Compensating Employees <i>Prerequisite: HRM 200</i>
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HRM 230	Legal Aspects of Basic HRM <i>Prerequisite: HRM 200</i>
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## UNDERGRADUATE CERTIFICATE IN BASICS OF CASINO MANAGEMENT

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

Covering one of the fastest growing industries, the Basics in Casino Management Certificate will provide learners a fundamental understanding of the knowledge and skills required for successful transition into supervisory positions within their organizations, while presenting the content in a delivery format that is modeled by a constructivist methodology thereby providing a catalyst into the higher education arena for underrepresented learners.

The Basics in Casino Management courses focus upon common supervisory competencies found in fast-paced hospitality and casino organizations. A Basics in Casino Management certificate provides:

1. A broad-based core of supervisory competencies coupled with essential technology-oriented business functions,
2. An introductory understanding of the processes that enable specific business functions in the hospitality and casino industry, and
3. A grounding in applied academic fundamentals to include critical thinking, writing, and communication skills required in today's hospitality and casino industry.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify fundamental business activities, theoretical and practical, related to hospitality and casino management.
- Recognize ethical issues as they apply to cross-functional supervisory activities in the hospitality and casino industry.
- Identify current and emerging trends in the hospitality and casino industry as applied to Native American gaming institutions.
- Recognize the importance of diversity and multiculturalism in the hospitality and casino industry.
- Demonstrate undergraduate-level written communication skills.
- Demonstrate undergraduate-level oral communication and presentation skills.
- Apply analytical and critical thinking skills in interpreting the advantages and disadvantages of the gaming industry on tribal and community relations.

### Certificate Requirements

(6 courses; 27 quarter units)

HCM 200	Basic Accounting
HCM 210	Intro to Gaming Law <i>Prerequisite: HCM 200</i>
HCM 220	Intro to Casino Marketing <i>Prerequisite: HCM 200</i>
HCM 230	Hospitality Staffing <i>Prerequisite: HCM 200</i>
HCM 240	Hospitality Diversity <i>Prerequisite: HCM 200</i>
HCM 250	Tribal Community Dev <i>Prerequisite: HCM 200</i>

## UNDERGRADUATE CERTIFICATE IN FINANCE

Faculty Advisor: Gurdeep Chawla; (408) 236- 1138; gchawla@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met.

A certificate in Finance is designed for students who are interested in strengthening their business acumen, acquiring analytical skills, or supplementing their financial background. Career opportunities include three interrelated areas: financial institutions, investments, and financial management.

Expertise in finance is a sought after and unique skill. This certificate prepares students for managerial responsibilities in organizations such as banks, insurance companies, securities firms, commercial, and not-for-profit organizations. The four courses that comprise this certificate provide a broad yet comprehensive knowledge of financial management.

Upon successful completion, students will have acquired critical skills in the analysis of accounting, market, and economic data. This will prepare them for expanded opportunities in diverse industries.

#### Certificate Prerequisites

(5 courses; 22.5 quarter units)

ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
FIN 442	Investments <i>Prerequisite: FIN 310 and FIN 440</i>
FIN 443	Working Capital Management <i>Prerequisite: FIN 310</i>

#### Certificate Requirements

(4 courses; 18 quarter units)

FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
FIN 444	Risk Management & Insurance <i>Prerequisite: FIN 310</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 448	Seminar in Finance <i>Prerequisite: FIN 310, FIN 440, FIN 442, FIN 443, FIN 446</i>

### UNDERGRADUATE CERTIFICATE IN HOSPITALITY AND CASINO MANAGEMENT

*Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu*

This coursework and the accompanying credits may be transferred to the BBA programs if all other requirements for admission are met.

#### Certificate Requirements

(6 courses; 27 quarter units)

HCM 400	Princ of Hosp & Casino Acct
HCM 410	Hospitality and Gaming Law
HCM 420	Hospitality and Casino Mkt
HCM 430	Prin of Hosp & Casino Staffing
HCM 440	Cultural Diversity & Hosp Mgt
HCM 450	Native Am Tribal Comm Developm

### ● UNDERGRADUATE CERTIFICATE IN HUMAN RESOURCE MANAGEMENT

*Faculty Advisor: Bernadette Baum; (619) 563-7287; bbaum@nu.edu*

This certificate is designed for those who wish to gain the knowledge and skills in HRM which are appropriate for professional and supervisory careers in the field of human resource management.

#### Certificate Requirements

(4 courses; 18 quarter units)

HRM 409B	Survey in HRM & OD
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HRM 432	Recruit, Selection, Promo, Ret
HRM 433	Pay & Benefit Admin, & HR Tech
HRM 439	Legal, Reg, & Labor Relation C

### ● UNDERGRADUATE CERTIFICATE IN MARKETING

*Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu*

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met. To receive certification, students are required to successfully complete four courses and achieve a passing grade on a comprehensive test covering these four areas.

#### Certificate Requirements

(4 courses; 18 quarter units)

MKT 302A	Marketing Fundamentals
MKT 420	Principles of Consumer Behavior <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>

### ● GRADUATE CERTIFICATE IN ACCOUNTANCY

*Faculty Advisor: Russell Parkman; (619) 563-7299; rparkman@nu.edu*

The Certificate of Accountancy program is designed for students who wish to prepare for entry into the accounting profession and for employment opportunities in private, government, or not-for-profit entities. Those desiring to prepare for taking the CPA or CMA exams should consider the BS in Accountancy or Master of Accountancy programs. Students taking ACC630M and ACC631M need not take the ACC 604 in the MBA program.

#### Certificate Requirements

(6 courses; 27 quarter units)

Available to both undergraduate and graduate students. To receive a Certificate in Accountancy, students must complete the following six courses from the Master of Accountancy program courses for which the required prerequisite has been successfully completed.

ACC 657	Accounting Information Systems <i>Prerequisite: ACC 601M</i>
ACC 640M	Acc for Gov't & NFP Entities <i>Prerequisite: ACC 601M</i>
ACC 630M	Cost Accounting <i>Prerequisite: ACC 601M</i>
ACC 631M	Advanced Managerial Accounting <i>Prerequisite: ACC 630M</i>
ACC 610M	Financial Accounting I <i>Prerequisite: ACC 601M</i>
ACC 611M	Financial Accounting II <i>Prerequisite: ACC 610M</i>

### ● GRADUATE CERTIFICATE IN INTERNATIONAL BUSINESS

*Faculty Advisor: Juan Espana; (619) 563-7294; jespana@nu.edu*

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met.

This certificate program is designed for students who are either employed by a multinational company or interested in pursuing a career in international business. Expertise in this field is in high demand throughout the world. The four courses included in this certificate provide a comprehensive overview of trade principles and practices as well as a broad knowledge of global markets. Upon successful completion of this certificate, students will have developed skills enabling them to match markets with goods and services from a global perspective.

**Certificate Prerequisites**

(3 courses; 13.5 quarter units)

ECO 203 Principles of Microeconomics

MKT 302A Marketing Fundamentals

**or**

MKT 602 Marketing Management

ECO 630 Global Economic Geography  
*Prerequisite: ECO 607*

**Certificate Requirements**

(4 courses; 18 quarter units)

MGT 630 Global Business Environment

MGT 637 Comparative Int'l Management

MKT 631 Global Marketing  
*Prerequisite: MKT 602*

ECO 631 Global Trade Policy & Procedur  
*Prerequisite: ECO 607*



# SCHOOL OF EDUCATION

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Dean, Donald Chu  
Ph.D., Education, Stanford University

Associate Dean, Judy Mantle  
Ph.D., Education, University of Kansas

- 164 Degrees Offered**
- 165 Degrees Offered by Department**
- 166 Faculty**
- 169 Candidate Assistance Process**
- 169 Undergraduate Degree Programs**
- 180 Graduate Degree Programs**
- 196 Credentials**
- 207 Certificate Programs**





# DEGREE PROGRAMS OFFERED

## UNDERGRADUATE DEGREES

### Associate of Arts

with Majors in:

- Early Childhood Education
- School-Site Paraprofessional

### Bachelor of Arts

with Majors in:

- Early Childhood Development with a Preliminary Multiple Subject Teaching Credential (California)
- Early Childhood Education   
with Concentrations in:
  - » Early Childhood Administration
  - » Infant and Toddler
  - » Teacher Education
- English with a Preliminary Single Subject Credential (California)
- Health Sciences with a Preliminary Single Subject Credential (California)
- Interdisciplinary Studies with a Preliminary Multiple Subject Teaching Credential (California)   
with Concentrations in:
  - » STEM (Science, Technology, Engineering, Mathematics)
- Mathematics with a Preliminary Single Subject Teaching Credential (California)
- Social Science with a Preliminary Single Subject Credential (California)
- Spanish with a Preliminary Single Subject Teaching Credential (California)

## GRADUATE DEGREES

### Master of Arts

With fields of study in:

- Education  
with Specializations in:
  - » Best Practices
  - » Educational Technology
  - » e-Teaching and Learning
  - » Teacher Leadership
  - » Teaching and Learning in a Global Society
  - » Teaching Mathematics

### Teaching

with Specializations in:

- Applied Behavior Analysis
- Autism
- Best Practices
- e-Teaching and Learning
- Early Childhood Education
- Educational Technology
- National Board Certified Teacher Leadership

- Reading
- Special Education
- Teacher Leadership
- Teaching and Learning in a Global Society
- Teaching Mathematics

### Master of Education with a Preliminary Multiple or Single Subject Teaching Credential and Internship Option (California)

with Specializations in:

- Best Practices
- e-Teaching and Learning
- Educational Technology
- Teacher Leadership
- Teaching and Learning in a Global Society
- Teaching Mathematics

### Master of Science

with Fields of Study in:

- Applied School Leadership (in Partnership with COE) with Preliminary Administrative Services Credential Option
- Educational Administration
- Educational Counseling
- Educational and Instructional Technology
- Higher Education Administration
- Innovative School Leadership
- Instructional Leadership
- School Psychology with PPSP Credential
- Special Education

with Specialization in:

- » Deaf and Hard-of-Hearing
- » Mild/Moderate Disabilities
- » Moderate/Severe Disabilities

## CALIFORNIA CREDENTIAL PROGRAMS

(Approved by the Commission on Teacher Credentialing)

- Clear Administrative Services Credential
- Clear Level II Education Specialist: Deaf or Hard-of-Hearing (DHH)
- Clear Level II Education Specialist: Mild/Moderate Disabilities
- Clear Level II Education Specialist: Moderate/Severe Disabilities
- Early Childhood Special Education Add-On Authorization
- Preliminary Administrative Services Certificate/Credential
- Preliminary Education Specialist Authorization Teaching Credential
- Preliminary Multiple Subject Teaching Credential with Internship Option
- Preliminary Single Subject Teaching Credential with Internship Option

- Pupil Personnel Services Credential School Counseling (PPSC)
- University Internship Pupil Personnel Services Credential School Counseling (PPSC)

## GRADUATE CERTIFICATE PROGRAMS

- Applied Behavior Analysis
- Autism
- Best Practices
- e-Teaching and Learning
- Early Childhood Education
- Educational Technology
- National Board Certified Teacher Leadership
- Reading
- Teaching Mathematics

### Nevada Programs (Please see Nevada section of this catalog)

- Bachelor of Arts in Elementary Education with Nevada Elementary Licensure
- Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure
- Bachelor of Arts in English Education with Nevada Secondary Licensure
- Master of Arts in Teaching
- Master of Education with Nevada Elementary Licensure
- Master of Education with Nevada Secondary Licensure
- Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room

The following programs are also listed in the College of Letters and Sciences Section:

### Bachelor of Arts

with Majors in:

- English with a California Preliminary Single Subject Credential (California)
- Interdisciplinary Studies with a California Preliminary Multiple Subject Teaching Credential
- Mathematics with a California Preliminary Single Subject Credential (California)
- Social Science with a Preliminary Single Subject Teaching Credential (California)
- Spanish with a Preliminary Single Subject Teaching Credential (California)

The following program is also listed in the School of Health and Human Services Section:

### Bachelor of Arts

with a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California)

## DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND SCHOOL COUNSELING/PSYCHOLOGY

### Graduate Programs

#### Master of Science

with *Fields of Study* in:

- Applied School Leadership (in Partnership with COE) with Preliminary Administrative Services Credential Option
- Educational Administration with a Preliminary Administrative Services Credential
- Educational Counseling
- Higher Education Administration
- Innovative School Leadership
- Instructional Leadership
- School Psychology with PPSP Credential

## CALIFORNIA CREDENTIAL PROGRAMS

(Approved by the Commission on Teacher Credentialing)

- Clear Administrative Services Credential
- Preliminary Administrative Services Certificate/Credential
- Pupil Personnel Services Credential School Counseling (PPSC)
- University Internship Pupil Personnel Services Credential School Counseling (PPSC)

## CERTIFICATE PROGRAMS

- Graduate Certificate in Applied Behavior Analysis

## DEPARTMENT OF SPECIAL EDUCATION

### Master of Science

with *Fields of Study* in:

- Special Education
  - with *Specialization* in:
    - » Deaf and Hard-of-Hearing
    - » Mild/Moderate Disabilities
    - » Moderate/Severe Disabilities

## CALIFORNIA CREDENTIAL PROGRAMS

(Approved by the Commission on Teacher Credentialing)

- Clear Level II Education Specialist: Deaf or Hard-of-Hearing (DHH)
- Clear Level II Education Specialist: Mild/Moderate Disabilities
- Clear Level II Education Specialist: Moderate/Severe Disabilities
- Preliminary Education Specialist Authorization Teaching Credential:

## CERTIFICATE PROGRAMS

- Graduate Certificate in Autism
- Early Childhood Special Education Add on Authorization

## DEPARTMENT OF TEACHER EDUCATION

### Associate of Arts

with *Majors* in:

- Early Childhood Education
- School-Site Paraprofessional

### Bachelor of Arts

with *Majors* in:

- Early Childhood Development with a Preliminary Multiple Subject Teaching Credential (California)
- Early Childhood Education
  - with *Concentrations* in:
    - » Early Childhood Administration
    - » Teacher Education
    - » Infant and Toddler
- English with a Preliminary Single Subject Credential (California)
- Health Sciences with a Preliminary Single Subject Teaching Credential (California)
- Interdisciplinary Studies with a Preliminary Multiple Subject Teaching Credential (California)
- Mathematics with a Preliminary Single Subject Credential (California)
- Social Science with a Preliminary Single Subject Teaching Credential (California)
- Spanish with a Preliminary Single Subject Teaching Credential (California)

### Master of Arts

With *fields of study* in:

- Education
  - with *Specializations* in:
    - » Best Practices
    - » Educational Technology
    - » e-Teaching and Learning
    - » Teacher Leadership
    - » Teaching and Learning in a Global Society
    - » Teaching Mathematics
- Teaching
  - with *Specializations* in:
    - » Applied Behavior Analysis
    - » Autism
    - » Best Practices
    - » e-Teaching and Learning
    - » Early Childhood Education
    - » Educational Technology
    - » National Board Certified Teacher Leadership
    - » Reading

- » Special Education
- » Teacher Leadership
- » Teaching and Learning in a Global Society
- » Teaching Mathematics

## Master of Education with a Preliminary Multiple or Single Subject Teaching Credential and Internship Option (California)

with *Specializations* in:

- Best Practices
- e-Teaching and Learning
- Educational Technology
- Teacher Leadership
- Teaching and Learning in a Global Society
- Teaching Mathematics

## MASTER OF SCIENCE

with *Fields of Study* in:

- Educational and Instructional Technology

## CALIFORNIA CREDENTIAL PROGRAMS

(Approved by the Commission on Teacher Credentialing)

- Preliminary Multiple Subject Teaching Credential with Internship Option
- Preliminary Single Subject Credential with Internship Option
- Clear Multiple or Single Subject Credential

## CERTIFICATE PROGRAMS

*Graduate Certificates* in:

- Best Practices
- Early Childhood Education
- Educational Technology
- National Board Certified Teacher Leadership
- Reading
- Teaching Mathematics

## Nevada Programs (Please see Nevada section of this catalog)

- Bachelor of Arts in Elementary Education with Nevada Elementary Licensure
- Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure
- Bachelor of Arts in English Education with Nevada Secondary Licensure
- Master of Arts in Teaching
- Master of Education with Nevada Elementary Licensure
- Master of Education with Nevada Secondary Licensure
- Master of Science in Special Education with Nevada licensure and Endorsement for Generalist Resource Room

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# SCHOOL OF EDUCATION

## CANDIDATE ASSISTANCE PROCESS

### National University Policies

National University has Policies and Procedures for Student Discipline, Academic Dishonesty, Civility, Reasons for Probation, Suspension and Dismissal that are described in the Catalog under the Policy and Procedures section. National University also has a process for providing accommodation to students with documented special needs (see Students with Disabilities under the Student Services section of the catalog). Additionally, a Writing Center and Math Tutoring are available to assist students seeking to improve their writing and mathematics skills.

### School of Education Procedures

The School of Education has developed procedures to assist candidates (students in professional preparation programs) in meeting School and program requirements. Candidates must be able to demonstrate the requisite knowledge, skills and dispositions of the School's Conceptual Framework and the values of National University. These knowledge, skills and dispositions provide a foundation for educators in today's schools.

Within the School of Education, each program has identified knowledge, skills and dispositions necessary for specific professional responsibilities. The knowledge, skills and dispositions are based upon the School of Education Conceptual Framework, California Commission on Teacher Credentialing (CTC) preparation standards, National Council on the Accreditation of Teacher Education (NCATE) standards and professional organization standards.

### Candidate Progress Alert

When an instructor becomes aware that a candidate needs assistance to effectively demonstrate the appropriate knowledge, skills and/or dispositions within their program, a Candidate Progress Alert will be initiated by their instructor. This is the first step in the Candidate Assistance Process that is intended to be supportive, based upon each program's standards and individualized to the candidate. The Candidate Progress Alert is intended to alert the candidate to areas of performance that are deficient or may need remediation.

When a Progress Alert is initiated, the candidate and instructor will meet to develop activities to improve areas requiring attention and identify methods of assessment.

### Candidate Assistance Plan

In cases where a candidate has been unable to adequately remediate deficiencies identified in a Progress Alert, the appropriate faculty member will develop a formal Candidate Assistance Plan. The Plan will identify areas of deficiency and prescribe specific activities and/or intervention strategies the candidate will need to complete to successfully meet knowledge, skills and/or dispositions. The faculty member will review the Plan with the candidate to ensure that the information, intervention strategies and assessment measures are clear. A candidate's signature on the Candidate Assistance Plan will acknowledge receipt and review of the Plan and will be maintained by the School of Education.

### Unsatisfactory Completion of Candidate Assistance Plan

When a candidate has not satisfactorily completed a Candidate Assistance Plan, the Plan, and a detailed description of activities or areas not adequately met will be forwarded by the appropriate faculty member with a recommendation to the School of Education and Office of Student Services designees. The candidate will be notified by the Dean of the School of Education regarding the candidate's continuing status within the program and/or the School.

### Requesting Accommodations to a Candidate Assistance

Plan Students with disabilities who wish to apply for accommodations to a Candidate Assistance Plan (Plan) may do so through submitting an application for accommodations to the National University Office of Special Services (Special Services). Applications for accommodations for a disability may be requested from the Office of Special Services, National University, 11255 North Torrey Pines Road, La Jolla, CA 92037-1011, Phone: (858) 642-8185. Students seeking special accommodations due to a disability must submit an application with supporting documentation to Special Services. The application will be reviewed within fourteen (14) days of receipt by the Committee for Students with Disabilities (CSD). The CSD will engage in an interactive process with the student regarding the accommodations request and determine the appropriate accommo-

dations to be administered during the Plan. Once the CSD determines the appropriate accommodations, written notification is sent within seven (7) days to the student and faculty responsible for the implementation of the Plan. Following receipt of the CSD notification, the faculty responsible for implementing the Plan will schedule a formal meeting with the student to review the Plan and the approved accommodations. The timeline for completion of a Plan is halted during the accommodations application and review process, and begins following the formal meeting. If the accommodations request is not approved, the timeline for completion of the Plan begins upon receipt of the CSD's notification letter. If a student is denied accommodation(s) or believes that the accommodation afforded is insufficient, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipt of the appeal or prior to the start date of the next course, depending on which occurs first. The decision of the vice president is final. The timeline for completion of a Plan is also halted during the appeals process.

If a student believes that accommodations approved by Special Services have not been implemented in the Plan, they should immediately contact Special Services. The timeline for completion of the Plan is halted during this process. Special Services will contact the instructor to resolve the student's concern and ensure the approved accommodations are properly implemented. Special Services will provide the student with notification of progress, findings, or resolution within fourteen (14) days. If either the student or Special Services feel that a satisfactory resolution is not reached, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipts of the appeal. The decision of the vice president is final. If the complaint is not satisfactorily resolved at the University level, the student may choose to file a complaint with the U.S. Department of Education Office for Civil Rights, 50 Beale Street Suite 7200, SF, CA 94105, Phone: (415) 486-5555, E-mail: ocr.sanfrancisco@ed.gov. The timeline for completion of a Plan is also halted during the appeals process.

## ■ ASSOCIATE OF ARTS

### ◆ MAJOR IN EARLY CHILDHOOD EDUCATION

Faculty Advisor: Enid Acosta-Tello; (714) 429-5127; eacostat@nu.edu

The Associate of Arts Degree in Early Childhood Education (AAECE) is based on a conceptual framework of current theory, contemporary perspectives, and sound research findings. Focus is on knowledge, attitudes, skills, practice, reflection, and supervised field experiences needed to become efficient, competent, and effective professionals in the field of early childhood education. The AAECE is designed to include the competencies and guidelines as established by the National Association for the Education of Young Children (NAEYC) and the Child Development Associates National Competency Standards (CDA). The completion of the AAECE degree program meets course work requirements of the state of California Child Development Permits.

Non-residents of California, military personnel or their dependents, and international candidates should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework, in addition to the AAECE degree program, may be required to obtain a permit, license or credential necessary for employment. Candidates assume the responsibility for determining and meeting these requirements.

### Background Check

Agencies/schools collaborating with the School of Education to provide field experience may require a background check and TB clearance prior to acceptance of a student into their facility. Candidates who do not have a Certificate of Clearance may not be able to attend the field experience component of the course and therefore, may be unable to complete their program of study. Any fee or cost associated with background checks and TB testing is the responsibility of the student.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify cultural diversity as it pertains to early childhood teaching.
- Demonstrate communication skills that meet ethical, professional and legal guidelines and necessary to effectively work with families, school personnel, and other professionals.
- Demonstrate developmentally, linguistically, and culturally appropriate child-centered lessons, including cognitive, language, social, emotional

and physical dimensions.

- Review developmentally, linguistically and culturally appropriate assessment instruments.
- Apply an interweaving of theory and practice into a child-centered curriculum which shows competence in selection of teaching strategies designed to create diverse developmentally appropriate, safe, learning environments.

### Degree Requirements

To receive an Associate of Arts degree majoring in Early Childhood Education, candidates must complete at least 90 quarter units of which 45 quarter units must be in early childhood education core courses including supervised field experience and of which 31.5 quarter units must be taken in residence at National University. Also, as part of the 90 quarter units, candidates must complete a minimum 34.5 units of the Associate of Arts General Education Requirements. Refer to the section on undergraduate admission procedures for specific information regarding application and placement evaluation.

### Requirements for the Major

(10 courses; 45 quarter units)

ECE 201	The Growing Child: Zero to 8
ECE 210	Child, Family, School and Comm
ECE 211	Diversity: Development & Ed.
HED 220	Health, Nutrition and Safety
ECE 212	Principles and Practices <i>Recommended Preparation: ILR 260</i>
ECE 213	Basics of Curriculum
ECE 214	Oral Language & Read Aloud <i>Recommended Preparation: COM 103</i>
ECE 215	Basics of Assessment
ECE 216	Intro to Special Education
ECE 217	Supervised Field Experience <i>Prerequisite: Candidates must have successfully completed all core courses with an average grade of "C" (2.0) or better and approval from the Faculty Lead. Current TB and fingerprint clearance are required.</i>

### ◆ MAJOR IN SCHOOL-SITE PARAPROFESSIONAL

*Faculty Advisor: Janet Richards; (909) 919-7632; jrichard@nu.edu*

The Associate in Arts Degree in School-Site Paraprofessional prepares candidates to function effectively as a member of an instructional team. While paraprofessionals working in the field may have varying responsibilities, their primary role is to provide support in the classroom. This program will provide the necessary knowledge, skills and dispositions to assist certified/licensed educators by providing quality educational support.

Non-residents of California; military personnel, or their dependents; and international students should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework may be required to obtain employment. Candidates assume the responsibility for determining and meeting these requirements. Candidates are required to obtain a Certificate of Clearance (fingerprint and identification process) prior to scheduling any coursework with a field experience component.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate among the roles and responsibilities of paraprofessionals, teachers, administrators, parents/guardians and other team members.
- Demonstrate the required dispositions to assist the teacher and students in the classroom.
- Analyze the pertinent laws, regulations, policies and procedures; including knowledge of health, safety and emergency procedures.
- Demonstrate strategies, techniques, and delivery methods for instruction in reading, writing, math and science.

- Prepare materials to support learning of required subject matter.
- Utilize strategies to facilitate effective integration of special needs learners into various classroom settings.
- Demonstrate sensitivity to cultural and individual differences and disabilities.
- Develop strategies to facilitate learner acquisition of social skills and exercising self-control and self-management; based upon knowledge of learner characteristics and factors that influence behavior.
- Record relevant information/data about learners using assessment instruments specified by the teacher to document and maintain data.

### Degree Requirements

To receive an Associate in Arts Degree with a major in School-Site Paraprofessional, candidates must complete at least 90 quarter units; 34.5 quarter units are comprised of general education requirements and 45 quarter units are major course requirements. The minimum residency requirement is 31.5 quarter units. In the absence of transfer credit additional general electives may need to be taken to meet the overall degree unit requirements. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

### Requirements for the Major

(10 courses; 45 quarter units)

TED 100	Intro to P-12 Education System
TED 102	Professional/Ethical Practices
TED 208	Reading/Writing Instr. Support
TED 210	Math/Sci. Instruction Support
TED 212	ELL & Students w/Special Needs
TED 214	Classroom Environment
TED 216	Student Assessment Support
TED 218	Learner Growth & Development
HIS 220A+	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B+	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>

Prior to enrolling in TED 210, it is recommended that candidates complete MTH 209A to fulfill General Education requirements of Area B and a Lab Science Course from Area F.

+ Diversity Enriched Offering

## ■ BACHELOR OF ARTS

### ◆ MAJOR IN EARLY CHILDHOOD DEVELOPMENT WITH A PRELIMINARY MULTIPLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

*Faculty Advisor: Thomas Doyle; (310) 662-2158; tdoyle@nu.edu*

The Bachelor of Arts majoring in Early Childhood Development with a California Preliminary Multiple Subject Teaching Credential provides a broad, rigorous education that prepares candidates for a career as a teacher at early elementary grades. Candidates are introduced to essential knowledge, strategies, techniques and connections across the disciplines as applied to young children. Focus is on an enriched and thought-provoking curriculum that incorporates content across subject areas, specific educational methodology courses and preparation for professional work as multiple subject teachers in elementary grades. All candidates must demonstrate subject-matter competency through a state-approved examination.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify essential concepts, inquiry tools, structure of content areas and resources for early childhood education.
- Develop oral, written, and technological skills for communicating with

families and very young children.

- Create environments that are healthy, respectful, supportive, and challenging for young children.
- Use systematic observations, documentation, and other assessment strategies in partnership with families and professionals to positively influence children's development and learning.
- Implement a curriculum that promotes development and learning outcomes for diverse young children.
- Demonstrate ethical, legal, and professional standards in early childhood practice.
- Create positive relationships and appropriate interactions with young children.
- Apply educational technology to meet the needs of all learners.
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Create positive learning environments that ensure healthy human growth.
- Explain how to support growth in cognitive, social, physical, and emotional domains.
- Utilize systematic observations, documentation, and other assessment strategies to facilitate and account for learning and to support positive growth.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts in Early Childhood Development with a California Preliminary Multiple Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

(4 courses; 18.0 quarter units)

ECE 201	The Growing Child: Zero to 8
ECE 210	Child, Family, School and Comm
ECE 211	Diversity: Development & Ed.
HED 220	Health, Nutrition and Safety

### Requirements for the Major

(13 courses; 58.5 quarter units)

ECE 464	Ethical and Legal Issues
ECE 330	Early Cognition <i>Prerequisite: ECE 201, ECE 210, HED 220, and ECE 211</i>
ECE 410	Early Language and Literacy <i>Prerequisite: ECE 330</i>
ECE 415	Designing Emergent Curriculum <i>Prerequisite: ECE 330</i>
ECE 420	Nature, Numbers and Technology <i>Prerequisite: ECE 330</i>
ECE 430	Play as Pedagogy <i>Prerequisite: ECE 330</i>
ECE 440	Observing, Assessing & Plannin <i>Prerequisite: ECE 330</i>
ECE 443	Children with Special Needs <i>Prerequisite: ECE 330</i>
ECE 445	Strategies: Guiding Behaviors <i>Prerequisite: ECE 330</i>

ECE 446	Literature and Young Children
ECE 435	Music, Movement, Drama, Dance
ECE 465	Crisis Trauma and Abuse
HIS 410	California History <i>Prerequisite: ENG 100, ENG 101</i>

All Early Childhood Education coursework has field experience component.

### Teacher Education Core Requirements

(4 courses; 18 quarter units)

TED 305	Teaching as a Profession
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 350	Math and Science Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>

All Teacher Education coursework has field experience component.

### Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B</i>

TED 530A, TED 530B, TED 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

### ◆ MAJOR IN EARLY CHILDHOOD EDUCATION

*Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu*

The Bachelor of Arts degree in Early Childhood Education (BAECE) has been designed to include the competencies and guidelines as established by the National Association for the Education of Young Children (NAEYC) and the Child Development Associates National Competency Standards (CDA). The completion of the BAECE degree program meets the educational requirements needed for the Child Development Associates National Licensing program and meets the requirements of the State of California Child Development Permits.

Non-residents of California; military personnel or their dependents; and international students should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework, in addition to the BAECE degree program, may be required to obtain a permit, license or credential necessary for employment. Candidates assume the responsibility for determining and meeting these requirements.

The program is based on a conceptual framework of current theory, contemporary perspectives and sound research findings. Focus is on knowledge, attitudes, skills, practice, reflection and field experiences needed to become efficient, competent, and effective professionals in the field of early childhood education. Emphasis is on designing appropriate learning environments, individual and adaptive curricula, and instructional strategies and techniques to maximize learning outcomes. Topics demonstrated, both in writing and discussion, provide a broad-based foundation of child development in the areas of familial and socio-cultural influences on learning and brain development, parent empowerment, peer cooperation and collaboration, early cognition, emerging literacy (listening, speaking, reading and writing), ongoing participant observation and appropriate developmental screening assessments, child advocacy, law and ethics, and, most important, play as pedagogy.



## Background Check

Agencies/schools collaborating with the School of Education to provide field experience often require a background check and TB clearance prior to acceptance of a student into their facility. Candidates who do not have a Certificate of Clearance will not be able to attend the field experience component of the course and, therefore, will be unable to complete their program of study. Any fee or cost associated with background checks and TB testing is the responsibility of the student.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify essential concepts, inquiry tools, and structure of content areas and resources for early childhood education.
- Develop oral, written and technological skills for communicating with families and very young children.
- Create environments that are healthy, respectful, supportive, and challenging for young children.
- Use systematic observations, documentation, and other assessment strategies in partnership with families and professionals to positively influence children's development and learning.
- Implement a curriculum that promotes development and learning outcomes for diverse young children.
- Demonstrate ethical, legal, and professional standards in early childhood education.
- Create positive relationships and supportive interactions with young children

## Degree Requirements

To receive a Bachelor of Arts in Early Childhood Education degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

## Preparation for the Major

(4 courses; 18 quarter units)

ECE 201	The Growing Child: Zero to 8
ECE 210	Child, Family, School and Comm
ECE 211	Diversity: Development & Ed.
HED 220	Health, Nutrition and Safety

## Requirements for the Major

(10 courses; 45 quarter units)

ECE 464	Ethical and Legal Issues <i>Prerequisite: HED 220</i>
ECE 330	Early Cognition <i>Prerequisite: ECE 201, ECE 210, HED 220, and ECE 211</i>
ECE 410	Early Language and Literacy <i>Prerequisite: ECE 330</i>
ECE 415	Designing Emergent Curriculum <i>Prerequisite: ECE 330</i>
ECE 420	Nature, Numbers and Technology <i>Prerequisite: ECE 330</i>
ECE 430	Play as Pedagogy <i>Prerequisite: ECE 330</i>
ECE 440	Observing, Assessing & Plannin <i>Prerequisite: ECE 330, and ECE 415</i>
ECE 443	Children with Special Needs <i>Prerequisite: ECE 330</i>
ECE 445	Strategies: Guiding Behaviors <i>Prerequisite: ECE 330, and ECE 415, and ECE 430</i>

ECE 450	Academic Seminar/Field Experie <i>Prerequisite: Satisfactory completion of all core courses with an average grade of "C" (2.0) or better in the core.</i>
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## Upper-Division Electives or Concentration Requirements

(6 courses; 27 quarter units)

Candidates may choose one concentration or a combination of approved elective courses within the concentrations.

ECE 465	Crisis Trauma and Abuse
ECE 490	Guided Study (variable units)

### ▲ Concentration in Early Childhood Administration

Students must successfully complete the following courses for a concentration in Early Childhood Administration. It is recommended that students take these classes toward the end of their program after completing the upper-division major requirements.

#### Concentration Requirements

(6 courses; 27 quarter units)

ECE 461	Leadership and Supervision
ECE 460	Program Administration
ECE 462	Financial Mgmt & Resources
HRM 432	Recruit, Selection, Promo, Ret
ECE 466	Planning Physical Environments
HUB 401	Conflict Resolution <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>

### ▲ Concentration in Infant and Toddler

This concentration is designed to equip candidates with the skills necessary to provide developmentally appropriate practice and environments for infants and toddlers.

Candidates must successfully complete the following courses for a Concentration in Infant and Toddler in Early Childhood Education. It is recommended that students take these courses after completing the upper-division major requirements and when they are within six (6) months of completing their degree program.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create environments that are healthy, respectful, supportive, and challenging for infants and toddlers.
- Create positive relationships and supportive interactions with infants, toddlers and their families.

#### Concentration Requirements

(6 courses; 27 quarter units)

ECE 312	Infant and Toddler Care
ECE 451	Observation and Assessment <i>Prerequisite: ECE 312</i>
ECE 452	Partnering With Families <i>Prerequisite: ECE 312</i>
ECE 453	Developing Appropriate Curricu <i>Prerequisite: ECE 312</i>
ECE 454	Creative Aesthetics <i>Prerequisite: ECE 312</i>
ECE 466	Planning Physical Environments

### ▲ Concentration in Teacher Education

Candidates must successfully complete the following courses for a Concentration in Teacher Education in Early Childhood Education. It is recommended that students take these classes after completing the upper-division major requirements and when they are within six (6) months of completing their degree program.

This concentration allows currently enrolled students who are completing their last six courses to register for three prerequisites – HEDX 1101X, EDX 1201X, and SPD 608– for the California teaching credential program as electives.

Students must complete graduate level coursework taken as part of the BAECE degree with a grade of “B” or better. This coursework will not transfer as graduate level credit to National University or any other University as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student’s undergraduate grade point average.

### Concentration Requirements

(6 courses; 27 quarter units)

ECE 446	Literature and Young Children
EDX 1201X	Computer Tech in Classroom
SPD 608	Exceptionalities
ECE 435	Music, Movement, Drama, Dance
ECE 465	Crisis Trauma and Abuse
HEDX 1101X	Introductory Health Ed: K-12

### ◆ MAJOR IN ENGLISH WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: John Miller; (949) 733-0632; [jmiller@nu.edu](mailto:jmiller@nu.edu)  
For Credential: Jo Birdsell; (858) 642-8365; [jbirdsell@nu.edu](mailto:jbirdsell@nu.edu)

The Bachelor of Arts in English with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity, and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation of literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical and emotional domains.
- Create positive learning environments that ensure healthy human growth.
- Utilize systematic observations, documentation, and other assessment strategies to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts in English with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Preparation for the Major

(1 course; 4.5 quarter units)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>
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\* May be used to meet a General Education requirement

### Requirements for the Major

(25 courses; 108 quarter units)

### English Requirements

(11 courses; 49.5 quarter units)

ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100, and ENG 101</i>
LIT 311	British Literature I <i>Prerequisite: LIT 100</i>
LIT 312	British Literature II <i>Prerequisite: LIT 100</i>
LIT 321	American Literature I <i>Prerequisite: LIT 100</i>
LIT 322	American Literature II <i>Prerequisite: LIT 100</i>
LIT 338	Shakespeare <i>Prerequisite: LIT 100</i>
LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>
LIT 463	20th Century World Literature <i>Prerequisite: LIT 100</i>
LIT 498	English Capstone Course <i>Prerequisite: Satisfactory completion of 8 upper-division LIT courses</i>

### and

Any two additional upper division Literature (LIT) courses from available offerings.

### Education Orientation, Theory and Methodology Requirements

(8 courses; 36 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305, or TED 320</i>
TED 450	Methods of Teaching English <i>Prerequisite: TED 305, or TED 320</i>

### Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
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- TED 530B Student Teaching II  
*Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S*
- TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*
- TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

### Additional Courses for Satisfying SB2042 and CTC for California Teaching Credential

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. EDX 1201X is considered graduate level. The grades earned must be a "B" or better. EDX 1201X will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201X Computer-based Technology in the Classroom

HEDX 1101X Intro Health Ed: K-12

### ◆ MAJOR IN HEALTH SCIENCES WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA)

*Faculty Advisor: Alba Diaz; (858) 309-3497; adiaz@nu.edu*

*For Credential: Carol Shepherd; (916) 855-4115; cshepher@nu.edu*

The Bachelor of Arts with a Major in Health Sciences with a Preliminary Single Subject Credential provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education and prepares a candidate for a career as a teacher in the middle and secondary school levels. The students are required to think critically, write clearly, and speak articulately. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of developmentally appropriate grade level health education content domains.
- Describe the relationship of personal, family, school, community, cultural and environmental factors as related to health behavior and physical, emotional, and mental well-being.
- Identify cognitive, social, and physical characteristics, growth, and development of healthy adolescents, at-risk adolescents and those who have health problems.
- Examine components of research-based health education and health promotion programs / practices including coordinated school health programs.
- Discuss the evolving role of a health science teacher as a culturally responsive health educator, counselor, advocate, and resource for individuals, families, and communities.
- Analyze the role of mass media, technology and the Internet in promoting physical, mental and emotional health literacy and behaviors.
- Utilize health promotion materials, lessons, and programs to reduce health risk behavior and increase positive health behaviors.
- Discuss the personal, social, and legal requirements and appropriate prevention and intervention strategies in providing a safe, inclusive school environment.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for

learning and to support positive growth.

- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts with a Major in Health Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level. All undergraduate students must complete a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Preparation for the Major

(11 courses; 46.5 quarter units)

- CHE 101\* Introductory Chemistry  
*Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B*
- PSY 100\* Introduction to Psychology
- SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*
- COH 100\* Personal Health
- MTH 204\* Mathematics for Science  
*Prerequisite: MTH 12A, and MTH 12B, or Accuplacer test placement*
- MTH 209A\* Fundamentals of Mathematics I  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*
- COM 220\* Media Literacy
- BIO 100\* Survey of Bioscience
- BIO 100A\* Survey of Bioscience Lab (1.5 quarter units)  
*Prerequisite: BIO 100, or BIO 161 for science majors*
- BIO 380 Human Biology for Teachers  
*Recommended Preparation: BIO 161, and BIO 162, and Prerequisite: BIO 163, BIO 100A*
- SOC 344\* Marriage, Sex and the Family  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement + Diversity Enriched Offering

### Requirements for the Major

(23 courses; 99 quarter units)

### Health Science Requirements

(11 courses; 49.5 quarter units)

- COH 320 Chronic & Communicable Disease
- COH 321 Health Behavior
- COH 416 PH & Physical Activity
- COH 317 Public Health Nutrition
- COH 318 Drug Use and Abuse
- COH 319 Human Sexuality
- COH 420 Health of Vulnerable Groups
- HED 311 Health Literacy
- HED 414 Violence & Bullying Prevention
- HED 308 Mental and Emotional Health  
*Recommended: Prior completion of: COH 318*
- HED 351 Coordinated School Health  
*Prerequisite: COH 100, Recommended: Prior completion of: COH 321*

## Education Theory/Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305, or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 464	Mths Teach Sec Health Sci <i>Prerequisite: TED 305, TED 300, TED 310, TED 430, HED 351, Recommended: Prior completion of: TED 330B, TED 420, COH 320, COH 416, COH 317, COH 318, COH 319, HED 308, COH 100, HED 311, HED 414, COH 321</i>

## Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B</i>

## Credentialing Requirements

(1 course; 4.5 quarter units)

Students must have a senior standing to enroll in this course. The grade earned must be a B or better. EDX 1201X will not transfer to any graduate level program (at National university or elsewhere).

EDX 1201X Computer Tech in Classroom

## ◆ MAJOR IN INTERDISCIPLINARY STUDIES WITH A PRELIMINARY MULTIPLE SUBJECTS TEACHING CREDENTIAL (CALIFORNIA) 📍

*Faculty Advisor: Jacqueline Caesar; (858) 642-8350; jcaesar@nu.edu; For Credential: Mary Anne Weegar; (858) 642-8360; mweegar@nu.edu*

The Bachelor of Arts in Interdisciplinary Studies and a Preliminary Multiple Subjects Teaching Credential (California) provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines, and applies knowledge of life beyond the University. This degree program gives candidates an enriched and thought-provoking curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as multiple subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information.

- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines.
- Identify and appreciate the cultural perspectives of world view.
- Use information communications technology for knowledge sharing and the interdisciplinary approach.
- Demonstrate a deep and flexible understanding of subject matter.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical, and emotional domains.
- Utilize different teaching strategies to accomplish the teaching and learning goals.
- Create positive learning environments that ensure healthy human growth.
- Utilize systematic observations, documentation and other assessment strategies to facilitate and account for learning, and to support positive growth.
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.

## Degree Requirements

To receive a Bachelor of Arts in Interdisciplinary Studies with a Multiple Subjects Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level, including a minimum 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate subject-matter competency through a state-approved examination. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Preparation for the Major

(3 courses; 13.5 quarter units required)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 410	California History <i>Prerequisite: ENG 100, ENG 101</i>
MTH 209A*	Fundamentals of Mathematics I <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>

\* May be used to meet a General Education requirement

## Requirements for the Major

(23 Courses; 99 units)

## Core Requirements

(18 courses; 76.5 quarter units)

BIS 301	Intro to Interdisc. Studies
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100, and ENG 101</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A, or Accuplacer test placement evaluation</i>
ART 400	Expressive and Integrative Art
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 355	Hist/Social Science Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>

TED 380	Arts/PE/Health Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
BIS 401	Interdisciplinary Practice: In <i>Prerequisite: BIS 301 and four additional courses from the major</i>
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 440	Leadership and Assessment <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
BIS 499	Interdisciplinary Studies Proj
TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED530A with a minimum grade of Pass, and TED531A with a minimum grade of Pass, and Corequisite: TED 530B</i>

### Upper Division Requirements

(5 courses; 22.5 quarter units)

COM 380+ Democracy in the Info. Age  
*Prerequisite: ENG 100, and ENG 101*

or

HIS 320 Culture of Global Capitalism  
*Prerequisite: ENG 100, ENG 101*

TED 305 Teaching as a Profession

or

TED 306 21st Century Teaching Methods

TED 350 Math and Science Methods  
*Prerequisite: TED 305, or TED 320, or TED 306*

or

TED 351 Teaching STEM Methods  
*Prerequisite: TED 305, or TED 306, or TED 320*

and

Two additional courses from the following:

BIO 330 Ecology  
*Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A*

BIS 405 Genetic Anthropology  
*Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215*

MTH 410 Technology in Math Education  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301*

TED 306 21st Century Teaching Methods

TED 351 Teaching STEM Methods  
*Prerequisite: TED 305, or TED 306, or TED 320*

### ▲ Concentration in STEM (Science, Technology, Engineering, Mathematics)

*Faculty Advisor: Jacqueline Caesar; (858) 642-8350; jcaesar@nu.edu*

A Concentration in STEM provides students with the depth and breadth of knowledge in science, technology, engineering and mathematics that prepares them to be successful in a digital classroom. Students will define, create and model team building and problem based learning in an interdisciplinary environment that demonstrates an understanding of the integration of knowledge within and across the disciplines.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate how to integrate Science, Technology, Engineering, and Mathematics (STEM) to meet the needs of all learners
- Create and model interdisciplinary learning environments that reflect team building and problem based learning using technology.

### Requirements for the Concentration

(5 courses; 22.5 quarter units)

SCI 400 History of Science  
*Prerequisite: One 4.5 quarter unit science course from the natural sciences*

TED 306 21st Century Teaching Methods

MTH 410 Technology in Math Education  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301*

BIS 405 Genetic Anthropology  
*Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215*

TED 351 Teaching STEM Methods  
*Prerequisite: TED 305, or TED 306, or TED 320*

### ◆ MAJOR IN MATHEMATICS WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

*Faculty Advisor: Igor Subbotin; (310) 662 2150; isubboti@nu.edu*

*For Credential: Zhonghe Wu; (714) 429-5144; zwu@nu.edu*

The Bachelor of Art in Mathematics with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication
- Develop fundamental knowledge in geometry
- Model real world problems with a variety of algebraic and transcendental functions
- Use advanced statistics and probability concepts and methods
- Use educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students
- Explain how to support growth in cognitive, social, physical and emotional domains
- Create positive learning environment that ensures healthy human growth
- Utilize systematic observations, documentation, and other assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth

- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas
- Demonstrate professional standards and ethics
- Utilize different teaching strategies to accomplish the teaching and learning goals

### Degree Requirements

To receive a Bachelor of Arts in Mathematics with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

(6 courses; 27 quarter units)

MTH 210\* Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

or

MTH 216A\* College Algebra I (3 quarter units)  
*Prerequisite: Accuplacer test placement evaluation, MTH 12A, and MTH 12B*

and

MTH 216B\* College Algebra II (3 quarter units)  
*Prerequisite: MTH 216A*

MTH 220\* Calculus I  
*Prerequisite: MTH 215, or Accuplacer test placement, or evaluation by a lead faculty*

or

CSC 208\* Calculus for Comp. Science I  
*Prerequisite: MTH 215*

MTH 221 Calculus II  
*Prerequisite: MTH 220*

MTH 222 Calculus III  
*Prerequisite: MTH 221*

MTH 223 Calculus IV  
*Prerequisite: MTH 222*

\* May be used to meet a General Education requirement

### Requirements for the Major

(21 courses; 90 quarter units)

### Mathematics Requirements

(9 courses; 40.5 quarter units)

MTH 311 Topics from Geometry  
*Prerequisite: MTH 215*

MTH 325 Discrete Mathematics  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B*

or

CSC 331 Discrete Structures and Logic  
*Prerequisite: CSC 252, and CSC 310*

MTH 411 Number Theory  
*Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301*

MTH 435 Linear Algebra  
*Prerequisite: MTH 220, and MTH 325*

MTH 416 Algebraic Structures  
*Prerequisite: MTH 435, and MTH 325*

MTH 417 Foundations of Geometry  
*Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311*

MTH 418 Statistical Analysis  
*Prerequisite: MTH 210, and MTH 220*

MTH 412 History of Mathematics  
*Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B*

MTH 410 Technology in Math Education  
*Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301*

### Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305 Teaching as a Profession

TED 300 Fundamentals of Education  
*Prerequisite: TED 320, or TED 305, or TED 306*

TED 430 Special Needs Students  
*Prerequisite: TED 305, or TED 320, or TED 306*

TED 310 Development and Learning  
*Prerequisite: TED 305, or TED 320, or TED 306*

TED 420 Diversity in Schooling  
*Prerequisite: TED 305, or TED 320*

TED 330B Reading and Language Arts  
*Prerequisite: TED 305, or TED 320*

TED 461 Mathematics Teaching Methods  
*Prerequisite: TED 305, or TED 320*

### Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A Student Teaching I  
*Corequisite: TED 531A*

TED 530B Student Teaching II  
*Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S*

TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*

TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

### Credentialing Requirement

(1 course; 4.5 quarter units)

Students must have senior standing to enroll in this class.

HEDX 1101X Intro Health Ed: K-12

### ◆ MAJOR IN SOCIAL SCIENCE WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA)

*Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu  
For Credential: Bernardo Gallegos; (310) 662-2134; bgallegos@nu.edu*

The Bachelor of Arts with a Major in Social Science with a Preliminary Single Subject Credential combines rigorous coursework in history and the social sciences with training in educational methodology to prepare candidates for careers as teachers of social studies and history at the middle and secondary school levels. The program introduces students to a variety of fields in the social sciences and concentrates on World History, U.S. History, and California History. Students examine worlds, times, places and cultures—including their own—in ways they have never considered and they develop strong skills in critical thinking, reading, writ-

ing, and researching. The educational methodology and student teaching portions of the program prepare candidates for professional work as single subject social studies or history teachers in a changing cultural and economic environment. For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the significance of major trends in World History.
- Assess the significance of major trends in U.S. History.
- Analyze a variety of primary sources.
- Analyze secondary sources for their arguments and use of supporting evidence.
- Discuss current concerns, new theories, new evidence, and issues that shape interpretation in history and the social sciences.
- Conduct research in history and the social sciences supported by appropriate primary and secondary source materials.
- Delineate the central demographic, economic, and political developments in the history of California from the eve of Spanish settlement to the present.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts with a Major in Social Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Preparation for the Major

(9 courses; 40.5 quarter units)

HIS 220A+	United States History I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 220B+	United States History II <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 233*	World Civilizations I <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100, and ENG 101</i>
POL 100*	Introduction to Politics <i>Prerequisite: ENG 100, and ENG 101</i>
POL 201*	American Politics <i>Prerequisite: ENG 100, and ENG 101</i>
SCI 300*	Geography
ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

### Requirements for Major

(24 courses; 103.5 quarter units)

### Requirements for the Social Science Major

(11 courses; 49.5 quarter units)

HIS 431	The Ancient World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 432	The Classical World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 433	The Post-Classical World <i>Prerequisite: ENG 100, ENG 101, and HIS 233</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101, and HIS 234</i>
HIS 400	Historical Theories & Methods <i>Prerequisite: ENG 240</i>
HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101, and HIS 220A</i>
HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 363	U.S. Since World War I <i>Prerequisite: ENG 100, ENG 101, and HIS 220B</i>
HIS 410	California History <i>Prerequisite: ENG 100, ENG 101</i>
HIS 499	Capstone Research Project <i>Prerequisite: ENG 240 or equivalent, HIS 400, and completion of 31.5 quarter units of core courses in the major</i>

### Education Theory and Methodology

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305, or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 434	Methods of Teaching Social Sci <i>Prerequisite: TED 305</i>

### Student Teaching

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.	
TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A, and TED 530B</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED530A with a minimum grade of Pass, and TED531A with a minimum grade of Pass, and Corequisite: TED 530B</i>

## Credentialing Requirements

(2 courses; 9 quarter units)

Students must have a senior standing to enroll in these courses. EDX1201X is graduate level and the grade earned must be a "B" or better. EDX1201X will not transfer to National University or any other university as a graduate level class.

HEDX 1101X Intro Health Ed: K-12

EDX 1201X Computer Tech in Classroom

## ◆ MAJOR IN SPANISH

### WITH OPTIONAL PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Luis Acebal; (530) 226-4003; lacebal@nu.edu

For Credential: Jo Birdsell; (858) 642-8365; jbirdsell@nu.edu

The Bachelor of Arts with a Major in Spanish consists of intensive proficiency-oriented coursework in Spanish language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of the region. The program prepares students for a variety of career paths in government, military, business, and education. Each student has the option of choosing to complete seven courses of upper-division electives or pursuing a Preliminary Single Subject Teaching Credential (California).

For additional information on credential requirements please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop oral, written and reading proficiency in Spanish.
- Read and interpret representative texts and cultural productions in Spanish.
- Develop analytical and critical skills that build from textual, cultural and linguistic analysis to the exploration of society.
- Translate and interpret to and from Spanish.
- Differentiate the major aspects of Latin American and Hispanic culture and civilization from pre-Columbian times to the present.
- Demonstrate familiarity with the history and culture of the Spanish speaking world.
- A comprehensive familiarity with the history and culture of the region.

### Degree Requirements

To receive the Bachelor of Arts Degree with a Major in Spanish, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. The following courses are degree requirements. In the absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

### Preparation for the Major

(5 courses; 22.5 quarter units)

SPN 100\* Beginning Spanish I

SPN 101\* Beginning Spanish II  
*Prerequisite: SPN 100*

SPN 200\* Intermediate Spanish I  
*Prerequisite: SPN 101*

SPN 201 Intermediate Spanish II  
*Prerequisite: SPN 200*

LIT 100\* Introduction to Literature  
*Prerequisite: ENG 100, and ENG 101*

\* May be used to meet a General Education requirement

## Requirements for the Major

(10 courses; 45 quarter units)

SPN 300 Advanced Spanish I  
*Prerequisite: SPN 201*

SPN 301 Advanced Spanish II  
*Prerequisite: SPN 300*

SPN 310 Literary Readings in Spanish  
*Prerequisite: LIT 100, SPN 301*

SPN 320 Advanced Spanish Conversation  
*Prerequisite: SPN 201 or 3 semesters of college level Spanish language.*

SPN 330 Intro Lat Am Cultures  
*Prerequisite: SPN 301*

SPN 350 Film and Culture  
*Prerequisite: SPN 301*

SPN 420 Literature and Culture I  
*Prerequisite: SPN 310, and SPN 330*

SPN 430 Literature and Culture II  
*Prerequisite: SPN 420*

SPN 450 Identity and Multiculturalism  
*Prerequisite: SPN 310, and SPN 330*

SPN 499 Spanish Capstone  
*Prerequisite: SPN 430*

### Upper-Division Electives

(7 courses; 31.5 quarter units)

The following are strongly recommended:

HIS 345 Latin American Studies  
*Prerequisite: ENG 100, ENG 101*

GLS 430 The Global Economy  
*Prerequisite: ENG 240*

GLS 440 Study Abroad  
*Prerequisite: HIS 320*

HUM 501 Global Civic Culture  
*Prerequisite: ENG 100, and ENG 101*

HIS 434 Modern World, 1500 to Present  
*Prerequisite: ENG 100, ENG 101, and HIS 234*

LIT 360 Literary Theory  
*Prerequisite: LIT 100*

LIT 460 Gender and Literature  
*Prerequisite: LIT 100*

LIT 463 20th Century World Literature  
*Prerequisite: LIT 100*

LIT 480 Literature of the Americas  
*Prerequisite: LIT 100*

PHL 320 World Religions  
*Prerequisite: ENG 100, and ENG 101*

POL 340 Comparative Politics  
*Prerequisite: ENG 100, and ENG 101*

SOC 328 Intercultural Thinking  
*Prerequisite: ENG 100, and ENG 101*

SPN 490 Guided Study in Spanish

### Optional Preliminary Single Subject Teaching Credential (California)

Faculty Advisor: Jo Birdsell; (858) 642-8365; jbirdsell@nu.edu

The Bachelor of Arts in Spanish with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Spanish at the middle and secondary school levels. The program stresses foundation Spanish and its application. This program prepares candidates for profession-



al work as single subject teachers in a changing cultural and economic environment. Students majoring in Spanish can enroll in this program at any time prior to the completion of SPN 490 or 499. This program prepares students with the knowledge, skills and dispositions required for entry into the teaching profession.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate application of educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.
- Demonstrate knowledge of adolescent development in order to explain how to support growth in cognitive, social, physical and emotional domains
- Demonstrate a thorough understanding of the learning needs of students to create positive learning environments that ensure healthy human growth.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.

### Education Orientation, Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
LTL 504B	Teach Methods: Sec Schs
LTL 524S	Lang Teach & Assess: Spanish

### Student Teaching Requirements

(4 courses; 13.5 units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

Please see student teaching and internship eligibility requirements in the School of Education Credential Information section of the catalog.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B</i>

### Credentialing Requirements

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The EDX1201X class is considered graduate level. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 1201X	Computer Tech in Classroom
HEDX 1101X	Intro Health Ed: K-12

Please see additional credential requirements in the School of Education Credential Information section of the catalog.

## GRADUATE DEGREE PROGRAMS

### ■ MASTER OF ARTS IN EDUCATION

*Faculty Advisor: Nedra Crow; (858) 642-8004; ncrow@nu.edu*

The Master of Arts in Education (MAE) program is designed for individuals interested in seeking professional growth and advancement in educational fields. Additionally, the program meets the needs of international students seeking a master's degree education. Students will complete a six-course Core focused on exploring the historical, philosophical, psychological, and social foundations education; analyzing issues of educational equity and diversity; understanding learners with learning exceptionalities; examining the foundations of curriculum, assessment, and instruction; and using educational research to deepen critical thinking skills. Students in this program will have opportunities to select a four-course specialization from a variety of areas. Note: this program is not designed for students seeking a teaching credential.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze diversity issues in education to support equity in educational contexts and learning practices.
- Integrate foundational theory and skills to make subject matter comprehensible to all learners.
- Analyze the application of educational research, evidence-based practices, and academic writing.
- Apply theoretical foundations of education to examine personal, societal, and organizational practices.

### Degree Requirements

To receive a Master of Arts in Education, students must complete 45 quarter hours of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed, as it applies to this degree and if the units were not used in earning another advanced degree.

### Requirements for the Degree

(10 courses; 45 quarter units)

### Core Requirements

(6 courses; 27 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities
TED 612	Curric, Assess, & Instruction
TED 670	Educational Research <i>Prerequisite: TED 602 with a minimum grade of B-, SPD 604 with a minimum grade of B-, TED 606 with a minimum grade of B-, SPD 608 with a minimum grade of B-, TED 612 with a minimum grade of B-</i>

or

MAT 655*	Leadership Impact Seminar
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\* Only for students in the Teacher Leadership Specialization

Candidates must also choose one of the following specializations:

### ▲ Specialization in Best Practices

*Faculty Advisor: Linda Ventriglia-Nava; (916) 855-4119; lventrig@nu.edu*

The Best Practices specialization instructs students in research-based Best Practices that accelerate student achievement. The program is based on 11 years of school-based research that turned around low achieving schools and accelerated achievement at all schools where the Best Practices were used. Students will learn how to implement effective teaching strategies that accelerate student achievement and engage students in 21st century learning. An interdisciplinary approach to learning will enable teachers to develop a systematic approach for teaching interdisciplinary vocabulary across the curriculum.

Teachers will learn how to use both textual and digital comprehension strategies, critical/creative 21st century questioning and 21st century problem solving.

An emphasis will be placed on differentiated and targeted instruction, student engagement/motivation strategies, cooperative and other effective grouping patterns, and technological multimedia applications. All the Best Practice strategies will be tied to standards-based direct and indirect instruction.

Effective strategies for English language learners and other diverse learners are integrated throughout the four courses in Best Practices in Teaching. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans using the structure of Teach, Practice and Apply.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for standards-based instruction across content areas.
- Use Best Practices teaching strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Apply student engagement/motivational strategies.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

### Required Courses

(4 courses; 18 quarter units)

MAT 670	Theory Best Practice Teaching
MAT 671	Appl Best Practice Strat in CI
MAT 674	Differentiated Instruction
MAT 675	21st Century Multimedia & Tech

### ▲ Specialization in Educational Technology

Faculty Advisor: Cynthia Sistek-Chandler; (858) 642-8322; cchandler@nu.edu

This specialization is designed for individuals wishing to develop their knowledge and skills for using technology in the educational setting.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate interdisciplinary connection between evidence based technologies for multimedia instruction.
- Use teaching strategies to accommodate learners in an online or blended environment.
- Participate in online community building and web-based interactive activities.
- Assess the effectiveness and efficiency of multimedia courseware and internet resource for use in instruction and delivery system.
- Examine the critical issues involved in designing effective distance educational programs.
- Design web-based courses using web page design authoring tools.

### Required Courses

(4 courses; 18 quarter units)

EDT 605	Education Theory & Technology
EDT 610	Teaching Online
EDT 660	Multimedia & Interactive Tech.
EDT 671	Curriculum for Online Learning

### ▲ Specialization in e-Teaching and Learning

Faculty Advisor: Lorraine Leavitt; (714) 429-5316; lleavitt@nu.edu

The e-Teaching and Learning Specialization is designed to meet the growing need for quality online instructors in PK - 16, community colleges, and corporations. The specialization focuses on learning and applying effective student-centered online pedagogical skills, developing online curriculum that adheres to the Na-

tional Standards for Quality Online Teaching, and assessing online learning using multiple assessment strategies. Upon completion of this specialization, candidates will be prepared to effectively teach in the online learning environment.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends and issues in the online environment.
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence-based best practices research in the online teaching environment.

### Requirements for Specialization

(4 courses; 18 quarter units)

ETL 680	Introduction to e-Teaching
ETL 682	Active Teaching and Learning
ETL 684	Differentiated Online Instruct
ETL 686	Designing Instr Materials

*Prerequisite: ETL 680, and ETL 682, and ETL 684*

### ▲ Specialization in Teacher Leadership

Faculty Advisor: Dina Pacis; (858) 642-8351; dpacis@nu.edu

This five-course specialization comes from the Advanced Learning Press' Center for Performance Assessment, which offers a unique master's degree program that provides teachers with the skills and theories to be leaders in their classrooms and schools. It is a collaborative effort with Advanced Learning Press, which already offers a ten course master's degree in educational leadership. All the courses will be offered online. The capstone is an alternative course to TED 670 Educational Research. The capstone course is MAT 655 Leadership Impact: Synthesis of Theory and Practice.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the principles of effective educational accountability.
- Demonstrate the ability to analyze and understand research on educational leadership.
- Demonstrate an understanding of how to lead learning communities and cross-cultural educational initiatives within school and classroom
- Demonstrate the ability to build professional relationships and networks for instructional leadership.

### Required Courses

(5 courses; 22.5 quarter units)

MAT 651	Assessing Educational Leaders
MAT 652	Leadership Accountability
MAT 653	Motivational Leadership
MAT 654	Seminar in Social Issues
MAT 655	Leadership Impact Seminar

### ▲ Specialization in Teaching and Learning in a Global Society

Faculty Advisor: Margot Kinberg; (760) 268-1514; mkinberg@nu.edu

This specialization is designed to provide candidates with the necessary knowledge, skills, and dispositions to teach in culturally and linguistically diverse classrooms.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Using current research on multilingualism and multiculturalism, explore the global issues of immigration, poverty, environment, distribution of resources and power and identify how these issues affect human development, schooling and learning.
- Examine the current models of schooling and how they might be transformed to make curricula (instructional approaches, practices, materials and assess-

ments) accessible, equitable and just to an increasingly diverse population.

- Develop a community of practice that promotes global awareness and participation in community service and school learning activities, including field experiences and social and professional relationships with parents, teachers, administrators and local community members and organizations.
- Develop a systematic approach to reflect on personal and professional beliefs, knowledge, dispositions and practices to continuously improve teaching and student learning.
- Review and conduct action research on issues of international and immigrant populations, language, class, race, gender, ethnicity and culture in the school and reflect on that research.

#### Required Courses

(4 courses; 18 quarter units)

TED 665	Cognition, Lang. & Cult
TED 666	Cultural and Linguistics
TED 667	Diversity and Change
TED 668	Multicultural Literature

#### ▲ Specialization in Teaching Mathematics

Faculty Advisor: Zhonghe Wu; (714) 429-5144; [zwu@nu.edu](mailto:zwu@nu.edu)

Designed to improve the quality of teaching mathematics in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. Content prepares teacher credential holders and/or candidates for the CSET 1 and 2 Foundational Level Mathematics Exam. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues in teaching Mathematics in grades K-9.
- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

#### Required Courses

(4 courses; 18 quarter units)

MAT 635	Contemporary Issues/Challenges
MAT 636	Teaching Algebra/Number Theory <i>Prerequisite: MAT 635</i>
MAT 637	Teaching Geometry/Measurement <i>Prerequisite: MAT 635, MAT 636</i>
MAT 638	Teaching Probability/Stats <i>Prerequisite: MAT 635, MAT 636, MAT 637</i>

#### ■ MASTER OF ARTS IN TEACHING

Faculty Advisor: Ron Germaine; (858) 642-8316; [rgermain@nu.edu](mailto:rgermain@nu.edu)

The Master of Arts in Teaching (MAT) degree is designed for practicing educators and professionals who want to enhance their teaching skills, broaden their intellectual and professional understanding by interrelating educational theory and practice to promote lifelong learning efforts, and sustain their commitment as instructional leaders in educational settings.

#### For Candidates in Nevada

Candidates pursuing the Master of Arts in Teaching (MAT) degree must already hold a Nevada teaching license. The MAT degree is not a credentialing program and does not meet the standards of quality for licensure or endorsement in teaching in public education in Nevada. Please note that the Master of Arts in Teaching Program Learning Outcomes are aligned to the Interstate Teacher Assessment and Support Commission (INTASC) Standards for Nevada.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply critical thinking skills and active reflection to evaluate and improve professional practice.
- Analyze diversity issues in education to support equity pedagogy, social justice, and community collaboration.
- Apply information literacy skills to inquire, research, teach, and learn.

#### Degree Requirements

(10-11 courses; 45-49.5 quarter units)

To receive a Master of Arts in Teaching, students must complete 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed, as it applies to this degree and if the units were not used in earning another advanced degree.

Those holding National Board Certification qualify for a waiver of one of the following courses: MAT 641, MAT 642, MAT 643, or MAT 644.

Note: Students must have access to Microsoft Office on either a PC or Mac platform.

#### Core Requirements

(6 courses; 27 quarter units)

EDT 612	Meaningful Learning w/ Tech.
MAT 641	Education & Social Pluralism
MAT 642	Program Design
MAT 643	Models of Teaching
MAT 644	Foundations of Curriculum
MAT 640	Applications of Research

or

NBC 639\* Leadership Portfolio

or

MAT 655\*\* Leadership Impact Seminar

or

MAT 640C+ Action Res for the Read Spec

*Prerequisite: MAT 645, MAT 646, MAT 647A, and MAT 647B*

\* Only for students in the National Board Certified Teacher Leadership Specialization

\*\* Only for students in the Teacher Leadership Specialization

+ Only for students in the Reading Specialization

Candidates must choose one of the following specializations:

#### For Nevada Students

Four Specializations for the MAT degree have Nevada Department of Education approval:

Specialization in Early Childhood Education

Specialization in Educational Technology

Specialization in National Board Certified Teacher Leadership

Specialization in Reading

#### ▲ Specialization in Applied Behavior Analysis (ABA)

Faculty Advisor: William Matthew; (661) 864-2367; [wmatthew@nu.edu](mailto:wmatthew@nu.edu)

The five-course sequence in applied behavior analysis is designed to prepare candidates for the national certification examinations sponsored by the Behavior Analyst Certification Board (BACB). Upon successful completion of National University's five course sequence, the candidate will receive a certificate of completion from National University, but this is not professional certification by the Behavior Analyst Certification Board (BACB) and does not entitle candidates to claim they are Board Certified Behavior Analysts (BCBA's). Information about becoming certified through the BACB can be found at [www.bacb.com](http://www.bacb.com)

#### Required CBA Learning Module Subscription

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at [www.behaviordevelopmentsolutions.com](http://www.behaviordevelopmentsolutions.com) Using someone else's account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the

program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply techniques and methods of applied behavior analysis within multi-cultural learning environments.
- Present data and information from applied behavior analysis procedures in graphic, textual, and oral formats.
- Integrate overall practice guidelines, code of ethics and laws in applied behavior management.
- Critique relevant research literature and use idiographic research methods to solve behavior problems.
- Use multiple data sources and points of view in the design, implementation, and evaluation of analytic goals.

### Required Courses

(5 courses; 22.5 quarter units)

ABA 601	Assessment in ABA
ABA 602	Processes of ABA <i>Prerequisite: ABA 601</i>
ABA 603	Applications of ABA <i>Prerequisite: ABA 602</i>
ABA 604	Advanced Applications I <i>Prerequisite: ABA 603</i>
ABA 605	Advanced Applications II <i>Prerequisite: ABA 603</i>

### ▲ Specialization in Autism

*Faculty Advisor: KayDee Caywood; (310) 662-2145; kaywood@nu.edu*

This specialization is designed for those interested in working with students that fall within the Autism Spectrum Disorder. For candidates interested in adding the Autism Authorization to a valid Education Specialist credential, please review the Autism Certificate program. Students who have completed the Certificate in Autism through National University's Division of Extended Learning are not eligible to pursue this specialization.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate competence and understanding in using behavioral analysis to manage and change behaviors in children with autism.
- Demonstrate competence in recognizing behaviors and utilizing assessments that identify children as having autism.
- Demonstrate knowledge of the background and orientation of the terms included in Autism Spectrum Disorder (ASD) category.
- Demonstrate skills needed for working collaboratively with diverse populations in ASD.
- Demonstrate understanding of differing evidence-based strategies for teaching students with autism.
- Demonstrate an understanding of federal and state laws.
- Demonstrate competency to collaborate in a group process (paraprofessionals, DIS providers, etc.) to organize a structured ASD classroom, to collect relevant data on behavioral outcomes, and to implement identified evidence-based strategies.

### Required Courses

(4 courses; 18 quarter units)

EXC 621	Intro Students w/Autism Spect
EXC 622	Assess & Behavioral App in Aut

EXC 623 Intervention/Instr. w/Aut.

EXC 624 Autism Collab w/Parents & Fam.

### ▲ Specialization in Best Practices

*Faculty Advisor: Linda Ventriglia; (916) 855-4119; lventrig@nu.edu*

The Best Practices specialization instructs students in research-based Best Practices that accelerate student achievement. The program is based on 11 years of school-based research that turned around low achieving schools and accelerated achievement at all schools where the Best Practices were used. Students will learn how to implement effective teaching strategies that accelerate student achievement and engage students in 21st century learning. An interdisciplinary approach to learning will enable teachers to develop a systematic approach for teaching interdisciplinary vocabulary across the curriculum.

Teachers will learn how to use both textual and digital comprehension strategies, critical/creative 21st century questioning and 21st century problem solving. An emphasis will be placed on differentiated and targeted instruction, student engagement/motivation strategies, cooperative and other effective grouping patterns, and technological multimedia applications. All the Best Practice strategies will be tied to standards-based direct and indirect instruction.

Effective strategies for English language learners and other diverse learners are integrated throughout the four courses in Best Practices in Teaching. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans using the structure of Teach, Practice and Apply.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for standards-based instruction across content areas.
- Use Best Practices teaching strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Apply student engagement/motivational strategies.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

### Required Courses

(4 courses; 18 quarter units)

MAT 670	Theory Best Practice Teaching
MAT 671	Appl Best Practice Strat in CI
MAT 674	Differentiated Instruction
MAT 675	21st Century Multimedia & Tech

### ▲ Specialization in e-Teaching and Learning

*Faculty Advisor: Lorraine Leavitt; (714) 429-5316; lleavitt@nu.edu*

The e-Teaching and Learning Specialization in the Master of Arts in Teaching Program is designed to meet the growing need for quality online instructors in PK-16, community colleges, and corporations. The specialization focuses on: learning and applying effective student-centered online pedagogical skills, developing online curriculum that adheres to the National Standards for Quality Online Teaching, and assessing online learning using multiple assessment strategies. Upon completion of this specialization, candidates will be prepared to effectively teach in the online learning environment.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends and issues in the online environment.
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence-based best practices research in the online teaching environment.

## Requirements for Specialization

(4 courses; 18 quarter units)

ETL 680	Introduction to e-Teaching
ETL 682	Active Teaching and Learning
ETL 684	Differentiated Online Instruct
ETL 686	Designing Instr Materials

*Prerequisite: ETL 680, and ETL 682, and ETL 684*

### ▲ Specialization in Early Childhood Education

*Faculty Advisor: Susan Gilbert; (310) 662-2168; sgilbert@nu.edu*

The Early Childhood Education Specialization program has been designed to include the competencies and guidelines as established by the National Association for the Education of Young Children (NAEYC) Advanced Program standards. The certificate is also structured to meet the State of California Child Development Permit Matrix requirements for employment in pre-school settings and does not confer a State of California teaching credential or license.

Non-residents of California; military personnel or their dependents; and international students should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework, in addition to the certificate program, may be required to obtain a permit, license or credential necessary for employment. Candidates assume the responsibility for determining and meeting these requirements.

The four course sequence specializing in early childhood education is designed to prepare candidates with teaching experience for meeting the unique needs of teaching children from birth to age 8.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze and evaluate effective early childhood practice using critical thinking skills, active self-reflection and professional standards.
- Analyze and articulate the impact of theory, standards and current research on Early Childhood practice.
- Apply and integrate evidence-based practices in current work situations to increase learning, growth and development.

## Requirements for the Specialization

(4 courses; 18 quarter units)

ECE 650	The Early Childhood Teacher
ECE 651	Current Issues in ECE
ECE 652	Cognition and the Young Child
ECE 653	Best ECE Teaching Practices

### ▲ Specialization in Educational Technology

*Faculty Advisor: Cynthia Sistik-Chandler; (858) 642-8322; cchandler@nu.edu*

This specialization is designed for individuals wishing to develop their knowledge and skills for using technology in the educational setting.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate interdisciplinary connection between evidence based technologies for multimedia instruction.
- Use teaching strategies to accommodate learners in an online or blended environment.
- Participate in online community building and web-based interactive activities.
- Assess the effectiveness and efficiency of multimedia courseware and internet resource for use in instruction and delivery system.
- Examine the critical issues involved in designing effective distance educational programs.
- Design web-based courses using web page design authoring tools.

## Required Courses

(4 courses; 18 quarter units)

EDT 605	Education Theory & Technology
EDT 610	Teaching Online
EDT 660	Multimedia & Interactive Tech.
EDT 671	Curriculum for Online Learning

### ▲ Specialization in National Board Certified Teacher Leadership

*Faculty Advisor: Ronarae Adams; (858) 642-8352; radams@nu.edu*

The five-course NBCT sequence is designed to meet the needs of several groups of teachers:

- Those who want to improve their teaching and prepare themselves to achieve National Board Certification now or sometime during their career.
- Those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to NBPTS submission guidelines.
- Those who have achieved NBCT and want to earn graduate credit as they develop an NBCT Leadership Portfolio.
- New teachers who want to experience the NBCT portfolio process in advance of submitting for full candidacy to the NBPTS.

The NBCT Specialization engages teachers in the preparation and submission of the NBPTS portfolio in any one of 24 certificate areas (as defined by the NBPTS organization (nbpts.org)).

The School of Education and the National University NBPTS Professional Teaching Development Center (PTDC) provide the following online and on-site services, opportunities and program options for new, practicing, and accomplished educators:

- Support and Assistance for NBCT Candidates and School Districts
- Access to Candidate Support Providers (CSPs) and NBCT Faculty
- Holding National Board Certification meets requirements for clearing preliminary credentials
- Master of Arts in Teaching, Master of Science in Instructional Leadership
- Teachers Leader and Professional Development Opportunities
- Networking and Celebration of Accomplishments

### Program Learning Outcomes

- Upon successful completion of this program, students will be able to:
- Demonstrate the ability to focus on student learning through a systematic study and reflection of one's own teaching practices.
- Demonstrate continuous growth in effective instructional practices and leadership through evidence of contributions to purposefully formed collaborative learning communities.
- Integrate fairness, equity, and access in designing strategies to meet diverse student learning.
- Apply learning theories, methodologies, and assessments to manage, monitor, and engage student learning.
- Integrate information literacy skills to inform professional teaching practices and future instruction.

## Required Courses

(4 courses; 18 quarter units)

(NBC 639 is the capstone course and replaces the general MAT 640 required for the Master of Arts in Teaching.)

NBC 680 Quality Teaching and Learning

or

NBCX 1201X NBCT

NBC 681 Membership in Learning Communi

NBC 682 Videotape Analysis

### ▲ Specialization in Reading

Faculty Advisor: Marilyn Moore; (858) 642-8301; mmoore@nu.edu

This five-course sequence is designed to meet the needs of teachers who already have a valid teaching credential and want to attain a specialty in assessing student reading capabilities and provide appropriate reading instruction in response to those assessments (MAT 640C is the capstone course and replaces the general MAT 640 required for the Master of Arts in Teaching.)

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Show knowledge about theories and research related to effective reading and language arts instruction.
- Conduct individualized informal literacy assessments for struggling readers at early and intermediate levels, including English language learners.
- Prepare a Reading Specialization Field Study Proposal with recommendations for instructional interventions, based on individualized informal literacy assessments.
- Design and conduct tutorial, small group, and whole-class language arts instruction.
- Implement research-based theory, assessment, and instructional strategies.
- Utilize the ability to incorporate instructional technology into language arts instruction.
- Communicate plans for tutorial, small group, and whole-class language arts instruction to principal and other school personnel, including assessment-based rationale.
- Communicate results of individualized informal assessments to parents.
- Make decisions about what all students need to succeed (Social Justice).
- Portray a professional image, model integrity, and reflect continuously on actions and interactions.

#### Required Courses

(4 courses; 18 quarter units)

MAT 645	Dev. Fluency in Reading
MAT 646	Comprehension Strategies
MAT 647A	Lang Arts Assess and Instruc I <i>Prerequisite: MAT 645, and MAT 646</i>
MAT 647B	Fld St: Lag Art Assess & In II <i>Prerequisite: MAT 645, MAT 646, and MAT 647A</i>

Candidates in the Reading Specialization are required to upload assignments in the Reading Specialization electronic Presentation Portfolio in eCollege.

Completion of the reading specialization may qualify candidates for a state of California Reading Certificate. Upon successful completion, the candidate should contact their credential program specialist for information about the California Reading Certificate. All courses must be taken at National University. No coursework is accepted from another university for this program and no substitutions are allowed.

### ▲ Specialization in Special Education

Faculty Advisor: Penelope Keough; (858) 642-8324; pkeough@nu.edu

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate data-based decision-making skills.
- Demonstrate advanced skills in systems that assess, plan, and provide academic instruction to support students with behavioral and emotional needs.
- Demonstrate knowledge of current research, theory, legislation, policy, and practice.
- Demonstrate ability to successfully plan transitional life experiences for students.
- Expand the scope and depth of study in candidates area of special emphasis.

- Candidates in the mild/moderate specialization will also demonstrate advanced skills in the areas of assessment, curriculum and collaboration.
- Candidates in the moderate/severe specialization will also demonstrate advanced skills in the areas of communication and leadership.

#### Required Courses

(5 courses; 18 quarter units for students seeking a CA Level II Education Specialist Credential)

Individuals who desire to obtain the Level II Education Specialist Credential (CA) must complete the following five courses. Please see additional requirements for the Education Specialist Credential in the School of Education's Credential Programs section of the catalog:

EXC 655A Professional Induction Seminar (3 quarter units)

EXC 656 Best Pract. Stud Spec Needs

EXC 657 Comm. Resources & Transition

EXC 658 Adv. Spc. Mild/Moderate

or

EXC 659 Adv. Spc. Moderate/Severe

EXC 655B Exit Seminar (1.5 quarter units)

(4 courses; 18 quarter units for students not seeking a CA Level II Education Specialist Credential)

Individuals who are not seeking the Level II Education Specialist Credential (CA) should complete the following three courses and choose one elective from the below list:

EXC 656 Best Pract. Stud Spec Needs

EXC 657 Comm. Resources & Transition

EXC 658 Adv. Spc. Mild/Moderate

or

EXC 659 Adv. Spc. Moderate/Severe

#### Elective:

SPD 630 Tech for Teaching & Learning

SPD 614 Classroom and Behavior Mgmt

SPD 628 Teaching Reading/Lang Arts

SPD 616 Law, Policy, & Collaboration

### ▲ Specialization in Teacher Leadership

Faculty Advisor: Dina Pacis; (858) 642-8351; dpacis@nu.edu

This five-course specialization comes from the Advanced Learning Press' Center for Performance Assessment, which offers a unique master's degree program that provides teachers with the skills and theories to be leaders in their classrooms and schools. It is a collaborative effort with Advanced Learning Press, which already offers a ten course master's degree in educational leadership. All the courses will be offered online. Similar to the National Board Specialization, the capstone is an alternative course to MAT 640 Applications of Research for the Art of Teaching. The capstone course is MAT 655 Leadership Impact: Synthesis of Theory and Practice.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the principles of effective educational accountability.
- Demonstrate the ability to analyze and understand research on educational leadership.
- Demonstrate an understanding of how to lead learning communities and cross-cultural educational initiatives within school and classroom
- Demonstrate the ability to build professional relationships and networks for instructional leadership.

#### Required Courses

(5 courses; 22.5 quarter units)

MAT 651 Assessing Educational Leaders

MAT 652	Leadership Accountability
MAT 653	Motivational Leadership
MAT 654	Seminar in Social Issues
MAT 655	Leadership Impact Seminar

### ▲ Specialization in Teaching and Learning in a Global Society

Faculty Advisor: Margot Kinberg; (760) 268-1514; mkinberg@nu.edu

This specialization is designed to provide candidates with the necessary knowledge, skills, and dispositions to teach in culturally and linguistically diverse classrooms.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Using current research on multilingualism and multiculturalism, explore the global issues of immigration, poverty, environment, distribution of resources and power and identify how these issues affect human development, schooling and learning.
- Examine the current models of schooling and how they might be transformed to make curricula (instructional approaches, practices, materials and assessments) accessible, equitable and just to an increasingly diverse population.
- Develop a community of practice that promotes global awareness and participation in community service and school learning activities, including field experiences and social and professional relationships with parents, teachers, administrators and local community members and organizations.
- Develop a systematic approach to reflect on personal and professional beliefs, knowledge, dispositions and practices to continuously improve teaching and student learning.
- Review and conduct action research on issues of international and immigrant populations, language, class, race, gender, ethnicity and culture in the school and reflect on that research.

#### Required Courses

(4 courses; 18 quarter units)

TED 665	Cognition, Lang. & Cult
TED 666	Cultural and Linguistics
TED 667	Diversity and Change
TED 668	Multicultural Literature

### ▲ Specialization in Teaching Mathematics

Faculty Advisor: Zhong Wu; (714) 429-5144; zwu@nu.edu

Designed to improve the quality of teaching mathematics in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. Content prepares teacher credential holders and/or candidates for the CSET 1 and 2 Foundational Level Mathematics Exam. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues in teaching Mathematics in grades K-9.
- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

#### Required Courses

(4 courses; 18 quarter units)

MAT 635	Contemporary Issues/Challenges
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MAT 636	Teaching Algebra/Number Theory <i>Prerequisite: MAT 635</i>
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MAT 637	Teaching Geometry/Measurement <i>Prerequisite: MAT 635, MAT 636</i>
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MAT 638	Teaching Probability/Stats <i>Prerequisite: MAT 635, MAT 636, MAT 637</i>
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### ■ MASTER OF EDUCATION WITH A PRELIMINARY MULTIPLE OR SINGLE SUBJECTS TEACHING CREDENTIAL AND INTERNSHIP OPTION (CALIFORNIA)

Faculty Advisor: Nedra Crow; (858) 642-8004; ncrow@nu.edu

The Master of Education with a Multiple or Single Subjects Teaching Credential is designed for candidates dedicated to instructional leadership in the P-12 settings. Courses meet the California Commission on Teacher Credentialing (CTC) requirements for a Preliminary Multiple or Single Subjects teaching credential and meet requirements for a master's degree. Candidates desiring a Master's degree and not seeking to achieve a Preliminary Multiple or Single Subjects teaching credential or those who already hold a Multiple or Single Subject teaching credential should enroll in the Master of Arts in Teaching.

As this is a joint program students must complete all coursework in order to be eligible for the degree, including student teaching or internship, and one of the five specializations.

\*Please note: Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

\*Please note: Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in making subject matter comprehensible for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in assessing all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in engaging/supporting all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in designing/planning learning experiences for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in creating/maintaining effective learning environments for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in being a legal, ethical, and professional educator for all P-12 learners, including those with diverse learning needs.
- Analyze the application of educational research, evidence-based practices, and academic writing.

#### Degree Requirements

(20-22 courses; 85.5-94.5 quarter units)

To receive a Master of Education with California Preliminary Multiple or Single Subjects Teaching Credential, candidates must complete at least 58.5 quarter units of graduate credit of which 48 quarter units must be taken in residence at National University. Further information on graduate admission and evaluation can be found in the Academic Information for Graduate Degrees section of the catalog.

Candidates choosing the Internship option to obtain the Preliminary Multiple or Single Subject Teaching Credential will need to meet the Internship Eligibility requirements.

The CTC mandates that all approved internship programs require a minimum of 120 hours of pre-service coursework prior to becoming the teacher of record. 4.5 quarter units are equal to 40 clock hours. These pre-service courses must be successfully completed prior to eligibility for completing the internship option.

#### Co-requisites

(2 courses; 9 quarter units)

HEDX 1101X Intro Health Ed: K-12

EDX 1201X Computer Tech in Classroom

#### Core Requirements

(6 courses; 27 quarter units)

TED 602 Educational Foundations

SPD 604 Psychological Fdns of Educ.

TED 606 Equity and Diversity

SPD 608 Exceptionalities

TED 626\* Classroom Management  
*Prerequisite: TED 623, or TED 621A*

TED 690 Capstone  
*Prerequisite: TED 530B with a minimum grade of S, or TED 628B with a minimum grade of S, or TED 640B with a minimum grade of S*

\* Internship Pre-Service course

Select one of the following Teacher Credential Areas:

#### Teacher Credential Areas: Multiple Subject or Single Subject Methods

(4 courses; 18 quarter units)

##### Multiple Subject:

TED 621A\* Lang. Dev. Methods: Elem. Sch.  
*Prerequisite: SPD 604, SPD 608, TED 602, TED 606*

TED 621B\* Reading/Lang. Arts Methods  
*Prerequisite: TED 621A*

TED 635 Methods: History/SS-Heal-PE-Art  
*Prerequisite: TED 621A with a minimum grade of C*

TED 636 Methods: Mathematics-Science  
*Prerequisite: TED 621A with a minimum grade of C*

or

##### Single Subject:

TED 623 \* Lang. Dev. Methods: Secondary  
*Prerequisite: TED 602, SPD 604, TED 606, SPD 608*

TED 632 Content Area Curriculum  
*Prerequisite: TED 623*

TED 633 Content Area Instruct-Assess  
*Prerequisite: TED 623 with a minimum grade of C*

TED 634 \* Content Area Literacy  
*Prerequisite: TED 623*

\* Internship Pre-Service course.

#### Clinical Practice Path: Student Teaching or Internship

(Student Teaching 4 courses; 13.5 quarter units or Internship 5 courses; 18 quarter units)

The clinical practice (K12 classroom) experience courses (TED 530A, TED 530B, TED 628A, and TED 628B) do not grant graduate credit.

Student Teaching will be arranged by the University for candidates who have completed all program coursework and met all program/state requirements. Student Teaching is unpaid and a minimum 80 instructional days in the PK12 classrooms.

#### Student Teaching:

TED 530A Student Teaching I  
*Corequisite: TED 531A*

TED 530B Student Teaching II  
*Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S*

TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*

TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

or

#### Internship:

TED 610 Best Internship Practices  
*Prerequisite: Admission to the intern program*

TED 628A Internship Clinical Practice I  
*Corequisite: TED 610, TED 628A, TED 631A*

TED 628B Internship Clinical Pract. II  
*Prerequisite: TED 628A, Corequisite: TED 631B*

TED 631A Internship Seminar I (2.25 quarter units)  
*Prerequisite: TED 610 with a minimum grade of B-*

TED 631B Internship Seminar II (2.25 quarter units)  
*Prerequisite: TED 631A, TED 628A, Corequisite: TED 628B*

Candidates must choose one of the following Areas of Specializations:

#### ▲ Specialization in Best Practices

Faculty Advisor: Linda Ventriglia-Nava; (919) 855-4119; lventrig@nu.edu

The Best Practices specialization instructs students in research-based Best Practices that accelerate student achievement. The program is based on 11 years of school-based research that turned around low achieving schools and accelerated achievement at all schools where the Best Practices were used. Students will learn how to implement effective teaching strategies that accelerate student achievement and engage students in 21st century learning. An interdisciplinary approach to learning will enable teachers to develop a systematic approach for teaching interdisciplinary vocabulary across the curriculum.

Teachers will learn how to use both textual and digital comprehension strategies, critical/creative 21st century questioning and 21st century problem solving. An emphasis will be placed on differentiated and targeted instruction, student engagement/motivation strategies, cooperative and other effective grouping patterns, and technological multimedia applications. All the Best Practice strategies will be tied to standards-based direct and indirect instruction.

Effective strategies for English language learners and other diverse learners are integrated throughout the four courses in Best Practices in Teaching. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans using the structure of Teach, Practice and Apply.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for standards-based instruction across content areas.
- Use Best Practices teaching strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Apply student engagement/motivational strategies.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

#### Required Courses

(4 courses; 18 quarter units)

MAT 670 Theory Best Practice Teaching



MAT 671	Appl Best Practice Strat in CI
MAT 674	Differentiated Instruction
MAT 675	21st Century Multimedia & Tech

### ▲ Specialization in e-Teaching and Learning

Faculty Advisor: Lorraine Leavitt; (714) 429-5316; lleavitt@nu.edu

The e-Teaching and Learning Specialization in the Master of Arts in Teaching Program is designed to meet the growing need for quality online instructors in PK-16, community colleges, and corporations. The specialization focuses on learning and applying effective student-centered online pedagogical skills, developing online curriculum that adheres to the National Standards for Quality Online Teaching, and assessing online learning using multiple assessment strategies. Upon completion of this specialization, candidates will be prepared to effectively teach in the online learning environment.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends and issues in the online environment.
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence-based best practices research in the online teaching environment.

#### Requirements for Specialization

(4 courses; 18 quarter units)

ETL 680	Introduction to e-Teaching
ETL 682	Active Teaching and Learning
ETL 684	Differentiated Online Instruct
ETL 686	Designing Instr Materials

*Prerequisite: ETL 680, and ETL 682, and ETL 684*

### ▲ Specialization in Educational Technology

Faculty Advisor: Cynthia Sitek-Chandler; (858) 642-8322; cchandler@nu.edu

This specialization is designed for individuals wishing to develop their knowledge and skills for using technology in the educational setting.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate interdisciplinary connection between evidence based technologies for multimedia instruction.
- Use teaching strategies to accommodate learners in an online or blended environment.
- Participate in online community building and web-based interactive activities.
- Assess the effectiveness and efficiency of multimedia courseware and internet resource for use in instruction and delivery system.
- Examine the critical issues involved in designing effective distance educational programs.
- Design web-based courses using web page design authoring tools.

#### Required Courses

(4 courses; 18 quarter units)

EDT 605	Education Theory & Technology
EDT 610	Teaching Online
EDT 660	Multimedia & Interactive Tech.
EDT 671	Curriculum for Online Learning

### ▲ Specialization in Teacher Leadership

Faculty Advisor: Dina Pacis; (858) 642-8351; dpacis@nu.edu

This five-course specialization comes from the Advanced Learning Press' Center for Performance Assessment, which offers a unique master's degree program that provides teachers with the skills and theories to be leaders in their classrooms and

schools. It is a collaborative effort with Advanced Learning Press, which already offers a ten course master's degree in educational leadership. All the courses will be offered online. Similar to the National Board Specialization, the capstone is an alternative course to TED 690 Capstone. The capstone course is MAT 655 Leadership Impact: Synthesis of Theory and Practice.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the principles of effective educational accountability.
- Demonstrate the ability to analyze and understand research on educational leadership.
- Demonstrate an understanding of how to lead learning communities and cross-cultural educational initiatives within school and classroom
- Demonstrate the ability to build professional relationships and networks for instructional leadership.

#### Required Courses

(5 courses; 22.5 quarter units)

MAT 651	Assessing Educational Leaders
MAT 652	Leadership Accountability
MAT 653	Motivational Leadership
MAT 654	Seminar in Social Issues
MAT 655	Leadership Impact Seminar

### ▲ Specialization in Teaching and Learning in a Global Society

Faculty Advisor: Margot Kinberg; (760) 268-1514; mkinberg@nu.edu

This specialization is designed to provide candidates with the necessary knowledge, skills, and dispositions to teach in culturally and linguistically diverse classrooms.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Using current research on multilingualism and multiculturalism, explore the global issues of immigration, poverty, environment, distribution of resources and power and identify how these issues affect human development, schooling and learning.
- Examine the current models of schooling and how they might be transformed to make curricula (instructional approaches, practices, materials and assessments) accessible, equitable and just to an increasingly diverse population.
- Develop a community of practice that promotes global awareness and participation in community service and school learning activities, including field experiences and social and professional relationships with parents, teachers, administrators and local community members and organizations.
- Develop a systematic approach to reflect on personal and professional beliefs, knowledge, dispositions and practices to continuously improve teaching and student learning.
- Review and conduct action research on issues of international and immigrant populations, language, class, race, gender, ethnicity and culture in the school and reflect on that research.

#### Required Courses

(4 courses; 18 quarter units)

TED 665	Cognition, Lang. & Cult
TED 666	Cultural and Linguistics
TED 667	Diversity and Change
TED 668	Multicultural Literature

### ▲ Specialization in Teaching Mathematics

Faculty Advisor: Zhong Wu; (714) 429-5144; zwu@nu.edu

Designed to improve the quality of teaching mathematics in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. Content prepares teacher credential holders and/or candidates for the CSET 1 and 2 Foundational

Level Mathematics Exam. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues in teaching Mathematics in grades K-9.
- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

### Required Courses

(4 courses; 18 quarter units)

MAT 635	Contemporary Issues/Challenges
MAT 636	Teaching Algebra/Number Theory <i>Prerequisite: MAT 635</i>
MAT 637	Teaching Geometry/Measurement <i>Prerequisite: MAT 635, MAT 636</i>
MAT 638	Teaching Probability/Stats <i>Prerequisite: MAT 635, MAT 636, MAT 637</i>

### ■ MASTER OF SCIENCE IN APPLIED SCHOOL LEADERSHIP (IN PARTNERSHIP WITH COE) WITH PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL OPTION

*Faculty Advisor: Clifford Tyler; (408) 236-1135; ctyler@nu.edu*

This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site or district administrators. This program is offered in collaboration with County Offices of Education--"Leaders in Educational Administration Program" (L.E.A.P), which is comprised of six courses leading to the Preliminary Administrative Services Credential. Students accepted into the program receive full National University graduate credit for the six County Education Office Tier I courses. In addition, students are required to enroll in two additional National University Tier I core courses, not including EDA 620B (Fieldwork in Educational Administration). The EDA 620B National University requirement is met through the completion of 75 hours of on-site administrative fieldwork embedded in the six County Office of Education courses. Students must also take an additional four required National University Master of Science in Educational Administration courses for the completion of the Masters of Science in Applied Leadership Degree.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a personal vision of education that includes reflection with colleagues and school stakeholders.
- Implement a shared vision that places student and adult learning at the center of instructional leadership.
- Establish high expectations and standards for the academic and social development of all students and adult stakeholders.
- Devise effective communication systems that support the implementation of the vision of the school community and the infusion of the vision in the instructional program.
- Create consensus among the diverse constituencies in the school and community.
- Critically analyze a topic related to educational leadership through the lens of a researcher.

### Degree Requirements

(10 courses; 45 quarter units)

To receive a Master of Science in Applied School Leadership in partnership with County Offices of Education, students must complete at least 45 quarter units of

graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree.

### Core Requirements

(8 courses; 36 quarter units)

EDA 631(**), *	Shared Vision of Learning
EDA 632(**), *	Teaching and Learning Culture
EDA 633(**), *	Mgmt for Teaching/Learni
EDA 634(**), *	Diverse Families/Communities
EDA 635(**), *	Personal Ethics for Leadership
EDA 636(**), *	Political and Social Influence
ILD 625	Educational Research
EDA 694	Thesis <i>Prerequisite: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.</i>

or

EDA 637	Action Research <i>Prerequisite: ILD 625</i>
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(\*\*), \* (\*\*) COE Courses \* Required for Preliminary Administrative Services Certificate/Credential

Plus choose two additional core courses from the following list:

EDA 623	Instructional Leadership
EDA 624	Supervision of Instruction
EDA 614	Introduction to Leadership
EDA 626	Community & Diversity
EDA 618	School Law and Policy
EDA 619	School Resource Management
EDA 651	Ethics & Philosophy of Leaders

Fieldwork is required and the requirement is met through the completion of 75 hours of supervised on-site administrative fieldwork embedded in the six SCCOE courses)

### ■ MASTER OF SCIENCE IN EDUCATIONAL ADMINISTRATION WITH PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL

*Faculty Advisor: David Kurth; (909) 806-3313; dkurth@nu.edu*

*Faculty Advisor: Glenn Sewell; (209) 475-1442; gsewell@nu.edu*

This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site or district administrators. It can be completed with or without a preliminary credential option for those pursuing a career in the nonpublic education sector. For students who want to pursue the credential option, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create a vision of learning that is shared and supported by the school community.
- Develop a school culture conducive to student learning and staff professional growth.
- Analyze the organization, operations, and resources necessary to foster a safe, efficient, and effective learning environment.
- Design a system of collaboration that includes families and community members, and responds to diverse community interests and needs, and mobilizes community resources.
- Analyze aspects of professional and personal ethics that are conducive to leading a school or school system.
- Analyze the larger political, social, economic, legal, and cultural context that impacts a school or school district.

- Critically analyze a topic related to educational leadership through the lens of a researcher.
- Evaluate leadership within the lens of ethics and philosophy.

### Degree Requirements

To receive a Master of Science in Educational Administration, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience.

### Core Requirements

(10 courses; 45 quarter units)

EDA 614 Introduction to Leadership

EDA 623 Instructional Leadership

EDA 619 School Resource Management

EDA 626 Community & Diversity

EDA 624 Supervision of Instruction

EDA 618 School Law and Policy

EDA 651 Ethics & Philosophy of Leaders

EDA 620B Degree Field Experience  
*Prerequisite: Prerequisite Students must have completed at least 3 of the following courses: EDA 623, EDA 624, EDA 614, EDA 626, EDA 618, EDA 619*

or

EDA 620C Degree Field Experience  
*Prerequisite: Students must have completed at least 3 of the following courses: EDA 623, and/or EDA 624, and/or EDA 614, and/or EDA 626, and/or EDA 618, and/or EDA 619*

or

EDA 620I Intern Field Experience  
*Prerequisite: May only be taken by students approved for the internship program.*

ILD 625 Educational Research

Choose one of the following:

EDA 637 Action Research  
*Prerequisite: ILD 625*

or

EDA 694 Thesis  
*Prerequisite: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.*

### ■ MASTER OF SCIENCE IN EDUCATIONAL COUNSELING WITH PPSC CREDENTIAL OPTION

*Faculty Advisor: Harvey Hoyo; (714) 429-5143; hhoyo@nu.edu*

The Department of School Counseling and School Psychology offers a graduate degree leading to the Master of Science in Educational Counseling and a recommendation for a Pupil Personnel School Counseling Credential (PPSC). This program is aligned with national standards and prepares candidates for the position of school counselor. Graduates of this program generally seek employment as school counselors in P-12 schools and employment in a institution of higher education.

Candidates enrolled in the degree and credential program are not awarded the master's degree until they have successfully completed all coursework, the action research project and the PRAXIS exam. All coursework must be completed prior to the PPSC credential recommendation. Course equivalence will not be granted for life experiences.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish among major developmental theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and the impact of these stages on school behavior and learning.
- Appraise and address relevant social and diversity concerns and crises of individuals and groups of students.
- Develop and evaluate comprehensive guidance programs based on relevant data.
- Implement individual counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Implement group counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Integrate positive consultative and collaborative skills and techniques in communication with school staff, parents, and community agencies in order to support candidate academic, career, and personal/social success.
- Evaluate legal mandates affecting education and school counseling and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Advocate academic success for all preK-16 students by employing appropriate standardized and non-standardized group and individual educational and psychological assessment data and data driven educational decisions/interventions.
- Integrate computer technology relevant to the tasks and role of a school counselor.
- Construct curriculum for diverse classrooms and classroom interventions strategies based on learning theory.
- Perform as professional school counselors and professional leaders reflecting the history and trends of the profession to enhance the field of school counseling.
- Propose career based programs and interventions based on career development theories, and the impact of career development on school behavior and learning.
- Interpret findings of social science research, developed and implemented by the student, to professional practice.

### Degree Requirements

(18 courses; 79.5 quarter units)

To receive a Master of Science in Educational Counseling, students must complete at least 79.5 quarter units of graduate work. Credentialed teachers may waive the CED 605 course with a curriculum and instruction course taken during their credential program. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree and provided the coursework was completed within the past 7 years. Course equivalence cannot be granted for life experience.

### Program Prerequisites

(2 courses; 9 quarter units)

ECE 201 The Growing Child: Zero to 8

MTH 210 Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

Note: Only CED 607 and prerequisites can be taken prior to admission.

### Core Requirements

(14 courses; 63 quarter units)

CED 607 School Counseling Orientation

CED 600 Applied Child/Adol Development  
*Prerequisite: CED 607 or PED 504*

CED 602 Societal Issues in the Schools  
*Prerequisite: CED 607*

CED 605 Instructional Design

CED 606	Development and Evaluation <i>Prerequisite: CED 607</i>
CED 610	Adv Coun Theories & Methods <i>Prerequisite: CED 600, or PED 667</i>
CED 603	Multicultural Counseling <i>Prerequisite: CED 610</i>
CED 611	Group Counseling <i>Prerequisite: CED 610</i>
CED 601	Consultation in the Schools <i>Prerequisite: CED 610</i>
CED 612	Career & Academic Counseling
CED 613	Assessment for Ed Counselors <i>Prerequisite: CED 607, and Advancement to Candidacy</i>
CED 614	Legal and Ethical Practices
ILD 625	Educational Research
CED 637	School Counseling Research <i>Prerequisite: ILD 625</i>

Candidates are required to complete 100 hours of practicum prior to starting internship. These hours will be completed throughout CED coursework.

### Internship Requirements for Masters Degree with PPSC Credential Students

(4 courses; 16.5 quarter units)

A minimum of 600 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels.

CED 620	Internship Seminar (3 quarter units) <i>Prerequisite: Students must have completed ten (10) program courses, must be enrolled in their internship and have permission of the faculty advisor.</i>
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Choose 3 from the following:

CED 616	School Counseling Intern. I <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 617	School Counseling Intern. II <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 618	School Counseling Intern. III <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 619	Couns Practicum Comm College <i>Prerequisite: A record of a passing score on the CBEST, completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>

Candidates are expected to complete their internship either on a full time basis or part time basis of a minimum of 8 hours per week.

### Internship Requirements for Master's Degree only students

(4 courses; 16.5 quarter units)

For candidates that are only pursuing the MS degree in Educational Counseling (without the PPSC credential).

CED 619	Couns Practicum Comm College <i>Prerequisite: A record of a passing score on the CBEST, completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
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or

CED 616	School Counseling Intern. I <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 620	Internship Seminar (3 quarter units) <i>Prerequisite: Students must have completed ten (10) program courses, must be enrolled in their internship and have permission of the faculty advisor.</i>

Plus select two courses from the following list (other electives may be chosen in consultation with the Faculty Advisor by special permission):

TED 605	The Diverse Classroom
EDT 660	Multimedia & Interactive Tech.
EDA 614	Introduction to Leadership
EDA 617	Philosophy and Leadership
EDA 640	Introduction to H Admin
EDA 648	Student Svcr Enrollment Mgt

Candidates are expected to complete their internship either on a full time basis or part time basis of a minimum of 8 hours per week.

### ■ MASTER OF SCIENCE IN EDUCATIONAL AND INSTRUCTIONAL TECHNOLOGY

*Faculty Advisor: George Beckwith; (909) 806-3349; gbeckwith@nu.edu*

The Master of Science in Educational and Instructional Technology is designed for students who want to participate in the paradigm changes that technology is precipitating in both education and training, as human learning moves from print and classroom-based instruction to digital media. The history and effectiveness of change processes and the role of technology in human learning are key components to the program.

Graduates will be prepared to enter education careers such as K-12 technology coordination, site administration, home school and virtual school instruction, and online instruction in higher education. Graduates will be prepared for the rapidly growing employment opportunities available to people skilled in applying emerging information and telecommunication technologies to solving instructional problems. These graduates will be capable of applying their knowledge and skills to any situation in which digital technologies hold the potential for improving instruction especially business, industry, and governmental agencies. This program emphasizes practical applications by offering extensive technical training in a variety of software. The program culminates with a final technology project that applies the theory and practice of educational and instructional technology.

### Program Technical Requirements

Students are expected to possess a computer or to have access to a campus with a computer lab. Given the nature of educational and instructional technology, the off campus computer should have a high speed Internet connection (T1 or DSL) and have at least 1.6 GHz of processing speed with 512 MB RAM. In addition, students should have access to MS Office (Word, PowerPoint, Excel, and Internet Explorer), as well as Adobe Dreamweaver 8. Additional software may be required depending on courses selected. Finally, students must also have access to a computer headset with microphone for Adobe Connect for synchronous video enabled, web-based conferences.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Conduct an educational needs assessment using analysis of subject matter, job/task, audience and context.

- Apply learning theory, instructional theory, and interactive communication theory using various technology methods across disciplines.
- Integrate interdisciplinary connections from technology, psychology, and computer assisted interactive communications.
- Construct an instructional module using appropriate theories and methodologies.
- Evaluate effective teaching methods for adult learners using available technologies.
- Evaluate the social, political, economic, and global implications of web-based instruction.
- Integrate multimedia elements into simulations, virtual worlds, and learning objects.

### Degree Requirements

(12 courses; 54 quarter units)

To obtain a Master of Science in Educational and Instructional Technology students must complete 54 quarter units of graduate work. Where appropriate, students can transfer a maximum of 13.5 quarter units of graduate work completed at another regionally accredited institution to meet stated requirements in the program. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Core Requirements

(6 courses; 27 quarter units)

EDT 600A	Technology Foundations
EDT 601	Instructional Design <i>Prerequisite: EDT 600A</i>
EDT 605	Education Theory & Technology
EDT 607	Media Based Learning Objects <i>Prerequisite: EDT 600A, EDT 601, and EDT 605</i>
EDT 609	Developing Online Courseware <i>Prerequisite: EDT 600A, EDT 601, EDT 605, and EDT 607</i>
EDT 631	Media and Instruction <i>Prerequisite: EDT 600A</i>

### Required Electives

(4 courses; 18 quarter units)

Students will select four of the following courses as electives:

EDT 603	Advanced Instructional Design <i>Prerequisite: EDT 601</i>
EDT 611	Current Training Issues <i>Prerequisite: Completion of all core requirements.</i>
EDT 613	Simulations & Virtual Reality <i>Recommended: Prior completion of: EDT 600A, and EDT 601, and EDT 605, and EDT 607, and EDT 609, and EDT 631</i>
EDT 615	Performance Technology <i>Prerequisite: EDT 611 and completion of all core requirements.</i>
EDT 616	Video Games as Learning Tools <i>Prerequisite: EDT 611 and completion of all core requirements</i>
EDT 623	Web-based Instruction <i>Prerequisite: EDT 615 and completion of all core requirements.</i>
EDT 632	Technology and Leadership <i>Prerequisite: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631 and completion of all core requirements.</i>
EDT 633	Assessment & Accountability <i>Prerequisite: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631 and completion of all core requirements.</i>

### Integration Seminars and Project

(2 courses; 9 quarter units)

EDT 693	Instructional Eval. & Devl. <i>Prerequisite: EDT 600A, and EDT 601, and EDT 605, and</i>
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*EDT 607, and EDT 609, and EDT 631, and all 4 of the required elective courses*

EDT 695	Capstone Project <i>Prerequisite: EDT 693 and all core and elective classes.</i>
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## ■ MASTER OF SCIENCE IN HIGHER EDUCATION ADMINISTRATION

*Faculty Advisor: Joseph Marron; (858) 642-8356; jmarron@nu.edu*

The Program is designed to provide candidates with the knowledge and skills necessary for leadership positions in institutions of Higher Education. Candidates will learn to apply sound educational theory, leadership and strategic management techniques in the planning, evaluation and implementation of instructional programs and student services. Candidates will learn strategies for managing and implementing change in the dynamic higher education environment. Developing and maintaining positive community relationships and addressing diverse community needs and interests will be addressed, along with financial management and case law pertinent to higher education.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze sound educational philosophy, theory and practice to managing change, policy and governance, strategic planning and analysis, student services, and enrollment management in higher education.
- Appraise change strategies, including understanding complex human phenomena such as resistance and anxiety.
- Evaluate current higher education policy in the context of its possible impact on the future of colleges and universities.
- Examine the impact community relations have on institutions of higher learning.
- Interpret major legal issues that impact higher education today and will impact higher education in the future.
- Examine resource management in higher education settings.
- Analyze strategic planning and evaluation strategies and data in the context of student, programmatic assessment, and operational needs.
- Examine the impact Student Services and Enrollment Management have on institutions of higher learning.
- Critically analyze a topic related to higher education administration through the lens of a researcher.

### Degree Requirements

To receive a Master of Science in Higher Education Administration, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree and provided the coursework was completed within the past 7 years. Course equivalence cannot be granted for life experience. Please refer to the graduate information section of the University catalog for admission and evaluation.

### Core Requirements

(10 courses; 45 quarter units)

EDA 640	Introduction to H.E. Admin.
EDA 641	Leading and Managing Change <i>Prerequisite: EDA 640</i>
EDA 642	Policy & Accountability <i>Prerequisite: EDA 640</i>
EDA 643	Community Development in HE <i>Prerequisite: EDA 640</i>
EDA 644	Higher Education Law/Politics <i>Prerequisite: EDA 640</i>
EDA 645	Managing Finances & Operations <i>Prerequisite: EDA 640</i>
EDA 646	Strategic Planning & Analysis

Prerequisite: EDA 640

EDA 648 Student Svcs & Enrollment Mgt

ILD 625 Educational Research

EDA 694 Thesis

Prerequisite: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.

### ■ MASTER OF SCIENCE IN INNOVATIVE SCHOOL LEADERSHIP

Faculty Advisor: David Kurth; (909) 806-3313; [dkurth@nu.edu](mailto:dkurth@nu.edu)

Faculty Advisor: Glenn Sewell; (209) 475-1442; [gsewell@nu.edu](mailto:gsewell@nu.edu)

This is an interdisciplinary program between the School of Education and the School of Business and Management designed for students who are committed to leading innovation and positive change within educational systems as a school site or district administrator. Candidates will learn techniques for applying sound business and decision making processes in managing complex problems associated with implementing change. Models for developing trust and respect within diverse groups while leading and managing new initiatives will be presented. Students will be able to analyze group dynamics to create supportive environments where students and teachers can be successful. An electronic portfolio will be used to demonstrate student achievement of program learning outcomes.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze complex human phenomena such as resistance and anxiety and the ability to lead others in a process through the change process.
- Examine diversity and pluralism in the United States (of students, community, and faculty) in order to develop the cultural competence and be able to work well in diverse, rural and urban environments.
- Analyze decision making frameworks in order to surface and develop ethical leadership and improve decision making skills.
- Develop team building and understand organizational dynamics including the use of the learning organization processes.
- Apply advanced negotiation and conflict resolution strategies to further an organization.
- Explore innovative financial models and gain competency in information management fundamentals.
- Explore community leadership, outreach and partnerships.
- Examine competencies for leadership in globalization including emerging and future trends for business and education.
- Analyze innovative school models, including charter schools, to ensure student success and organizational sustainability.

#### Degree Requirements

To receive a Master of Science in Innovative School Leadership, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree and provided the coursework was completed within the past seven (7) years. Course equivalence cannot be granted for life experience. Please refer to the graduate information section of the University catalog for admission and evaluation.

The culminating project is the completion of a Portfolio that consists of key artifacts from activities that were performed in class, in a school setting, or in the community. These artifacts must be relevant to the six California Professional Standards for Educational Leaders. The assignments/artifacts will be selected by the candidate. All candidates must present their portfolio to designated faculty members as the capstone for the program.

#### Core Requirements

(10 courses; 45 quarter units)

ISL 661 Leadership Global Seminar

LED 604 Leading Change and Adaptation

ISL 662 Decision Making Organizations

Prerequisite: ISL 661

EDA 623 Instructional Leadership

EDA 624 Supervision of Instruction

EDA 618 School Law and Policy

ISL 660 Financial and Information Mgt

Prerequisite: ISL 661

LED 605 Conflict and Power Dynamics

EDA 680 Charter School Leadership

EDA 663 Community Leadership

Prerequisite: ISL 661, LED 604, ISL 662, EDA 623, EDA 624, EDA 618, ISL 660, LED 605, EDA 680

### ■ MASTER OF SCIENCE IN INSTRUCTIONAL LEADERSHIP

Faculty Advisor: Sidney Castle; (858) 642-8363; [scastle@nu.edu](mailto:scastle@nu.edu)

This program will develop leadership skills, particularly involving working with school change, for teachers who are interested in being school leaders but are not ready or interested in becoming administrators. A school leader is a teacher who may be involved in leading by serving on school committees, acting as club sponsors or team coaches, and may be involved as a change agent within the school. An administrator is a certified staff member who has an administrative degree and serves in an administrative position. The degree is a collaborative effort between the Teacher Education and Educational Administration Departments. It combines the five National Board Certified Teaching courses and five courses from the Educational Administration program that deal with leadership. At the conclusion of the program, the candidate has the opportunity to submit the portfolios and take the exam required for the National Board for Professional Teaching Standards certification process and receive a Master of Science degree. Students who are interested in the option of obtaining the California Preliminary Administrative Certificate should speak with the faculty advisor.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to focus on student learning through a systematic study and reflection of one's own teaching practices and through shared knowledge gained from purposefully formed professional learning communities.
- Demonstrate a commitment to educating all students by examining cross-cultural educational issues and relating those to enhancing student learning.
- Demonstrate knowledge of how to teach students by effectively accessing and using research based learning theories, assessment strategies, teaching models, technology, and classroom management strategies to educate all learners.
- Acquire knowledge and develop skills associated with restructuring organizations, mobilizing of human and fiscal resources, and creating a school environment that identifies institutional needs for diversity
- Build consensus among stake holders by implementing procedures for curricular improvements based upon assessment and appropriateness of diverse classroom environments
- Evaluate, analyze, and develop new school programs and paradigms from the politics of school organizations for the improvement of instruction.
- Demonstrate instructional leadership in maintaining and increasing teaching effectiveness provided through relevant professional development opportunities

#### Degree Requirements

(10 courses; 45 quarter units)

To receive a Master of Science in Instructional Leadership, candidates must complete 45 quarter units of graduate coursework, 22.5 of which must be taken from the National Certification program and 22.5 quarter units of graduate work from the Educational Administration program.

#### Core Requirements (National Board Certification)

(5 courses; 22.5 quarter units)

Teachers focus on student learning through systematic study and reflection of their own teaching practices and share their knowledge to form local learning communities. Teachers are committed to educating all students by examin-

ing cross-cultural educational issues and relating those to enhancing student learning. Teachers know how to teach their subject by effectively accessing and using research based learning theories and assessment management strategies to educate all learners.

- NBC 680 Quality Teaching and Learning
- or
- NBCX 1201X NBCT
- NBC 681 Membership in Learning Community
- NBC 682 Videotape Analysis
- NBC 683 Student Work and Assessments
- NBC 639 Leadership Portfolio

**Educational Administration Coursework**  
(5 courses; 22.5 quarter units)

- EDA 614 Introduction to Leadership
- EDA 618 School Law and Policy
- EDA 624 Supervision of Instruction
- EDA 619 School Resource Management
- EDA 626 Community & Diversity

**■ MASTER OF SCIENCE IN SCHOOL PSYCHOLOGY WITH PPSP CREDENTIAL**

*Faculty Advisor: Michael Anderson; (858) 642-8353; manderso@nu.edu*

The Department of Pupil Personnel Services-School Psychology offers a graduate degree leading to the Master of Science in School Psychology and a recommendation for a Pupil Personnel School Psychology credential (PPSP). Candidates cannot get a master’s degree without a credential. This program is aligned with California Commission for Teacher Credentialing (CCTC) standards and prepares candidates in California for the position of school psychologist. Graduates of this program generally seek employment as a school psychologist in P-12 school districts and must hold a PPSP credential for public school employment.

Students taking courses online are advised that there is a program requirement for students to meet on eight Saturdays onsite to engage in experiential, hands-on training during the four assessment courses: PED 671-674. No make-up sessions will be available for these Saturday sessions; students missing sessions may be significantly delayed from completing the program.

Candidates enrolled in the degree and credential program are not awarded the master’s degree until they have completed all coursework including practicum and internship and successful completion of the PRAXIS exam. Course equivalence cannot be granted for life experiences.

**Applied Behavior Analysis Information**

The program includes the five-course sequence in applied behavior analysis which is designed to prepare candidates for the certification examination sponsored by the Behavior Analyst Certification Board (BACB).

Upon successful completion of this five course sequence, the candidate will have met the BACB academic requirements for taking the Board Certified Behavior Analyst (BCBA) exam. Also, a candidate may receive a “certificate of completion” from National University. This is not professional certification by the BACB and does not entitle candidates to claim they are BCBA’s upon completion. Also offered on a limited basis and under very specific conditions, is an Intensive Practicum, not part of the academic requirements for taking the BCBA exam. The Intensive Practicum is designed to meet BACB experiential requirements for taking the BCBA exam.

Information about becoming certified through the BACB can be found at [www.bacb.com](http://www.bacb.com).

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

**Required CBA Learning Module Subscription**

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at [www.behaviordevelopmentolutions.com](http://www.behaviordevelopmentolutions.com) Using someone else’s account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Evaluate various methods of assessment in order to make data-based decisions.
- Analyze consultative/collaborative relationships with school staff, parents, and community agencies in support of student success.
- Examine societal influences on academic and social behavior.
- Analyze how systemic school approaches can affect student outcomes.
- Appraise principles related to prevention in the context of their ability to improve services provided to students.
- Examine strategies related to family systems that support student success.
- Evaluate strategies that mitigate individual differences, abilities, disabilities, and other diverse characteristics in order to enhance services for students.
- Compare and contrast current research methodologies used in school psychology and related fields.
- Conduct research using relevant design, statistics, measurements, data analysis, and program evaluation methods to improve student outcomes.
- Interpret the ethical, legal, and professional standards necessary to engage in sound decision making.
- Design a crisis intervention plan that includes responses that address both individual and school-wide emergency concerns.

**Degree Requirements**

(20 courses; 90 quarter units)

To receive a Master of Science in School Psychology, students must complete at least 90 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students are not awarded the master’s degree until they have completed all graduate and credential coursework, including internship and research (PED637). Course equivalence cannot be granted for life experience. Students must complete all coursework with a GPA of 3.0 or better within seven years. Any courses taken more than seven years ago must be repeated.

**Core Requirements**

(20 courses, 90 quarter units)

Candidates are required to complete all 450 hours of practicum prior to starting their internship. Candidates must complete the practicum experience under the supervision of a credentialed and experienced (three years) school psychologist. National University school psychology candidates will complete school-based practicum during the PED 678 course (3-month course).

- PED 680 Roles, Issues and Ethics
- PED 665 Test and Measurements
- PED 667 Developmental Psychopathology
- CED 601 Consultation in the Schools  
*Prerequisite: CED 610*
- CED 610 Adv Coun Theories & Methods  
*Prerequisite: CED 600, or PED 667*
- ABA 601 Assessment in ABA
- ABA 602 Processes of ABA  
*Prerequisite: ABA 601*

ABA 603	Applications of ABA <i>Prerequisite: ABA 602</i>
ABA 604	Advanced Applications I <i>Prerequisite: ABA 603</i>
ABA 605	Advanced Applications II <i>Prerequisite: ABA 603</i>
PED 671	Cognitive Assessment <i>Prerequisite: PED 665, PED 680</i>
PED 672	Psycho-Academic Assessment <i>Prerequisite: PED 671 with a minimum grade of B</i>
PED 673	Social/Emotional Assessment <i>Prerequisite: PED 672 with a minimum grade of B</i>
PED 678	Practicum in School Psychology <i>Prerequisite: PED 673, PED 671, PED 672</i>
PED 674	Special Populations Assessment <i>Prerequisite: PED 673 with a minimum grade of B</i>
PED 625	Research Methods in Education <i>Prerequisite: PED 665 with a minimum grade of B</i>
PED 637	School Psychology Research <i>Prerequisite: PED 625</i>
PED 685	Internship Seminar <i>Prerequisite: Students must have completed all program prerequisites, completion of PED coursework, 450 hours of practicum and have permission of the faculty advisor</i>
PED 689	School Psych Internship I <i>Prerequisite: Students must have completed all program course work, must be enrolled in their internship and have permission of the faculty advisor</i>
PED 690	School Psychology Intern II <i>Prerequisite: Students must have completed all program course work, must be enrolled in their internship and have permission of the faculty advisor</i>

#### Optional Elective

(1 course, 4.5 quarter units)

ABA 607	ABA Intensive Practicum <i>Prerequisite: Permission of Program Lead Faculty</i>
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### ■ MASTER OF SCIENCE IN SPECIAL EDUCATION

*Faculty Advisor: Myrtice Irish; (909) 919-7634; mirish@nu.edu*

The Master of Science in Special Education is designed for educators and other professionals who want to gain knowledge and skills in working with students who have disabilities and other special needs. Students will learn about educational learning problems and teaching strategies to enhance the performance of students. The Program is aligned with the Education Specialist Authorizations and standards of the California Commission on Teacher Credentialing.

Students may obtain a California Teaching Credential in Special Education while completing their master's degree. Please see completion requirements under Education Specialist in the School of Education's Credential Programs section.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate competence in the application of research methods including critiquing and synthesizing current educational literature.
- Demonstrate appropriate standards of conduct; practice within legal and ethical parameters.
- Develop skills to become a change agent and advocate for exceptional individuals, including diverse learners.
- Demonstrate an understanding of federal and state laws, legislation and judicial decisions regarding exceptional individuals.
- Demonstrate competence in instructional design including adaptations required to assist diverse special education learners achieve the state

standards for curriculum.

- Demonstrate competence in positive behavioral support.
- Demonstrate expertise in use of adaptive and augmentative technology.
- Demonstrate the knowledge, skills and dispositions to actively and creatively engage and support all students in learning.
- Strive to become a continuous learner, a scholar, a collaborative community service member and a responsible citizen.

#### Degree Requirements

(16-17 courses; 72-76.5 quarter units)

To receive a Master of Science in Special Education students must complete at least 72 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience. Students must complete all coursework with a GPA of 3.0 or better within seven years. Any courses taken more than seven years ago must be repeated.

#### Core Requirements

(12 courses; 54 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities
TED 621A	Lang. Dev. Methods: Elem. Sch. <i>Prerequisite: SPD 604, SPD 608, TED 602, TED 606</i>
<b>or</b>	
TED 623	Lang. Dev. Methods: Secondary <i>Prerequisite: TED 602, SPD 604, TED 606, SPD 608</i>
TED 621B	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
SPD 614	Classroom and Behavior Mgmt
SPD 616	Law, Policy, & Collaboration
SPD 622	Assessment
SPD 628	Teaching Reading/Lang Arts
SPD 695	Understanding Edu. Research
SPD 696	Capstone Project <i>Prerequisite: SPD 695</i>

#### Requirements for the Specialization

(4-5 courses; 18-22.5 quarter units)

All students must choose one specialization defined below.

#### ▲ Specialization in Deaf and Hard-of-Hearing

*Faculty Advisor: Cheryl Dean; (858) 642-8371; cdean@nu.edu*

The specialization in Deaf and Hard of Hearing is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance students who are Deaf or Hard of Hearing.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify the etiologies, learning characteristics, language and cognitive development related to hearing loss.
- Communicate using a variety of strategies in signed and spoken language to interact directly and effectively with students who are deaf or hard of hearing, deaf-blind and/or with additional disabilities.
- Apply techniques that develop age appropriate language and cognitive skills, using both visual (signed) and/or auditory (spoken) input for students who are deaf or hard of hearing including those who are deaf-blind with additional disabilities.
- Collaborate effectively with a multi-disciplinary educational team to provide assessments, planning, and implementation strategies for children birth to age



5 that are deaf or hard of hearing, deaf-blind and/or with additional disabilities.

- Analyze the characteristics of students who are deaf or hard of hearing and exhibit additional disabilities that are associated with hearing loss and identify behaviors that require specialized instruction and/or adaptation and/or modifications in instruction.

### Specialization Requirements

(5 courses; 22.5 quarter units)

DHH 632	Charac of D/HH Learners
DHH 634	Assess & Inst D/HH Birth-5yrs
DHH 636	Language Develop Methods D/HH
DHH 638	Literacy Develop D/HH
DHH 640	Inst D/HH with Special Needs

### ▲ Specialization in Mild/Moderate

Faculty Advisor: Judith Menoher; (530) 226-4012; jmenoher@nu.edu

The Specialization in Mild/Moderate is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance individuals with mild/moderate disabilities.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of characteristics of students with M/M disabilities and autism for service delivery such as placement decisions, IEP development, and instruction.
- Evaluate a variety of appropriate assessments procedures and communicate results in order to use evidence based strategies and the core curriculum in the development of IEP goals and instructional plans for students with M/M disabilities and autism.
- Maintain appropriate educational environments and positive behavioral support to include the school-wide behavior support process for students with M/M disabilities and autism.
- Implement effective methods for teaching reading, speaking, listening, written language, and mathematics to ensure access to the general education curriculum across instructional settings for students with M/M disabilities and autism.
- Exhibit collaborative case management to coordinate the IEP process and address the legal and instructional requirements based on the individual needs of the student with M/M disabilities and autism.

### Specialization Requirements

(4 courses; 18 quarter units)

SPD 632	Charac/Instr Stds w/ M/M Disab
SPD 634	Assess of Std w/ M/M Disab
SPD 636	Teaching Math/Writing for M/M
SPD 638	Content Differentiation

### ▲ Specialization in Moderate/Severe

Faculty Advisor: Denise Hexom; (858) 642-8389; dhexom@nu.edu

The Specialization in Moderate/Severe program meets the professional program specific standards required by CTC for credentials. Candidates will meet California Standards for the Teaching Profession and Teacher Performance Expectations.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with Moderate/Severe/Profound disabilities for service delivery impacting assessments, IEP development, instruction, and program options.
- Analyze students' verbal and non-verbal communication abilities to develop needed augmentative, alternative or signed systems including assistive technology, to enhance communication, social interaction, academic performance and skill development.
- Evaluate a variety of assessments and procedures to maximize students?

participation in standards and evidence-based, academic/life skills/wellness curriculum within IEP goals and objectives across school/community settings.

- Establish and maintain educational environments based upon positive behavior support processes at the individual and school-wide levels.
- Analyze the movement, mobility, sensory, and specialized health care needs to access school and community to the fullest extent using appropriate techniques, procedures, materials, assistive technology, and adaptive equipment.
- Exhibit collaborative case management to coordinate the IEP process and the various transitions experienced by students with Moderate/Severe/Profound disabilities, while addressing the legal and instructional requirements of their IEPs.

### Specialization Requirements

(4 courses; 18 quarter units)

SPD 642	Academic Instruction M/S
SPD 644	Life Skills & Transitions M/S
SPD 646	PBS, Comm & Social Skills M/S
SPD 648	Medical & Asst Tech Issues M/S

## CREDENTIAL PROGRAMS

### ■ CLEAR ADMINISTRATIVE SERVICES CREDENTIAL

Faculty Advisor: Donna Elder; (858) 642-8416; delder@nu.edu

The Clear Administrative Services program provides a field-based preparation for administrators seeking a successor credential for administrators to replace their expiring Preliminary Administrative Services Credential. It consists of three courses or 13.5 quarter units: Induction Seminar, Professional Development Seminar, and Assessment Seminar, and may be completed in three months.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify areas of interest for personal study and professional development.
- Identify supplementary areas of study and professional development.
- Create and maintain a vision of learning at the candidate's school or school district.
- Develop and sustain a school culture focused on teaching and learning.
- Provide organizational management of the many aspects of the candidate's school and/or district.
- Present an assessment of the Professional Clear Administrative Credential coursework in relationship to current and future administrative responsibilities.
- Assess their individualized professional growth through participation in the Professional Clear Administrative Services Credential Program.
- Demonstrate sensitivity to school and family needs in diverse communities.
- Apply knowledge of the political, social, economic, legal and cultural context of educational leadership in the candidate's school and/or school district.
- Provide ethical leadership within the candidate's school and/or school district.
- Prepare goals for personal and professional growth.
- Develop a plan for future personal and professional growth.
- Select mentors and build working relationships with them.
- Discuss and reflect upon the completion of the Induction plan.
- Assess the efficacy of their experiences with mentoring.

### Program Requirements

(3 courses; 13.5 quarter units)

Courses must be completed the order below.

EDA 607	Induction Seminar <i>Prerequisite: Candidate must possess a valid preliminary administrative services credential.</i>
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EDA 608 Professional Dev. Seminar  
Prerequisite: EDA 607

EDA 609 Assessment Seminar  
Prerequisite: Possession of a valid preliminary administrative services certificate., and EDA 607, and EDA 608

### ■ CLEAR LEVEL II EDUCATION SPECIALIST: DEAF AND HARD-OF-HEARING

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Utilize knowledge of research to critique and synthesize learning theories as they relate to cognitive, language, and social development of ASL-English learners as well as those with special needs throughout their lifespan.
- Demonstrate understanding and practice of cultural-historical perspectives, educational theories and models, legal and ethical practices, and technological innovations for instructing ASL-English Bilingual Multicultural learners including those with special needs.
- Demonstrate academic discourse competency and language proficiency in both ASL and English, and utilize interpretation and translation skills between ASL and written English.
- Implement developmentally appropriate strategies supporting first and second language acquisition as well as cognitive development engaging each student in the learning process.
- Demonstrate the ability to select, adapt, administer, and interpret and explain formative and summative assessment results, making appropriate dual language and content based recommendations.
- Implement and evaluate differentiated instructional pedagogies addressing state content standards and core curriculum in a culturally relevant manner.
- Demonstrate collaboration skills working with the multi-disciplinary educational team, including families and other stakeholders, to interpret assessment tools and implementing developmentally appropriate dual language (i.e. expressive and receptive), cognitive, and social goals for children from birth to age five.
- Demonstrate knowledge of the etiologies and identify the learning characteristics of students who are DHH and those who are DHH with special needs.
- Implement appropriate classroom management with cultural sensitivity so that behavior challenges diminish and more positive attitudes toward school are developed.
- Demonstrate knowledge of developmental milestones from infancy to adulthood and advocacy skills meeting the communication and academic needs of d/Deaf learners during key transitional stages.
- Collaborate effectively with diverse families, support providers (i.e. ASL-English bilingual specialist, audiologists, interpreters, paraprofessionals, and speech language pathologist), general education professionals, community agencies, and the d/Deaf communities.

#### Program Requirements

(5 courses; 18 quarter units)

EXC 655A Professional Induction Seminar (3 quarter units)

EXC 656\* Best Pract. Stud Spec Needs

EXC 657 Comm. Resources & Transition

IHD 1203X Facilitating Outcomes

EXC 655B\*\* Exit Seminar (1.5 quarter units)

All courses are scheduled by an advisor. Courses in the Level II program may not be taken concurrently. Instructions for applying for a waiver of EXC 656 are provided in EXC 655A.

Candidates for the Level II Credential must take EXC 655A first and may not begin any of the other Level II courses until EXC 655A is completed. EXC 655B must be taken last.

Candidates in the deaf and hard-of-hearing program may take EXC 656, EXC 657, and IHD 1203X in any order.

\* (Students may substitute approved non-University activities for this class. Only full-time faculty members may approve the course equivalence.)

\*\*Portfolio required

### ■ CLEAR LEVEL II EDUCATION SPECIALIST: MILD/MODERATE DISABILITIES

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Required Courses

(5 courses; 18 quarter units)

EXC 655A Professional Induction Seminar (3 quarter units)

EXC 656\* Best Pract. Stud Spec Needs

EXC 657 Comm. Resources & Transition

EXC 658 Adv. Spc. Mild/Moderate

EXC 655B\*\* Exit Seminar (1.5 quarter units)

All courses are scheduled by an advisor. Courses in the Level II program may not be taken concurrently. Instructions for applying for a waiver of EXC 656 are provided in EXC 655A.

Candidates for the Level II Credential must take EXC 655A first and may not begin any of the other Level II courses until EXC 655A is completed. EXC 655B must be taken last.

Candidates in the mild/moderate program may take EXC 656, EXC 657, and EXC 658 in any order.

\* (Students may substitute approved non-University activities for this class. Only full-time faculty members may approve course equivalence.)

\*\*Portfolio required

### ■ CLEAR LEVEL II EDUCATION SPECIALIST: MODERATE/SEVERE DISABILITIES

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Required Courses

(5 courses; 18 quarter units)

EXC 655A Professional Induction Seminar (3 quarter units)

EXC 656\* Best Pract. Stud Spec Needs

EXC 657 Comm. Resources & Transition

EXC 659 Adv. Spc. Moderate/Severe

EXC 655B\*\* Exit Seminar (1.5 quarter units)

All courses are scheduled by an advisor. Courses in the Level II program may not be taken concurrently.

Instructions for applying for a waiver of EXC 656 are provided in EXC 655A.

Candidates for the Level II Credential must take EXC 655A first and may not begin any of the other Level II courses until EXC 655A is completed. EXC 655B must be taken last.

Candidates in the moderate/severe program may take EXC 656, EXC 657, and EXC 659 in any order.

\* (Students may substitute approved non-University activities for this class. Only full-time faculty members may approve the course equivalence.)

\*\* (Portfolio required)

## ■ CLEAR MULTIPLE OR SINGLE SUBJECT CREDENTIAL

Faculty Advisor: David Karrell; (916) 855-4302; dkarell@nu.edu

This program links the California Preliminary Credential to the experiences during and reflections upon the first years of teaching. Candidates eligible for this program must be under contract with a school district and hold a preliminary single or multiple subject credential. Candidates will apply content standards and curriculum frameworks to assess, plan and deliver differentiated instruction to diverse student populations. The effective use of technology in the classroom will also be addressed. Candidate will demonstrate their proficiency via an e-portfolio project.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Utilize content standards, curriculum frameworks and instructional materials to plan and deliver appropriate instruction for all students.
- Incorporate student data from multiple measures (including those for English learners and special populations) to inform instruction.
- Plan and deliver instruction using multi-tiered interventions.
- Create well-managed, equitable and inclusive learning environments
- Use technology for a variety of purposes including communication and collaboration as well as assessing, planning and delivering instruction
- Adhere to professional, legal and ethical obligations including district policies

### Degree Requirements

The five course program begins with a course where candidates reflect upon their initial preparation program, their TPA feedback and their current teaching situation. Based upon that, they complete a self-assessment based upon the California Standards for the Teaching Profession. This information will help determine which 3 of the 4 elective courses are to be taken. The final course is a 1.5 unit Clear Credential e-Portfolio course where professional growth is documented.

### Core Requirements

(5 courses; 19.5 quarter units)

TED 680 Dev as a Professional Educator  
*Prerequisite: California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position*

Choose 3 of the following 4 courses:

TED 682 Instructional Technology  
*Prerequisite: TED 680 California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position*

TED 684 Using Standards and Frameworks  
*Prerequisite: TED 680 California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position*

and

TED 686 Assessment and Instruction  
*Prerequisite: TED 680 Full-time teaching position in a public, charter or private school. A long-term substitute position may be used but needs pre-approval.*

TED 688 Meeting Needs of All Learners  
*Prerequisite: TED 680 Full-time teaching position in a public, charter or private school. A long-term substitute position may be used but needs pre-approval.*

and

TED 699 Clear Credential e-Portfolio (1.5 quarter units)  
*Prerequisite: TED 680 satisfactory completion of three of the four elective courses as well as a full-time teaching position in a P-12 school or a pre-approved long term substitute position*

## ■ PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL

Faculty Advisor: David Kurth; (909) 806-3313; dkurth@nu.edu

Faculty Advisor: Glenn Sewell; (209) 475-1442; gsewell@nu.edu

This program is designed for students who are committed to improving education and who want to advance their careers by becoming public school administrators.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create a vision of learning that is shared and supported by the school community.
- Develop a school culture conducive to student learning and staff professional growth.
- Analyze the organization, operations, and resources necessary to foster a safe, efficient, and effective learning environment.
- Design a system of collaboration that includes families and community members, and responds to diverse community interests and needs, and mobilizes community resources.
- Evaluate aspects of professional and personal ethics that are conducive to leading a school or school system.
- Analyze the larger political, social, economic, legal, and cultural context that impacts a school or school district.
- Evaluate leadership through the lens of ethics and philosophy.

### Scheduling

All courses, with the exception of field experience EDA 620B and EDA 620I, are scheduled by an admissions advisor.

### Core Requirements

(8 courses; 36 quarter units)

EDA 614 Introduction to Leadership

EDA 623 Instructional Leadership

EDA 619 School Resource Management

EDA 626 Community & Diversity

EDA 624 Supervision of Instruction

EDA 618 School Law and Policy

EDA 651 Ethics & Philosophy of Leaders

EDA 620B Degree Field Experience

*Prerequisite: Prerequisite Students must have completed at least 3 of the following courses: EDA 623, EDA 624, EDA 614, EDA 626, EDA 618, EDA 619*

or

EDA 620I Intern Field Experience

*Prerequisite: May only be taken by students approved for the internship program.*

## ■ PRELIMINARY EDUCATION SPECIALIST AUTHORIZATION TEACHING CREDENTIAL

Faculty Advisor: Denise Hexom; (858) 642-8389; dhexom@nu.edu

The Preliminary Education Specialist Authorization Teaching Credential is designed to address both the Education Specialist Standards and the program specific standards, including the Teaching Performance Expectations and California Standards for the Teaching Profession.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

\*Please note: Dual candidates need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate professional, legal, and ethical practices when instructing students with disabilities.
- Teach students who are diverse learners including those who are English language learners.
- Communicate effective case management and collaborative practices with parents, professionals, and other stake holders, in order to facilitate access to the core curriculum for students with disabilities.
- Assess students using a variety of standardized and non-standardized assessments in order to make appropriate educational decisions for students with disabilities
- Develop evidence-based curriculum and instruction including the use of educational and assistive technology to provide access to the core standards for students with disabilities.
- Transition students between educational environments and programs into successful post school experiences.

## Degree Requirements

To receive a California Preliminary Education Specialist: Mild/Moderate, Moderate/Severe, or Deaf and Hard-of-Hearing, teaching credential candidates are required to successfully complete core courses, specific program (advanced) courses, and a clinical practice path to supervised teaching (student teaching or internship).

Candidates choosing the Internship option to obtain the Preliminary Education Specialist: Mild/Moderate, Moderate/Severe, or Deaf and Hard of Hearing credential will need to meet the Internship Eligibility requirements.

The CTC mandates approved internship programs require a minimum of 120 hours of pre-service coursework prior to becoming the teacher of record. 4.5 quarter units are equal to 40 clock hours. These pre-service courses must be successfully completed prior to eligibility for completing the internship option.

## Requirements for the Credential

(20-24 courses; 85.5-94.5 quarter units)

### Corequisites

(2 courses; 9 quarter units)

HEDX 1101X Intro Health Ed: K-12

EDX 1201X Computer Tech in Classroom

### Core Requirements

(10 courses; 45 quarter units)

TED 602 Educational Foundations

SPD 604 Psychological Fdns of Educ.

TED 606 Equity and Diversity

SPD 608\* Exceptionalities

TED 621A Lang. Dev. Methods: Elem. Sch.  
*Prerequisite: SPD 604, SPD 608, TED 602, TED 606*

or

TED 623 Lang. Dev. Methods: Secondary  
*Prerequisite: TED 602, SPD 604, TED 606, SPD 608*

TED 621B\* Reading/Lang. Arts Methods  
*Prerequisite: TED 621A*

SPD 614\* Classroom and Behavior Mgmt

SPD 616 Law, Policy, & Collaboration

SPD 622 Assessment

SPD 628 Teaching Reading/Lang Arts

\* Internship Pre-Service course.

Students must also complete one of the following specializations

## ▲ Specialization in Deaf and Hard-of-Hearing

*Faculty Advisor: Cheryl Dean; (858) 642-8371; cdean@nu.edu*

The specialization in Deaf and Hard-of-Hearing is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance students who are Deaf or Hard-of-Hearing.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify the etiologies, learning characteristics, language and cognitive development related to hearing loss.
- Communicate using a variety of strategies in signed and spoken language to interact directly and effectively with students who are deaf or hard of hearing, deaf-blind and/or with additional disabilities.
- Apply techniques that develop age appropriate language and cognitive skills, using both visual (signed) and/or auditory (spoken) input for students who are deaf or hard of hearing including those who are deaf-blind with additional disabilities.
- Collaborate effectively with a multi-disciplinary educational team to provide assessments, planning, and implementation strategies for children birth to age 5 that are deaf or hard of hearing, deaf-blind and/or with additional disabilities.
- Analyze the characteristics of students who are deaf or hard of hearing and exhibit additional disabilities that are associated with hearing loss and identify behaviors that require specialized instruction and/or adaptation and/or modifications in instruction.

### Specialization Requirements

(5 courses; 22.5 quarter units)

DHH 632 Charac of D/HH Learners

DHH 634 Assess & Inst D/HH Birth-5yrs

DHH 636 Language Develop Methods D/HH

DHH 638 Literacy Develop D/HH

DHH 640 Inst D/HH with Special Needs

### Clinical Practice Requirements

Students will need to choose from one of the following options: Internship or Student Teaching

#### Internship Option

(4 courses; 13.5 quarter units)

DHH 692A Internship DHH  
*Prerequisite: SPD 608, SPD 614, TED 621B*

DHH 692B Internship DHH  
*Prerequisite: DHH 692A*

SPD 688A Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, or DHH 682A, or DHH 692, or DHH 692A*

SPD 688B Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or DHH 682B, or DHH 692, or DHH 692B*

or

#### Student Teaching Option

(4 courses; 13.5 quarter units)

DHH 682A Student Teaching  
*Corequisite: SPD 688A*

DHH 682B Student Teaching  
*Corequisite: SPD 688B*

SPD 688A Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, or DHH 692, or DHH 682A, or DHH 692A*

SPD 688B Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or DHH 692, or DHH 682B, or DHH 692B*

Optional: For the Multiple or Single Subject Credential Requirements, please choose one of the following options. (6-8 courses; 22.5-31.5 quarter units)

### Multiple Subject Credential

(3 courses; 13.5 quarter units)

- TED 635 Methods: History/SS-Heal-PE-Art  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 636 Methods: Mathematics-Science  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 626 Classroom Management  
*Prerequisite: TED 623, or TED 621A*

or

### Single Subject Credential

(3 courses; 13.5 quarter units)

- TED 632 Content Area Curriculum  
*Prerequisite: TED 623*
- TED 633 Content Area Instruct-Assess  
*Prerequisite: TED 623 with a minimum grade of C*
- TED 626 Classroom Management  
*Prerequisite: TED 623, or TED 621A*

and

Choose from one of the following options

### Student Teaching Option

(3 courses; 9 quarter units)

- TED 530A Student Teaching I  
*Corequisite: TED 531*
- TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*
- TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

or

### Internship:

(5 courses; 18 quarter units)

- TED 610 Best Internship Practices  
*Prerequisite: Admission to the intern program*
- TED 628A Internship Clinical Practice I  
*Corequisite: TED 610, TED 631A*
- TED 628B Internship Clinical Pract. II  
*Prerequisite: TED 628A, Corequisite: TED 631B*
- TED 631A Internship Seminar I (2.25 quarter units)  
*Prerequisite: TED 610 with a minimum grade of B*
- TED 631B Internship Seminar II (2.25 quarter units)  
*Prerequisite: TED 631A, TED 628A, Corequisite: TED 628B*

### ▲ Specialization in Mild/Moderate

*Faculty Advisor: Judith Menoher; (530) 226-4012; jmenoher@nu.edu*

The Specialization in Mild/Moderate is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance individuals with mild/moderate disabilities.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of characteristics of students with M/M disabilities and autism for service delivery such as placement decisions, IEP development, and instruction.
- Evaluate a variety of appropriate assessments procedures and communicate results in order to use evidence based strategies and the core curric-

ulum in the development of IEP goals and instructional plans for students with M/M disabilities and autism.

- Maintain appropriate educational environments and positive behavioral support to include the school-wide behavior support process for students with M/M disabilities and autism.
- Implement effective methods for teaching reading, speaking, listening, written language, and mathematics to ensure access to the general education curriculum across instructional settings for students with M/M disabilities and autism.
- Exhibit collaborative case management to coordinate the IEP process and address the legal and instructional requirements based on the individual needs of the student with M/M disabilities and autism.

### Specialization requirements

(4 courses; 18 quarter units)

- SPD 632 Charac/Instr Stds w/ M/M Disab
- SPD 634 Assess of Std w/ M/M Disab
- SPD 636 Teaching Math/Writing for M/M
- SPD 638 Content Differentiation

### Clinical Practice Requirements

Students will need to choose from one of the following options: Internship or Student Teaching

### Internship Option

(4 courses; 13.5 quarter units)

- SPD 692A Internship M/M  
*Prerequisite: SPD 608, SPD 614, TED 621B*
- SPD 692B Internship M/M  
*Prerequisite: SPD 692A*
- SPD 688A Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, or SPD 692A, or SPD 694A*
- SPD 688B Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or SPD 692B, or SPD 694B*

or

### Student Teaching Option

(4 courses; 13.5 quarter units)

- SPD 682A Student Teaching M/M  
*Corequisite: SPD 688A*
- SPD 682B Student Teaching M/M  
*Corequisite: SPD 688B*
- SPD 688A Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, or SPD 692A, or SPD 694A*
- SPD 688B Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or SPD 692B, or SPD 694B*

Optional: For the Multiple or Single Subject Credential Requirements, please choose one of the following options. (6-8 courses; 22.5-31.5 quarter units)

### Multiple Subject Credential

(3 courses; 13.5 quarter units)

- TED 635 Methods: History/SS-Heal-PE-Art  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 636 Methods: Mathematics-Science  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 626 Classroom Management  
*Prerequisite: TED 623, or TED 621A*

or

**Single Subject Credential**

(3 courses; 13.5 quarter units)

- TED 632 Content Area Curriculum  
*Prerequisite: TED 623*
- TED 633 Content Area Instruct-Assess  
*Prerequisite: TED 623 with a minimum grade of C*
- TED 626 Classroom Management  
*Prerequisite: TED 623, or TED 621A*

**and**

Choose from one of the following options

**Student Teaching Option**

(3 courses; 9 quarter units)

- TED 530A Student Teaching I  
*Corequisite: TED 531*
- TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*
- TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

**or****Internship:**

(5 courses; 18 quarter units)

- TED 610 Best Internship Practices  
*Prerequisite: Admission to the intern program*
- TED 628A Internship Clinical Practice I  
*Corequisite: TED 610, TED 631A*
- TED 628B Internship Clinical Pract. II  
*Prerequisite: TED 628A, Corequisite: TED 631B*
- TED 631A Internship Seminar I (2.25 quarter units)  
*Prerequisite: TED 610 with a minimum grade of B*
- TED 631B Internship Seminar II (2.25 quarter units)  
*Prerequisite: TED 631A, TED 628A, Corequisite: TED 628B*

**▲ Specialization in Moderate/Severe***Faculty Advisor: Denise Hexom; (858) 642-8389; dhexom@nu.edu*

The Specialization in Moderate/Severe program meets the professional program specific standards required by CTC for credentials. Candidates will meet California Standards for the Teaching Profession and Teaching Performance Expectations.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with Moderate/Severe/Profound disabilities for service delivery impacting assessments, IEP development, instruction, and program options.
- Analyze students' verbal and non-verbal communication abilities to develop needed augmentative, alternative or signed systems including assistive technology, to enhance communication, social interaction, academic performance and skill development.
- Evaluate a variety of assessments and procedures to maximize students participation in standards and evidence-based, academic/life skills/wellness curriculum within IEP goals and objectives across school/community settings.
- Establish and maintain educational environments based upon positive behavior support processes at the individual and school-wide levels.
- Analyze the movement, mobility, sensory, and specialized health care needs to access school and community to the fullest extent using appropriate techniques, procedures, materials, assistive technology, and adaptive equipment.
- Exhibit collaborative case management to coordinate the IEP process and the various transitions experienced by students with Moderate/Severe/Profound disabilities, while addressing the legal and instructional requirements of their IEPs.

**Specialization Requirements**

(4 courses; 18 quarter units)

- SPD 642 Academic Instruction M/S
- SPD 644 Life Skills & Transitions M/S
- SPD 646 PBS, Comm & Social Skills M/S
- SPD 648 Medical & Asst Tech Issues M/S

**Clinical Practice Requirements**

Students will need to choose from one of the following options: Internship or Student Teaching

**Internship Option**

(4 courses; 13.5 quarter units)

- SPD 694A Internship M/S  
*Prerequisite: SPD 608, SPD 614, TED 621B*
- SPD 694B Internship M/S  
*Prerequisite: SPD 694A*
- SPD 688A Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, or SPD 692A, or SPD 694A*
- SPD 688B Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or SPD 692B, or SPD 694B*

**or****Student Teaching Option**

(4 courses; 13.5 quarter units)

- SPD 684A Student Teaching M/S  
*Corequisite: SPD 688A*
- SPD 684B Student Teaching M/S  
*Corequisite: SPD 688B*
- SPD 688A Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, or SPD 692A, or SPD 694A*
- SPD 688B Clinical Practice Seminar (2.25 quarter units)  
*Corequisite: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or SPD 692B, or SPD 694B*

Optional: For the Multiple or Single Subject Credential Requirements, please choose one of the following options.

(6-8 courses; 22.5-31.5 quarter units)

**Multiple Subject Credential**

(3 courses; 13.5 quarter units)

- TED 635 Methods:History/SS-Heal-PE-Art  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 636 Methods: Mathematics-Science  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 626 Classroom Management  
*Prerequisite: TED 623, or TED 621A*

**or****Single Subject Credential**

(3 courses; 13.5 quarter units)

- TED 632 Content Area Curriculum  
*Prerequisite: TED 623*
- TED 633 Content Area Instruct-Assess  
*Prerequisite: TED 623 with a minimum grade of C*
- TED 626 Classroom Management  
*Prerequisite: TED 623, or TED 621A*

**and**

Choose from one of the following options

## Student Teaching Option

(3 courses; 9 quarter units)

- TED 530A Student Teaching I  
*Corequisite: TED 531*
- TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*
- TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

or

### Internship:

(5 courses; 18 quarter units)

- TED 610 Best Internship Practices  
*Prerequisite: Admission to the intern program*
- TED 628A Internship Clinical Practice I  
*Corequisite: TED 610, TED 631A*
- TED 628B Internship Clinical Pract. II  
*Prerequisite: TED 628A, Corequisite: TED 631B*
- TED 631A Internship Seminar I (2.25 quarter units)  
*Prerequisite: TED 610 with a minimum grade of B*
- TED 631B Internship Seminar II (2.25 quarter units)  
*Prerequisite: TED 631A, TED 628A, Corequisite: TED 628B*

## ■ PRELIMINARY MULTIPLE SUBJECTS TEACHING CREDENTIAL PROGRAM WITH INTERNSHIP OPTION (CALIFORNIA)

*Faculty Advisor: Nedra Crow; (858) 642-8004; ncrow@nu.edu*

The California Preliminary Multiple Subjects Teaching Credential with Internship Option is designed for candidates dedicated to instructional leadership in the K-6 settings. Courses meet the California Commission on Teacher Credentialing (CTC) requirements for a Preliminary Multiple Subject teaching credential. Candidates are required to successfully complete Core courses, multiple single subjects methods' area, and a clinical practice path (student teaching or internship).

\*Please note: Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in making subject matter comprehensible for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in assessing all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in engaging/supporting all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in designing/planning learning experiences for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in creating/maintaining effective learning environments for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in being a legal, ethical, and professional educator for all P-12 learners, including those with diverse learning needs.

### Credential Requirements

(13-14 courses; 54-58.5 quarter units)

To receive a California Preliminary Multiple Subjects Teaching Credential, candidates must complete at least 54 quarter units of graduate work, with 2 co-requisite courses, such that, 48 units must be taken in residence at National University.

Candidates choosing the Internship option to obtain the Preliminary Multiple Subject teaching credential will need to meet the Internship Eligibility requirements.

The CTC mandates that all approved internship programs require a minimum of 120 hours of pre-service coursework prior to becoming the teacher of record. 4.5 quarter units are equal to 40 clock hours. These pre-service courses must be successfully completed prior to eligibility for completing the internship option.

### Co-requisites

(2 courses; 9 quarter units)

HEDX 1101X Intro Health Ed: K-12

EDX 1201X Computer Tech in Classroom

### Core Requirements

(5 courses; 22.5 quarter units)

- TED 602 Educational Foundations
- SPD 604 Psychological Fdns of Educ.
- TED 606 Equity and Diversity
- SPD 608 Exceptionalities
- TED 626\* Classroom Management  
*Prerequisite: TED 623, or TED 621A*

\* Internship Pre-Service course.

### Teaching Credential Area: Multiple Subject Methods

(4 courses; 18 quarter units)

Multiple Subject:

- TED 621A\* Lang. Dev. Methods: Elem. Sch.  
*Prerequisite: SPD 604, SPD 608, TED 602, TED 606*
- TED 621B\* Reading/Lang. Arts Methods  
*Prerequisite: TED 621A*
- TED 635 Methods: History/SS-Heal-PE-Art  
*Prerequisite: TED 621A with a minimum grade of C*
- TED 636 Methods: Mathematics-Science  
*Prerequisite: TED 621A with a minimum grade of C*

\* Internship Pre-Service courses.

### Clinical Practice Path: Student Teaching or Internship

(Student Teaching 4 courses; 13.5 quarter units or Internship 5 courses; 18 quarter units)

The clinical practice (K12 classroom) experience courses (TED 530A, TED 530B, TED 628A, and TED 628B) do not grant graduate credit.

Student Teaching will be arranged by the University for candidates who have completed all program coursework and met all program and state requirements. Student Teaching is unpaid and minimum 80 instructional days in the PK12 classrooms.

### Student Teaching:

- TED 530A Student Teaching I  
*Corequisite: TED 531A*
- TED 530B Student Teaching II  
*Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S*
- TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*
- TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

or

### Internship:

- TED 610 Best Internship Practices  
*Prerequisite: Admission to the intern program*

TED 628A	Internship Clinical Practice I <i>Corequisite: TED 610, TED 628A, TED 631A</i>
TED 628B	Internship Clinical Pract. II <i>Prerequisite: TED 628A, Corequisite: TED 631B</i>
TED 631A	Internship Seminar I (2.25 quarter units) <i>Prerequisite: TED 610 with a minimum grade of B-</i>
TED 631B	Internship Seminar II (2.25 quarter units) <i>Prerequisite: TED 631A, TED 628A, Corequisite: TED 628B</i>

### ■ PRELIMINARY SINGLE SUBJECTS TEACHING CREDENTIAL WITH INTERNSHIP OPTION (CALIFORNIA)

*Faculty Advisor: Nedra Crow; (858) 642-8004; ncrow@nu.edu*

The California Single Subjects Teaching Credential with Internship Option is designed for candidates dedicated to instructional leadership in the P-12 settings. Courses meet the California Commission on Teacher Credentialing (CTC) requirements for a Preliminary Single Subject teaching credential. Candidates are required to successfully complete Core courses, single subject methods' area, and a clinical practice path (student teaching or internship).

\*Please note: Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in making subject matter comprehensible for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in assessing all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in engaging/supporting all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in designing/planning learning experiences for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in creating/maintaining effective learning environments for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in being a legal, ethical, and professional educator for all P-12 learners, including those with diverse learning needs.

#### Credential Requirements

(13-14 courses; 54-58.5 quarter units)

To receive a California Preliminary Single Subjects Teaching Credential, candidates must complete at least 54 quarter units of graduate work, with 2 co-requisite courses, such that, 48 units must be taken in residence at National University.

Candidates choosing the Internship option to obtain the Preliminary Single Subject teaching credential will need to meet the Internship Eligibility requirements.

The CTC mandates that all approved internship programs require a minimum of 120 hours of pre-service coursework prior to becoming the teacher of record. 4.5 quarter units are equal to 40 clock hours. These pre-service courses must be successfully completed prior to eligibility for completing the internship option.

#### Co-requisites

(2 courses; 9 quarter units)

HEDX 1101X Intro Health Ed: K-12

EDX 1201X Computer Tech in Classroom

#### Core Requirements

(5 courses; 22.5 quarter units)

TED 602 Educational Foundations

SPD 604 Psychological Fdns of Educ.

TED 606 Equity and Diversity

SPD 608 Exceptionalities

TED 626\* Classroom Management  
*Prerequisite: TED 623, or TED 621A*

\* Internship Pre-Service course.

#### Teaching Credential Area: Single Subject Methods

(4 courses; 18 quarter units)

##### Single Subject:

TED 623\* Lang. Dev. Methods: Secondary  
*Prerequisite: TED 602, SPD 604, TED 606, SPD 608*

TED 632 Content Area Curriculum  
*Prerequisite: TED 623*

TED 633 Content Area Instruct-Assess  
*Prerequisite: TED 623 with a minimum grade of C*

TED 634 \*Content Area Literacy  
*Prerequisite: TED 623*

\* Internship Pre-Service courses

#### Clinical Practice Path: Student Teaching or Internship

(Student Teaching 4 courses; 13.5 quarter units or Internship 5 courses; 18.0 quarter units)

The clinical practice (K12 classroom) experience courses (TED 530A, TED 530B, TED 628A, and TED 628B) do not grant graduate credit.

Student teaching will be arranged by the university for candidates who have completed all program coursework and met all program and state requirements. Student Teaching is unpaid and minimum 80 instructional days in the PK12 classrooms.

#### Student Teaching:

TED 530A Student Teaching I  
*Corequisite: TED 531A*

TED 530B Student Teaching II  
*Prerequisite: TED 530A, Corequisite: TED 531B with minimum grade of S*

TED 531A Student Teaching Seminar I (2.25 quarter units)  
*Corequisite: TED 530A*

TED 531B Student Teaching Seminar II (2.25 quarter units)  
*Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of Pass, and Corequisite: TED 530B*

or

#### Internship:

TED 610 Best Internship Practices  
*Prerequisite: Admission to the intern program*

TED 628A Internship Clinical Practice I  
*Corequisite: TED 610, TED 628A, TED 631A*

TED 628B Internship Clinical Pract. II  
*Prerequisite: TED 628A, Corequisite: TED 631B*

TED 631A Internship Seminar I (2.25 quarter units)  
*Prerequisite: TED 610 with a minimum grade of B-*

TED 631B Internship Seminar II (2.25 quarter units)  
*Prerequisite: TED 631A, TED 628A, Corequisite: TED 628B*

### ■ PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL COUNSELING (PPSC)

*Faculty Advisor: Harvey Hoyo; (714)429-5143; hhoyo@nu.edu*

This credential authorizes the holder to serve as an educational counselor in a school setting at any grade level P-12. This credential is valid for a maximum of five years. Candidate should see "Admissions to Credential Programs" for specific admission information.



Candidates who have completed an appropriate master's degree in Counseling, Psychology, Social Work, or Education from National University or another regionally-accredited institution can work toward a Pupil Personnel Services Credential with a School Counseling Specialization (PPSC) (i.e. without receiving another master's degree). To meet state-required competencies for the credential, candidates must complete either the entire Master of Science in Educational Counseling or the prerequisites and requirements for the MS in Educational Counseling not already met in previous graduate coursework. Course equivalence cannot be granted for life experiences.

This program is aligned with national standards and prepares candidates for the position of school counselor. Graduates of this program generally seek employment as school counselors in P-12 school districts and must hold a PPSC credential for public school employment or employment in a community college.

Candidates enrolled in the credential program are not awarded the master's degree until they have completed all coursework and have successfully completed the PRAXIS exam. All coursework must be completed prior to the PPSC credential recommendation. Course equivalence cannot be granted for life experiences.

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school age children, preferably in a public school setting.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

### Program Advisement

All PPSC candidates will be assigned a faculty advisor. Candidates will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 607 and prerequisites can be taken prior to admission.

All candidates are expected to meet with their assigned faculty advisor at the following times: (1) upon admission into the program, (2) after five classes, (3) before starting their clinical practice, and (4) at the completion of internship hours.

Candidates are expected to complete their internship either on a full or part time basis.

### Exit Requirements

In order to receive a PPSC credential, candidates must complete all courses and internship within seven years and fulfill the following requirements:

Successful completion of all coursework, portfolio, practicum and internship. Successful completion of the ETS National praxis: The Professional School Counselor (#0421 or #5421) examination in Professional School Counseling (passage score is 156 out of 200). Submit written evaluations of performance in internship experiences by Site Supervisor to University Supervisor. Successful completion of the Exit interview with faculty advisor or University Supervisor. Complete Program Evaluation Form-School Counseling. Schedule an exit appointment with credential program specialist for final clearance and credential documents. Have a zero account balance.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish among major developmental theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and the impact of these stages on school behavior and learning.
- Appraise and address relevant social and diversity concerns and crises of individuals and groups of students.
- Develop and evaluate comprehensive guidance programs based on relevant data.
- Implement individual counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Implement group counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.

- Integrate positive consultative and collaborative skills and techniques in communication with school staff, parents, and community agencies in order to support candidate academic, career, and personal/social success.
- Evaluate legal mandates affecting education and school counseling and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Support academic success for all preK-16 students by employing appropriate standardized and non-standardized group and individual educational and psychological assessment data and data driven educational decisions/interventions.
- Integrate computer technology relevant to the tasks and role of a school counselor.
- Construct curriculum for diverse classrooms and classroom interventions strategies based on learning theory.
- Perform as professional school counselors and professional leaders reflecting the history and trends of the profession to enhance the field of school counseling.
- Propose career based programs and interventions based on career development theories, and the impact of career development on school behavior and learning.

### Program Requirements

(17 courses; 72 quarter units)

A total of 13.5 quarter units of credit may be granted for equivalent graduate work completed at another institution, as it applies to this program and if the units were not used in earning another advanced degree. Credentialed teachers may waive the CED 605 course with a curriculum and instruction course taken during their credential program.

### Advancement to Candidacy

Advancement to Candidacy is a process and is one of several evaluative steps to help ensure that program objectives are met and that candidate-learning outcomes are attained.

After admission as a credential seeking candidate, a candidate must also Advance to Candidacy. To qualify for candidacy, a candidate must:

- Complete prerequisite coursework or equivalent (MTH 210 and ECE 201)
- Complete CED 607 and the next four graduate CED courses with a grade no lower than a B minus.
- If a candidate earns less than 3.0 GPA upon completion of the above courses, the candidate will not Advance to Candidacy. The candidate will be required to meet with lead faculty. A plan for remediation or possible dismissal from the program will be considered.

### Program Prerequisites

(2 courses; 9 quarter units)

ECE 201 The Growing Child: Zero to 8

MTH 210 Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

Note: Only CED 607 and prerequisites can be taken prior to admission.

### Core Requirements

(13 courses; 55.5 quarter units)

CED 607 School Counseling Orientation

CED 600 Applied Child/Adol Development  
*Prerequisite: CED 607 or PED 504*

CED 602 Societal Issues in the Schools  
*Prerequisite: CED 607*

CED 605 Instructional Design

CED 606 Development and Evaluation  
*Prerequisite: CED 607*

CED 610	Adv Coun Theories & Methods <i>Prerequisite: CED 600, or PED 667</i>
CED 603	Multicultural Counseling <i>Prerequisite: CED 610</i>
CED 611	Group Counseling <i>Prerequisite: CED 610</i>
CED 601	Consultation in the Schools <i>Prerequisite: CED 610</i>
CED 612	Career & Academic Counseling
CED 613	Assessment for Ed Counselors <i>Prerequisite: CED 607, and Advancement to Candidacy</i>
CED 614	Legal and Ethical Practices
EDA 690	Guided Study (1.5 quarter units)

Candidates are required to complete 100 hours of practicum prior to starting internship. These hours will be completed throughout CED coursework.

### Internship Requirements for Master's Degree with PPSC Credential Students

(4 courses; 16.5 quarter units)

A minimum of 600 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels.

CED 620	Internship Seminar (3 quarter units) <i>Prerequisite: Students must have completed ten (10) program courses, must be enrolled in their internship and have permission of the faculty advisor.</i>
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Choose 3 from the following:

CED 616	School Counseling Intern. I <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 617	School Counseling Intern. II <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 618	School Counseling Intern. III <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 619	Couns Practicum Comm College <i>Prerequisite: A record of a passing score on the CBEST, completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>

Candidates are expected to complete their internship either on a full time basis or part time basis of a minimum of 8 hours per week.

### ■ UNIVERSITY INTERNSHIP CREDENTIAL PROGRAM FOR PUPIL PERSONNEL SERVICES SCHOOL COUNSELING

*Faculty Advisor: Harvey Hoyo; (714) 429-5143; hhoyo@nu.edu*

The University Internship Pupil Personnel Services in School Counseling credential program allows students who meet the requirements to begin service as a "paid" school counselor in their sponsoring district while completing their formal coursework preparation. Students who qualify as a university intern may begin

the program upon starting a school counseling position, either at the beginning of their program or while currently enrolled in the regular pupil personnel services credential program. Intern students participate in the standard coursework and internship coursework. National University students who are interested in becoming a university intern must complete and show verification of all prerequisite requirements.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

This program is aligned with national standards and prepares candidates for the position of school counselor. Graduates of this program generally seek employment as school counselors in P-12 school districts and must hold a PPSC credential for public school employment.

Candidates enrolled in the degree and credential program are not awarded the master's degree until they have completed all coursework and have successfully completed the ETS PRAXIS-School Counseling exam. All coursework must be completed prior to the Preliminary PPSC credential recommendation. Course equivalence cannot be granted for life experiences.

### Program Advisement

All PPSC candidates will be assigned a faculty advisor. Candidates will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 607 and prerequisites can be taken prior to admission.

All candidates are expected to meet with their assigned faculty advisor at the following times: (1) upon admission into the program, (2) after five classes, (3) before starting their internship hours, and (4) at the completion of internship hours.

### Program Prerequisites

All candidates for the intern program must have a minimum GPA of 3.0. All candidates must possess an appropriate Master's Degree or be in enrolled in the Master of Science in Educational Counseling program and meet the standard internship requirements. Verification of two years relevant paid experience in a P-12 public school or related system or as a licensed counselor or therapist. Letter of recommendation from the Principal or Administrator of the hiring school. Completion of an American School Counseling Association (ASCA) National Model essay. Recommendation by Faculty Advisor

### Exit Requirements

In order to receive a Preliminary PPSC credential, candidates must complete all courses and internship within seven years and fulfill the following requirements:

- Successful completion of all coursework, portfolio, practicum and internship.
- Successful completion of the ETS Praxis (#0421) examination in Professional School Counseling (passage score is 156 out of 200).
- Submission of written evaluations of performance in internship experiences by Site Supervisor to University Supervisor.
- Successful completion of the Exit interview with Faculty advisor or University Supervisor. Complete Program Evaluation Form-School Counseling.
- Schedule an exit appointment with Credential Program Specialist for final clearance and credential documents.
- Have a zero account balance.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish among major developmental theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and their impact on school behavior and learning.
- Appraise and address relevant social and diversity concerns and crises of individuals and groups of students.
- Develop and evaluate comprehensive guidance programs based on relevant data.
- Implement individual counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Implement group counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.

- Integrate positive consultative and collaborative skills and techniques in communication with school staff, parents, and community agencies in order to support candidate academic, career, and personal/social success.
- Evaluate legal mandates affecting education and school counseling and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Advocate academic success for all preK-16 students by employing appropriate standardized and non-standardized group and individual educational and psychological assessment data and data driven educational decisions/interventions.
- Integrate computer technology relevant to the tasks and roles of a school counselor.
- Construct curriculum for diverse classrooms and classroom interventions strategies based on learning theory.
- Perform as professional school counselors and professional leaders reflecting the history and trends of the profession to enhance the field of school counseling.
- Propose career based programs and interventions based on career development theories, and the impact of career development on school behavior and learning.
- Interpret findings of social science research, developed and implement by the student, to professional practice.

### Degree Requirements

A total of 13.5 quarter units of credit may be granted for equivalent graduate work completed at another institution, as it applies to this program if completed no more than 7 years prior to application to program and if the units were not used in earning an advanced degree. Credentialed teachers may waive the CED 605 course with a curriculum and instruction course taken during their credential program.

### Program Requirements: PPSC Credential

(17 courses; 72 quarter units)

### Advancement to Candidacy

After admission as a credential seeking candidate, a candidate must also Advance to Candidacy. To qualify for candidacy, a candidate must:

- Complete CED 607, next four graduate CED courses with a grade no lower than a B minus.
- Complete prerequisite coursework or equivalent (MTH 210 and ECE 201).

If a candidate earns less than 3.0 GPA upon completion of the above courses, the candidate will not Advance to Candidacy. The candidate will be required to meet with faculty advisor. A plan for remediation or possible dismissal from the program will be considered.

### Internship Program Recommended Course Sequence

#### Program Prerequisites

(2 courses; 9 quarter units)

ECE 201	The Growing Child: Zero to 8
MTH 210	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>

Note: Only CED 607 and prerequisites can be taken prior to admission.

#### Internship Pre-Service Coursework

(5 courses; 22.5 quarter units)

CED 607	School Counseling Orientation
CED 600	Applied Child/Adol Development <i>Prerequisite: CED 607 or PED 504</i>
CED 605	Instructional Design
CED 602	Societal Issues in the Schools <i>Prerequisite: CED 607</i>
CED 606	Development and Evaluation <i>Prerequisite: CED 607</i>

### Program Requirements

(8 courses; 33 quarter units)

CED 610	Adv Coun Theories & Methods <i>Prerequisite: CED 600, or PED 667</i>
CED 603	Multicultural Counseling <i>Prerequisite: CED 610</i>
CED 611	Group Counseling <i>Prerequisite: CED 610</i>
CED 601	Consultation in the Schools <i>Prerequisite: CED 610</i>
CED 612	Career & Academic Counseling
CED 613	Assessment for Ed Counselors <i>Prerequisite: CED 607, and Advancement to Candidacy</i>
CED 614	Legal and Ethical Practices
EDA 690	Guided Study (1.5 quarter units)

Candidates are required to complete 100 hours of practicum throughout CED coursework.

### Internship

(4 courses; 16.5 quarter units)

A minimum of 600 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels:

CED 620*	Internship Seminar (3 quarter units) <i>Prerequisite: Students must have completed ten (10) program courses, must be enrolled in their internship and have permission of the faculty advisor.</i>
CED 616	School Counseling Intern. I <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 617	School Counseling Intern. II <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>
CED 618	School Counseling Intern. III <i>Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.</i>

\* taken concurrently with Internship

### ● EARLY CHILDHOOD SPECIAL EDUCATION ADD-ON AUTHORIZATION

*Faculty Advisor: Lucinda Kramer; (714) 429 5132; lkramer@nu.edu*

The Early Childhood Special Education (ECSE) program includes the mild/moderate and moderate/severe disabilities and traumatic brain injury, and authorizes service to children ages birth to pre-kindergarten only.

This Added On Authorization in Early Childhood Special Education is available to individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential, and who complete a program through a Commission-approved program sponsor. The ECSE Added Authorization authorizes the holder to provide special education services in the area of mild/moderate or moderate/severe disabilities for students ages birth to pre-K as determined by the local level special education assessment.

Completion of the Add-On Authorization extends special education teaching authorization from birth to Pre-K. It may also be added to Clear Credentials in Deaf and Hard-of-Hearing, Physical Impairments, and Visual Impairments. In addition, persons with Learning Handicapped or Severely Handicapped credentials may add this Add-On authorization. It is expected that the candidate has experience and access to early childhood special education programs serving young children with disabilities, birth to five, during the program.

Professionals in other fields, such as social work, nursing, behavioral intervention, and child development may also complete the course work for professional development units.

Note: SPD 678 ECSE Field Experience must be taken as the last course in the program. After successfully completing coursework and the ECSE Exit Exam candidates must meet with a Credential Program Specialist to complete and submit to the Commission on Teacher Credentialing application for the Add-On Authorization.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrates knowledge of developmental and learning characteristics, and evidence-based practices associated with young children (birth to Pre K) with developmental delays, and all categories of disabilities.
- Demonstrates knowledge of family systems, the impact of child with disabilities on the family, engages in family-centered practices and partnerships in all components of early intervention and education for infants and young children with disabilities
- Demonstrates skill in formal and informal assessment approaches that inform the development and implementation of evidence-based, developmentally appropriate, family supported interventions and reflect the impact of culture (including ELL), specific disabilities on learning, and the role of the interdisciplinary team.
- Document observations from birth to prekindergarten and in-depth field experiences in early childhood settings with families and children of diverse backgrounds and young children who have a range of abilities including in-home service delivery, and inclusive DAP center based preschool/prekindergarten programs

### Degree Requirements

To receive the Early Childhood Special Education Add-On Authorization candidates are required to successfully complete all course work including field experiences and pass the ECSE Program Exit Exam.

### Authorization Requirements

(4 courses; 18 quarter units)

SPD 672	Intro to ECSE
SPD 674	Collaborative Partners
SPD 676	ECSE Assessment & Intervention
SPD 678	ECSE Field Experience

## GRADUATE CERTIFICATES

### ● GRADUATE CERTIFICATE IN APPLIED BEHAVIOR ANALYSIS

*Faculty Advisor: William Matthew; 661-864-2367; wmatthew@nu.edu*

The six-course sequence in applied behavior analysis is designed to prepare candidates for the national certification examinations sponsored by the Behavior Analyst Certification Board (BACB). Upon successful completion of National University's six course sequence, the candidate will receive a certificate of completion from National University, but this is not professional certification by the Behavior Analyst Certification Board (BACB) and does not entitle candidates to claim they are Board Certified Behavior Analysts (BCBA's). Information about becoming certified through the BACB can be found at [www.bacb.com](http://www.bacb.com).

### Required CBA Learning Module Subscription

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at [www.behaviordevelopmentsolutions.com](http://www.behaviordevelopmentsolutions.com) Using someone else's account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve

your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate data and information from applied behavior analysis procedures, and synthesize in graphic, textual, and oral formats.
- Integrate overall practice guidelines code of ethics, and laws in applied behavior management.
- Critique relevant research literature and use idiographic research methods to solve behavior problems.
- Use multiple data sources and points of view in the design, implementation, and evaluation of analytic goals.
- Apply methods of applied behavior analysis to practice.

### Degree Requirements

Qualifying to take the national Board Certified Behavior Analyst exam requires that candidates must do 1500 hours of Supervised Fieldwork, supervised by a Board Certified Behavior Analyst (BCBA). National University does not provide this supervision. Candidates for admission to the ABA Certificate Program must have a bachelor's degree.

### Requirements for the Certificate

(6 courses; 27 quarter units)

ABA 601	Assessment in ABA
ABA 602	Processes of ABA <i>Prerequisite: ABA 601</i>
ABA 603	Applications of ABA <i>Prerequisite: ABA 602</i>
ABA 604	Advanced Applications I <i>Prerequisite: ABA 603</i>
ABA 605	Advanced Applications II <i>Prerequisite: ABA 603</i>
ABA 606	Ethics for Behavior Analysts

### Optional elective

(1 course; 4.5 quarter units)

ABA 607	ABA Intensive Practicum <i>Prerequisite: Permission of Program Lead Faculty</i>
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### ● GRADUATE CERTIFICATE IN AUTISM

*Faculty Advisor: KayDee Caywood; (310) 662-2145; kcaywood@nu.edu*

This certificate is designed for those interested in finding out more about working with and teaching those that fall within the Autism Spectrum Disorder. The four course sequence is designed to provide the student with an orientation to the terms and the characteristics involved, assessment and behavior management interaction strategies, a variety of teaching strategies, and train necessary skills in collaborating with parents and families of those in the spectrum. It is recommended that students complete EXC 621 first in the sequence.

Credentialed teachers interested in this certificate to enhance their knowledge of teaching those in the field, should contact a Credential Program Specialist.

Professionals in other fields such as social work, nursing, and child development can also complete the coursework for professional growth units or a National University certificate.

### Requirements for the Certificate

1. Possess a valid Education Specialist Mild/Moderate, Deaf and Hard-of-Hearing, Physical and Health Impairment, or Visual Impairment credential.
2. Meet with a Credential Program Specialist within 30 days of enrollment to obtain certification application procedures.

### Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of the background and orientation of the terms included in the Autism Spectrum Disorder (ASD) category.
- Demonstrate an understanding of federal and state laws, legislation and judicial decisions regarding children with autism.
- Demonstrate competence in recognizing behaviors and utilizing assessments that identify children as having autism.
- Demonstrate competence and understanding in using behavioral analysis to manage and change behaviors of children with autism.
- Demonstrate understanding of differing evidence-based program strategies for teaching students with autism.
- Demonstrate the competence to organize a structured classroom, to collect relevant data on behavioral outcomes, and to implement identified evidence-based strategies for a class that includes students that fall within the spectrum.
- Demonstrate skills needed for working collaboratively within and across systems that serve children and families and with professionals from diverse disciplines.

### Certificate Requirements

(4 courses; 18 quarter units)

EXC 621	Intro Students w/Autism Spect
EXC 622	Assess & Behavioral App in Aut
EXC 623	Intervention/Instr. w/Aut.
EXC 624	Autism Collab w/Parents & Fam.

### ● GRADUATE CERTIFICATE IN BEST PRACTICES

Faculty Advisor: Linda Ventriglia-Nava; (916) 444-2190; lventrig@nu.edu

The Best Practices program implements research-based practices that accelerate student achievement. It involves the following effective teaching practices: vocabulary development, comprehensive strategies, accelerated English Language Learning, higher level questioning, differentiated and targeted instruction, student engagement strategies, cooperative learning grouping strategies and standard-based instruction. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans. They will learn how to target research-based strategies to close the achievement gap. Candidates will do a videostreaming analysis of specific strategies. Candidates will develop a repertoire of strategies to become a trainer of trainers.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for Standards-based instruction across content areas.
- Use Best Practice teaching Strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice Teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension and interdisciplinary learning.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies for assessment and grouping.

### Certificate Requirements

(4 courses; 18 quarter units)

MAT 670	Theory Best Practice Teaching
MAT 671	Appl Best Practice Strat in CI
MAT 674	Differentiated Instruction
MAT 675	21st Century Multimedia & Tech

### ● GRADUATE CERTIFICATE IN e-TEACHING & LEARNING

Faculty Advisor: Lorraine Leavitt; (714) 429-5316; lleavitt@nu.edu

The e-Teaching and Learning Certificate is designed to meet the growing need for quality online instructors in PK - 16, community colleges, and corporations. The certificate focuses on learning and applying effective student-centered online pedagogical strategies and research-based Best Practices. Course content includes the history and evolution of distance learning, the use of interactive media tools, the development of online curriculum that adheres to the National Standards for Quality Online Teaching, and the accurate evaluation of student learning outcomes using multiple assessment strategies. Upon completion of this certificate, candidates will be prepared to teach effectively in the online learning environment.

The four course e-Teaching Certificate sequence is designed to help candidates cultivate the skills, knowledge and dispositions required for successful online course development, delivery and assessment. Given the exponential growth in online education, a certificate in the area of e-Teaching and Learning will improve candidate teaching performance, increase student learning and enhance employment opportunities

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends, and issues in the online environment
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence based best practices research in the online teaching environment.

### Certificate Requirements

(4 courses; 18 quarter units)

ETL 680	Introduction to e-Teaching
ETL 682	Active Teaching and Learning
ETL 684	Differentiated Online Instruct
ETL 686	Designing Instr Materials

*Prerequisite: ETL 680 , and ETL 682 , and ETL 684*

### ● GRADUATE CERTIFICATE IN EARLY CHILDHOOD EDUCATION

Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

The Early Childhood Education Certificate program has been designed to include the competencies and guidelines as established by the National Association for the Education of Young Children (NAEYC) Advanced Program standards. The certificate is also structured to meet the State of California Child Development Permit Matrix requirements for employment in pre-school settings however it does not confer a State of California teaching credential or license.

Non-residents of California; military personnel or their dependents; and international students should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework, in addition to the certificate program, may be required to obtain a permit, license or credential necessary for employment. Candidates assume the responsibility for determining and meeting these requirements. The four course sequence specializing in early childhood education is designed to prepare candidates with teaching experience for meeting the unique needs of teaching children from birth to age 8.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze and evaluate effective early childhood practice using critical thinking skills, active self-reflection and professional standards.
- Analyze and articulate the impact of theory, standards and current research in Early Childhood practice.
- Apply and integrate evidence-based practices in current work situations to increase learning, growth and development.

### Certificate Requirements

(4 courses; 18 quarter units)

ECE 650	The Early Childhood Teacher
ECE 651	Current Issues in ECE

ECE 652 Cognition and the Young Child  
ECE 653 Best ECE Teaching Practices

### ● GRADUATE CERTIFICATE IN EDUCATIONAL TECHNOLOGY

Faculty Advisor: Cynthia Sitek-Chandler; (858) 642-8322; cchandler@nu.edu

This certificate is designed for individuals wishing to develop their knowledge and skills for using technology in the educational setting

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explore and analyze various learning theories such as behaviorism, cognitivism, constructivism and neurocognition and apply those theories to instruction with technology.
- Research and report the ways that technology can be used to support specific types of learners.
- Identify and demonstrate methods and techniques to accommodate learners in an online or blended environment.
- Identify ways in which new learning technologies are supported by research.
- Participate in online community building and in web-based interactive activities.
- Assess the effectiveness and efficiency of multimedia courseware as an instructional delivery system.
- Describe the critical issues involved in designing effective distance educational programs, including formation of instructional goals and objectives, media/technology selection, and financial considerations.
- Design web-based courses using web page design authoring tools.
- Discuss the hardware and software requirements which need to be met in order to effectively utilize online learning.
- Analyze appropriate Internet resources to use.

#### Certificate Requirements

(5 courses; 22.5 quarter units)

EDT 608 Technology in the Classroom  
EDT 610 Teaching Online  
EDT 655 Issues & Trends in Ed. Tech  
EDT 660 Multimedia & Interactive Tech.  
EDT 612 Meaningful Learning w/ Tech.

### ● NATIONAL BOARD CERTIFIED TEACHER LEADERSHIP CERTIFICATE

Faculty Advisor: Ronarae Adams; (858) 642-8352; radams@nu.edu

The School of Education and the National University NBPTS Professional Teaching Development Center (PTDC) provide the following services, opportunities and program options for new, practicing, and accomplished educators:

- Support and Assistance for NBCT Candidates and School Districts
- Access to Candidate Support Providers (CSPs) and NBCT Faculty
- Master of Arts in Teaching, Master of Science in Instructional Leadership
- Five course Certificate Program
- Teachers Leader and Professional Development Opportunities
- Networking and Celebration of Accomplishments

The five-course NBCT Leadership sequence is thoughtfully designed to develop a professional teacher leadership portfolio that aligns with requirements and submission dates outlined by the National Board for Professional Teaching Standards. The courses meet the needs of several groups of teachers:

- Those who want to improve their teaching and prepare themselves to achieve National Board Certification now or sometime during their career.
- Those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to NBPTS submission guidelines.

- Those who have achieved NBCT and want to earn graduate credit as they develop an NBCT Leadership Portfolio.
- New teachers who want to experience the NBCT portfolio process in advance of submitting for full candidacy to the NBPTS.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to focus on student learning through a systematic study and reflection of one's own teaching practices and through shared knowledge gained from purposefully formed professional learning communities.
- Demonstrate a commitment to educating all students by examining cross-cultural educational issues and relating those to enhancing student learning.
- Demonstrate knowledge of how to teach students by effectively accessing and using research based learning theories, assessment strategies, teaching models, technology, and classroom management strategies to educate all learners.

#### Certificate Requirements

(5 courses; 22.5 quarter units)

NBC 680 Quality Teaching and Learning

or

NBCX 1201X NBCT

NBC 681 Membership in Learning Communi

NBC 682 Videotape Analysis

NBC 683 Student Work and Assessments

NBC 639 Leadership Portfolio

### ● READING CERTIFICATE (ADDED AUTHORIZATION)

Faculty Advisor: Marilyn Moore; (858) 642-8301; mmoore@nu.edu

The Reading Certificate (Added Authorization) authorizes the holder to assess student reading and provide reading instruction in response to those assessments. Reading Certificate holders are also authorized to develop, implement, and adapt the reading content curriculum and assist classroom teachers in these areas. Holders of the Certificate may perform the above services at one or more school sites at the grade levels authorized by their prerequisite teaching credential.

#### Requirements for the Certificate

1. Possess a valid teaching credential.
2. Meet with Credential Program Specialist within 30 days of enrollment to obtain reading certification application procedures. This packet provides detail on the additional requirements for the certificate listed below.
3. No coursework is accepted from another university for this program and no substitutions are allowed.
4. Candidates must maintain a 3.0 GPA. "D" and "F" grades are not accepted. Candidates are also required to upload assignments in the Reading Specialization electronic Presentation Portfolio in e-College.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Show knowledge about theories and research related to effective reading and language arts instruction.
- Conduct individualized informal literacy assessments for struggling readers at early and intermediate levels including English language learners.
- Prepare a Reading Specialization Field Study Proposal with recommendations for instructional interventions, based on individualized informal literacy assessments.
- Design and conduct tutorial, small group, and whole-class language arts instruction.
- Implement research-based theory, assessment, and instructional strategies.
- Utilize the ability to incorporate instructional technology into language arts instructions.
- Communicate plans for tutorial, small group, and whole-class language arts instruction to principal and other school personnel, including assess-

ment-based rationale.

- Communicate results of individualized informal assessments to parents.
- Make decisions about what ALL students need to succeed (Social Justice).
- Portray a professional image, model integrity, and reflect continuously on actions and interactions.

#### Certificate Requirements

(4 courses; 18 quarter units)

MAT 645 Dev. Fluency in Reading

MAT 646 Comprehension Strategies

MAT 647A Lang Arts Assess and Instruct I  
*Prerequisite: MAT 645, and MAT 646*

MAT 647B\* Fld St: Lag Art Assess & In II  
*Prerequisite: MAT 645, MAT 646, and MAT 647A*

Note: At the end of each course, students must have their instructor sign off on the competency verification forms found in the credential packet. These verification forms must be completed before applying for the certificate.

\* (Candidates must maintain a 3.0 GPA. "D" and "F" grades are not accepted.)

#### Completion Requirements for the Certificate

1. Provide verification of three years successful, full-time teaching experience in any grade or subject, preschool through adults. A letter or other appropriate documentation by the candidate's employer may provide verification. Acceptable experience does not include student teaching, internship teaching, or teaching while holding an emergency permit. This experience may also be gained outside of California.
2. Provide a copy of a teaching credential valid for a minimum of 12 months and have a non-delinquent student account balance
3. For each course, provide competency verification forms signed off on by each course instructor
4. After successful completion of the required coursework and a completed credential packet, the regional reading certificate coordinator will review the packet for final approval. Once approval is obtained, please see your Credential Advisor to apply to the CTC for the certificate. A valid credit card for the online application fee is required.

#### ● GRADUATE CERTIFICATE IN TEACHING MATHEMATICS

*Faculty Advisor: Zhonghe Wu; (714) 429-5144; zwu@nu.edu*

Designed to improve the quality of mathematics teaching in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. Based on the National Council of Teachers of Mathematics Principles and Standards, course content includes research-based strategies for developing curriculum and instructional materials, delivering instruction, conducting scholarly investigation, integrating technology and evaluating student performance. Specific course materials focus on contemporary issues and challenges in teaching mathematics, algebra and number theory, geometry and measurement, probability and statistics.

Content prepares teacher credential holders and/or candidates for the CSET 1 and 2 Foundational Level Mathematics Exam. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

The four course Certificate sequence is designed to prepare candidates with the necessary skills, knowledge and dispositions for meeting the unique challenges of teaching Mathematics in elementary and middle schools. Given the demand for qualified teachers in this area, a Certificate in Teaching Mathematics will improve candidate teaching performance, increase student learning and enhance employment opportunities

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues

in teaching Mathematics in grades K-9.

- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

#### Certificate Requirements

(4 courses; 18 quarter units)

MAT 635 Contemporary Issues/Challenges

MAT 636 Teaching Algebra/Number Theory  
*Prerequisite: MAT 635*

MAT 637 Teaching Geometry/Measurement  
*Prerequisite: MAT 635, MAT 636*

MAT 638 Teaching Probability/Stats  
*Prerequisite: MAT 635, MAT 636, MAT 637*

# SCHOOL OF EDUCATION CREDENTIAL INFORMATION

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Dean, Donald Chu  
Ph.D., Education, Stanford University

Associate Dean, Judy Mantle  
Ph.D., Education, University of Kansas

**212 General Information for all Credential Programs**





## REQUIREMENTS FOR ALL CREDENTIAL PROGRAM CANDIDATES

All credential program candidates are required to turn in a completed credential packet for his or her program within 30 days of enrollment. Candidates must review and respond accordingly to all messages delivered to the candidate's student message center and all printed information listed in the degree and credential section of this catalog.

Please be advised that credential programs have time sensitive requirements that must be met for admission, clinical practice, and completion. Candidates are encouraged to discuss individual completion goals and desired timelines with a Credential Program Specialist at the beginning of their program.

Note:

- Candidates transferring from a credential program from another university must provide a letter of good standing.
- Candidates with international degrees who do not hold a U.S.- bachelor's degree must receive an evaluation from a CTC-approved international evaluation agency before being admitted to the University and starting the first course.

## CREDENTIAL RESIDENCY REQUIREMENTS

All candidates enrolled in a preliminary credential program must complete a minimum of 31.5 qu. in residency at National University. All clinical practice courses must be taken in residence. All credential candidates concurrently pursuing a degree, must also meet the degree residency requirements.

Minimum residency requirements to be recommended for a credential and/or degree may vary and are listed under each program. Courses taken online are considered to be in-residence.

Note: All graduate credential coursework must be completed with a GPA of 3.0 ("D", "F" and "U" grades are not accepted and must be repeated). All undergraduate credential coursework must be completed with a GPA of 2.5 ("D", "F" and "U" grades are not accepted and must be repeated). Please see the grade requirements listed under your specific credential program.

## STUDENT ACKNOWLEDGMENT OF TERMS & AGREEMENTS

All applicants for admission to a credential program must review and sign a student acknowledgment of terms & agreements.

The student acknowledgment (provided in each credential packet) gives National University the right to suspend or terminate the candidate's participation in a credential program for any of the following reasons:

- Committed acts or engaged in conduct that could constitute grounds for denial of a credential
- Failed to demonstrate the requisite skills and qualifications to satisfy the requirements for a credential
- Demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the candidate for an education credential

The student acknowledgment of terms & agreements also authorizes National University to release to the Commission all pertinent information pertaining to the candidate's qualification or fitness for a credential.

## Program Advisement

Every credential program has an assigned Faculty Advisor who is available to provide program specific advisement related to a specific program field. The Faculty Advisor name and contact information is listed in the catalog under the heading of specific programs. The Faculty Advisor is a resource for specific questions candidates may have about classes, curriculum, and instructors.

Each candidate also has a Credential Program Specialist available to him/her to help navigate the specifics of the state and university credentialing requirements. These requirements may be updated due to changing legislation. It is very important for candidates to work closely with a Credential Program Specialist to understand and educate themselves on the specifics of their particular credentialing requirements.

## CLINICAL PRACTICE INFORMATION

Clinical practice may consist of student teaching, internship and/or field experience. All clinical practice courses are scheduled by a Credential Program Specialist. Detailed clinical practice eligibility requirements can be found under each credential program section.

## Courtesy Placement

The university understands that some credential candidates may have to leave the state of California prior to completion of the California credential program. Candidates who have not completed clinical practice may be eligible for a remote courtesy placement. Permission must be obtained for completing clinical practice outside of California by submitting a Courtesy Placement Request to the Credentials Department.

Although the university will exert every effort to arrange a placement, a courtesy placement cannot be guaranteed. Requests for placements in other states may take a minimum of four months to a year. Other states often have additional compliance requirements that make it difficult to secure placement.

## RECOMMENDATION FOR A CALIFORNIA CREDENTIAL

To be formally recommended for a California Teaching or Services Credential by National University all candidates must meet the following requirements:

- Official transcripts from all colleges/universities attended on file at National University
- Proof of a conferred bachelor's degree from a regionally accredited institution of higher education (IHE) or an international degree of U.S. equivalence
- Completion of the specific program residency requirements
- Completion of all specific California credential requirements
- Written evaluations of performance in field experiences, internships, educational projects, student teaching, and other practicum
- Successful completion of the credential coursework with a minimum grade point average of 3.0 (Grades of "D", "F" and "U" are not accepted)
- Fulfillment of all financial obligations to the University before applying for the credential; zero account balance
- A completed CTC credential application with valid credit card to pay for CTC online application fee

Note: For Candidates in the BA/S Blended Programs the undergraduate degree must be conferred, with a minimum of a 2.0 cumulative GPA and 2.5 in credential coursework.

## ADMINISTRATIVE SERVICES CREDENTIAL PROGRAMS

### PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL

The Administrative Services Credential authorizes the following services in grades PreK-12 and in classes organized primarily for adults; develop, coordinate, and assess instructional programs; evaluate certificated and classified personnel; provide candidates' discipline, including but not limited to, suspension and expulsion; provide certificated and classified employees discipline, including but not limited to, suspension, dismissal, and reinstatement; supervise certificated and classified personnel; manage school site, district, or county level fiscal services; recruit, employ, and assign certificated and classified personnel; develop, coordinate, and supervise candidate support services, including but not limited to extracurricular activities, pupil personnel services, health services, library services, and technology support services.

### Admissions Requirements

To be fully admitted into the Preliminary Administrative Services Credential Program, each candidate must view the recorded credential orientation sent to his/her SOAR Student Message Center and return a completed credential packet to the Credentials Department within 30 days of enrollment.

A Preliminary Administrative Services Credential Packet is complete when the candidate has filled out and returned the following:

- The Acknowledgement of Terms and Agreements

- Request for Field Experience Placement
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to clinical practice)
- Negative TB test results (valid within the last four years)
- Possess a Teaching or Services Credential (may be preliminary for admittance, but must be clear for recommendation)

### Field Experience Requirements

In addition to meeting the admissions requirements, to be cleared to begin field experience candidates must also complete and return the following:

- Complete at least 3 courses in the credential sequence: EDA 614, EDA 623, EDA 626,
- EDA 619, EDA 624, or EDA 618 (3.0 GPA Grades of “D” and “F” are not accepted)
- Proof of passage of a Basic Skills Assessment
- Possess a current account balance

### Completion Requirements

In addition to meeting the admissions and field experience requirements, candidates must also complete and return the following prior to credential recommendation:

- Possess a Valid CA Clear Teaching or Services Credential (with at least one year remaining on document)
- Five years of experience (must be in the area of the credential held)
- All credential program coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- Possess a zero account balance

All test results must remain valid in order to apply for credential, except for negative TB test results.

Candidates are issued a Certificate of Eligibility upon completion of the program. Unless candidate provides a completed “Verification of Employment as an Administrator” (CL-777) form with the credential application, in which case the candidate will be recommended for the credential.

### Preliminary Administrative Services University Internship Program

The University internship route provides an opportunity for candidates who have been offered employment to complete his or her field experience, while employed in an appropriate position as a school administrator. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the preliminary credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years. All candidates participating in the Administrative Services University Internship program must serve a minimum of one full year in the internship position to be recommended for the Preliminary credential.

Candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program (see below).

### Prerequisite Requirements

- Possession of a valid Preliminary, Clear, Life, General, or Services credential. A day to day or short term teaching permit does not qualify as an accepted credential for admission.
- Passage of a Basic Skills Assessment.
- Three years of experience while in the possession of a valid California emergency permit and/or teaching credential issued under the laws, rules, and regulations in effect on or before December 31, 1971, requiring the possession of a baccalaureate degree. Two of the three years’ experience may be accepted with an emergency permit.

- A letter of application stating the candidate’s qualifications for admission to the internship program, plus three letters of recommendation, one of the three must be from superintendent or district representative\*
- Agreement on file between the employing District, School or Agency and National University
- Negative TB test (valid within the last four years)
- 3.0 GPA (grades of “D” and “F” are not accepted)
- Maintain zero account balance

\*All candidates must furnish three letters of recommendation from the district discussing his/her prospects for success in the program. One of the letters must be from the superintendent or the superintendent’s designee pledging district support of the candidate.

### Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

1. Verification of internship program prerequisites
2. District or agency offer of employment for the intern as a full time administrator in a setting appropriate for the credential being sought
3. Verification of intern eligibility determined in an interview by lead internship faculty

### CLEAR ADMINISTRATIVE SERVICES CREDENTIAL

The Clear Administrative Services program provides a field-based preparation for administrators seeking a successor credential for administrators to replace his/her expiring Preliminary Administrative Services Credential. It consists of three courses (13.5 qu): Induction Seminar, Professional Development Seminar, and Assessment Seminar, and may be completed in three months.

### ADMISSIONS REQUIREMENTS

To be fully admitted into the Clear Administrative Services Credential Program, each candidate must return a completed credential packet (sent to his/her SOAR Student Message Center) to the Credentials Department within 30 days of enrollment.

A Clear Administrative Services Credential Packet is complete when the candidate has filled out and returned the following:

- The Acknowledgement of Terms and Agreements
- Proof of Valid Preliminary Administrative Services Credential

### Completion Requirements

In addition to meeting the admissions requirements, candidates must also complete and return the following prior to credential recommendation:

- A minimum of two years of successful, full-time school administrative experience in public schools, or private schools of equivalent status. Candidates must work under contract while holding a valid Preliminary Administrative Services credential for the entire two years.
- Preliminary Administrative Services Credential must have at least one year remaining on document
- All credential program coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- Possess a zero account balance

All test results must remain valid in order to apply for credential.

## EDUCATION SPECIALIST CREDENTIAL PROGRAMS

### PRELIMINARY EDUCATION SPECIALIST AUTHORIZATION TEACHING CREDENTIALS

The Preliminary Education Specialist Instruction Credential authorizes the holder to teach in the area of specialization Mild/Moderate or Moderate/Severe or Deaf & Hard-of-Hearing in the following settings: Special day classes; Special schools; Home/hospital settings; Correctional facilities; Nonpublic schools and agencies; Resource rooms.

**PRELIMINARY EDUCATION SPECIALIST AUTHORIZATION  
TEACHING CREDENTIAL PROGRAMS**

Core Requirements (10)				Co-Requisites (2)
TED 602	SPD 608*	SPD 614*	SPD 628	HEDX 1101X
SPD 604	TED 621A or TED 623	SPD 616		EDX 1201X
TED 606	TED 621B*	SPD 622		
Mild/Moderate		Moderate/Severe		Deaf and Hard-of Hearing
Specialization Courses (4-5)				
SPD 632		SPD 642		DHH 632
SPD 634		SPD 644		DHH 634
SPD 636		SPD 646		DHH 636
SPD 638		SPD 648		DHH 638
				DHH 640
Student Teaching Route (4)				
SPD 682A		SPD 684A		DHH 682A
SPD 682B		SPD 684B		DHH 682B
SPD 688A		SPD 688A		SPD 688A
SPD 688B		SPD 688B		SPD 688B
Internship Route (4)				
SPD 692A		SPD 694A		DHH 692A
SPD 692B		SPD 694B		DHH 692B
SPD 688A		SPD 688A		SPD 688A
SPD 688B		SPD688B		SPD688B
DUAL CANDIDATES				
Multiple Subject (3)			Single Subject (3)	
	TED 635			TED 632
	TED 636			TED 633
	TED 626			TED 626
Student Teaching Route (3)			Internship Route (5)	
	TED 530A			TED 610
	TED 531A			TED 628A
	TED 531B			TED 628B
				TED 631A
				TED 631B
OPTIONAL MASTER OF SCIENCE IN SPECIAL EDUCATION (2)				
				SPD 695
				SPD 696

### **Mild/Moderate Disabilities (M/M)**

Includes autism, specific learning disabilities; mild to moderate mental retardation; attention deficit and attention deficit hyperactivity disorders; serious emotional disturbance; and authorizes service in grades K–12 and in classes organized primarily for adults through age 22.

### **Moderate/Severe Disabilities (M/S)**

Includes autism; deaf-blindness; moderate to severe mental retardation; multiple disabilities; serious emotional disturbance; and authorizes service in grades K–12 and in classes organized primarily for adults through age 22.

### **Deaf and Hard-of- Hearing (DHH)**

Includes deaf-blind; deaf-autism; deaf with other special needs; and authorizes service to individual's age birth through 22 and in classes organized primarily for adults in services across the continuum of program options available.

### **Admissions Requirements**

To be fully admitted into a Preliminary Education Specialist Authorization Teaching Credential Program, each candidate must view the recorded credential orientation sent to his/her SOAR Student Message Center and return a completed credential packet to the Credentials Department within 30 days of enrollment.

A Preliminary Education Specialist Authorization Teaching Credential Packet is complete when the candidate had filled out and returned the following:

- The Acknowledgement of Terms and Agreements
- Request for Student Teaching Placement
- Negative TB test results (valid within the last four years)
- Proof of Fingerprint Clearance through the CTC
- Initial Faculty Interview
- \*Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to scheduling specialization)
- Proof of Subject Matter Competency in an NCLB Core Academic Subject Area may be shown by one of scenarios listed below (Proof of passage is mandatory prior to scheduling specialization). The Education Specialist Credential programs admit only those candidates who meet one of the following criteria:
  - » The candidate provides evidence of registration for the next scheduled examination.
  - » The candidate provides evidence of having attempted the appropriate subject matter examination(s).
  - » The candidate provides evidence of having completed a Commission approved appropriate subject matter preparation program (Single Subject Candidates only).
  - » The candidate provides evidence of enrollment in an organized subject matter examination preparation program.

### **Specialization Requirements**

In addition to meeting the admissions requirements, to be scheduled in specialization coursework candidates must also complete and return the following:

- All core coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- \*Passage of a Basic Skills Assessment
- Proof of Subject Matter Competency in an NCLB Core Academic Subject Area
- FOR DHH PROGRAM CANDIDATES ONLY: Pass American Sign Language Proficiency Interview- Gallaudet (minimum score of 4)
- Passage of the Generic Core Exam (Basic Skills and Subject Matter must be met prior to taking the Generic Core Exam)

\*Basic Skills Assessment may be waived based upon prelingual deafness. Prelingually deaf candidates who opt to waive the Basic Skills Assessment will be issued a two year preliminary credential instead of a five year.

Most core courses are scheduled by an Admissions Advisor. A Credential Program Specialist will schedule SPD 622, SPD 628 and the specialization courses when candidates meet all of the requirements listed above.

### **Student Teaching Requirements**

In addition to meeting the admissions and specialization requirements, to be cleared to begin student teaching candidates must also complete and return the following 90 days prior to start date:

- All specialization coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- Student Teaching Placement Request Form
- Faculty Student Teaching Interview
- Possess a current account balance
- FOR DUAL CANDIDATES ONLY: Pass Teaching Performance Assessment (TPA) Tasks 1 & 2 (For additional information, see the Teacher Education Credential Program section)

### **Completion Requirements**

In addition to meeting the admissions, specialization and student teaching requirements; candidates must also complete and return the following prior to credential recommendation:

- U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor 's degree
- \*Proof of passing the Reading Instruction Competence Assessment (RICA)
- CPR certification for Infant, Child, and Adult
- Pass the Exit Exam
- All credential program coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- Possess a zero account balance
- FOR DUAL CANDIDATES ONLY: Pass all four Teaching Performance Assessment (TPA) Tasks

\*The RICA exam may be waived based upon prelingual deafness. Prelingually deaf candidates who opt to waive the RICA will be issued a two year preliminary credential instead of a five year.

\*National University cannot recommend Dual candidates for a Preliminary Single Subject Credential prior to passage of the RICA.

All test results must remain valid in order to apply for credential, except for negative TB test results.

## **ALTERNATIVE EDUCATION SPECIALIST CLINICAL PRACTICE ROUTES**

### **Student Teaching Under Contract Route**

National University provides a program whereby actively employed teachers can complete the requirements for his/her teaching credential while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the credential sought.

Credential candidates teaching under contract must be:

- In a regionally (WASC) approved nonpublic school setting must complete a minimum of one course of the four-course sequence student teaching experience in a public school.
- Under the supervision of a University Supervisor and Supervising Teacher who model effective teaching, implement state-adopted academic core curriculum, and mentor the candidate.
- Teaching in an approved assignment that is a match for the credential sought.

### **The Preliminary Education Specialist University Internship**

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as an Education Specialist Mild/Moderate, Moderate/Severe or Deaf & Hard-of-Hearing teacher of record. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the Preliminary credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years.

National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

#### Prerequisite Requirements

- Conferred bachelor's degree
- Proof of Fingerprint Clearance through the CTC
- Negative TB test (valid within the last four years)
- Passage of a Basic Skills Assessment
- Proof of Subject Matter Competency in an NCLB Core Academic Subject Area
- U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor's degree
- 120 hours of pre-service met by coursework
- 3.0 GPA (Grades of "D" and "F" are not accepted)
- Agreement on file between the employing District, School or Agency and National University
- Possess a zero account balance
- FOR DHH PROGRAM CANDIDATES ONLY: Pass American Sign Language Proficiency interview - Gallaudet (min. score of 4)

#### Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

1. Verification of internship program prerequisites
2. Completed Internship Participation form
3. District or agency provisional offer of employment for the intern as a full time teacher of record in a setting appropriate for the credential being sought with a minimum of 20 instructional hours per week
4. Internship Eligibility Packet complete and on file with Credentials Department
5. Verification of intern eligibility determined in an interview by lead internship faculty

#### CLEAR LEVEL II EDUCATION SPECIALIST CREDENTIAL

Individuals who were issued a Level I Education Specialist Teaching Credential must complete a Commission-approved professional teacher program in order to obtain the Clear Level II Education Specialist Credential.

#### Admissions Requirements

To be fully admitted into the Clear Level II Education Specialist Credential, each candidate must return a completed credential packet (sent to his/her SOAR Student Message Center) to the Credentials Department within 30 days of enrollment.

A Clear Level II Education Specialist Credential Packet is complete when the candidate has filled out and returned the following:

- Be currently employed in an appropriate Education Specialist position
- Proof of Valid Level I Education Specialist Teaching Credential
- The Acknowledgement of Terms and Agreements

#### Completion Requirements

All Clear Level II Education Specialist credential candidates are required to have successfully completed coursework in Educational Technology and Health Education, including valid CPR Certification for Infant, Child and Adult. Candidates will be evaluated for these courses. If these classes have been completed in a Level I program or at another university, the candidate should meet with an admissions or Credential Program Specialist to submit an online equivalency request.

In addition to meeting the admissions requirements; candidates must also complete and return the following prior to credential recommendation:

- A minimum of two years of successful, full-time teaching experience in public schools, or private schools of equivalent status. Candidates must work under contract while holding a valid Level I Education Specialist Teaching Credential for the entire two years.
- All credential program coursework (3.0 GPA Grades of "D", "F" and "U" are not accepted)
- Passage of the Exit Exam
- Possess a zero account balance

All test results must remain valid in order to apply for credential.

## PUPIL PERSONNEL SERVICES CREDENTIAL PROGRAMS

### SCHOOL COUNSELING

The Pupil Personnel Services Credential with School Counseling Specialization authorizes the holder to perform the following duties: develop, plan, implement, and evaluate a school counseling and guidance program that include academic, career, personal, and social development; advocate for the high academic achievement and social development of all students; provide school-wide prevention and intervention strategies and counseling services; provide consultation, training, and staff development to teachers and parents regarding students' needs. Candidates seeking only a School Counseling credential must already hold an appropriate Master's degree. Candidates who do not already hold an appropriate Master's degree must be enrolled into the Master of Science in Educational Counseling with Credential program.

#### Admissions Requirements

To be fully admitted into the Pupil Personnel Services School Counseling Credential Program, each candidate must view the recorded credential orientation sent to his/her SOAR Student Message Center and return a completed credential packet to the Credentials Department within 30 days of enrollment.

A School Counseling Credential Packet is complete when the candidate had filled out and returned the following:

- Acknowledgement of Terms and Agreements
- Proof of Master's Degree or enrollment in National University's Master of Science in Educational Counseling
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to clinical practice)
- Negative TB test results (valid within the last four years)
- Proof of Fingerprint Clearance through the CTC

Candidates must also successfully complete the orientation course CED 607 and meet with his/her Faculty Advisor for initial advisement to be fully admitted into the program.

#### Internship Requirements

In addition to meeting the admissions requirements, to be cleared to begin internship hour's candidates must also complete and return the following 30 days prior to the start date:

- Passage of a Basic Skills Assessment
- Internship Application Form
- Complete 10 (ten) CED courses including: CED 610, CED 611, CED 603, and CED 601 (excluding: CED 637, CED 694 and CED 620)
- 3.0 GPA (grades of "D" and "F" are not accepted)
- Possess current account balance

#### Completion Requirements

In addition to meeting the admission and internship requirements, to be recommended for a Pupil Personnel Services: School Counseling Credential candidates must also complete and return the following:

- Passage of the ETS Praxis (#0421) examination in School Counseling (passing score is 156)

- Possession of an appropriate Master 's degree or completed Master 's degree coursework
- Exit interview with NU Faculty Advisor or University Supervisor
- All credential program coursework (3.0 GPA Grades of "D", "F" and "U" are not accepted)
- Possess a zero account balance

All test results must remain valid in order to apply for credential.

### **Pupil Personnel Services: School Counseling University Internship**

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as a school counselor. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years.

National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

### **Prerequisite Requirements**

- Proof of Fingerprint Clearance through the CTC
- Passage of a Basic Skills Assessment
- Negative TB test (valid within the last four years)
- Letter of recommendation from the Principal or Administrator of the hiring school
- Complete 12 CED courses including CED 610, CED 611, CED 603, and CED 601 (except CED 637, CED 694 and CED 620) if not completed the following will be required:
  - » Completion of program prerequisites courses, CED 607 and four additional core CED courses
  - » Verification of two years relevant paid experience in a K-12 public school or related system or as a licensed counselor or therapist
- Faculty approval of an American School Counseling Association (ASCA) National Model essay
- 3.0 GPA (grades of "D" and "F" are not accepted)
- Possess a zero account balance
- Recommendation by NU Faculty Advisor

### **Eligibility Requirements**

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

- Verification of internship program prerequisites
- Agreement on file between the employing District, School or Agency and National University
- District or agency offer of employment for the intern as a full time school counselor with a minimum of 10 hours per week.
- Verification of intern eligibility determined in an Faculty Advisor interview

### **SCHOOL PSYCHOLOGY**

The Pupil Personnel Services Credential with School Psychology Specialization authorizes the holder to perform the following duties: provide services that enhance academic performance; design strategies and programs to address problems of adjustment; consult with other educators and parents on issues of social development and behavioral and academic difficulties; conduct psycho-educational assessment for purposes of identifying special needs; provide psychological counseling for individuals, groups, and families; coordinate intervention strategies for management of individuals and school wide crises.

### **Admissions Requirements**

To be fully admitted into the Pupil Personnel Services School Psychology Credential Program, each candidate must view the recorded credential orientation sent to his/her SOAR Student Message Center and return a completed credential packet to the Credentials Department within 30 days of enrollment.

A School Psychology Credential Packet is complete when the candidate has filled out and returned the following:

- Acknowledgement of Terms and Agreements
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to internship)
- Negative TB test results (valid within the last four years)
- Proof of Fingerprint Clearance through the CTC

### **Internship Requirements**

In addition to meeting the admissions requirements, to be cleared to begin internship hour's candidates must also complete and return the following 30 days prior to the start date:

- Passage of a Basic Skills Assessment
- Internship Application Form
- Complete all credential coursework
- 3.0 GPA (grades of "D" and "F" are not accepted)
- Possess current account balance

### **Completion Requirements**

In addition to meeting the admission and internship requirements; candidates must also complete and return the following prior to credential recommendation:

- Passage of the ETS National Praxis (#0401) examination-School Psychology (passing score is 148)
- All credential & master's coursework (3.0 GPA Grades of "D", "F" and "U" are not accepted)
- Exit interview with NU Faculty Advisor or University Supervisor
- Possess a zero account balance

All test results must remain valid in order to apply for credential.

### **University Internship**

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as a school psychologist. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years. Pre-requisite and eligibility requirements for the University Internship are the same as those for field experience requirements.

National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

### **Prerequisite Requirements**

- Proof of Fingerprint Clearance through the CTC
- Passage of a Basic Skills Assessment
- Negative TB test (valid within the last four years)
- Complete all program coursework, excluding internship and seminar
- 3.0 GPA (grades of "D" and "F" are not accepted)
- Possess a current account balance
- Recommendation by NU Faculty Advisor

## Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

- Verification of internship program prerequisites
- Agreement on file between the employing District, School or Agency and National University
- District or agency offer of employment for the intern as a full time school psychologist
- Verification of intern eligibility determined in an interview by NU Faculty Advisor

## TEACHER EDUCATION CREDENTIAL PROGRAMS

### MULTIPLE/SINGLE SUBJECT TEACHING CREDENTIAL

The Multiple Subject Teaching Credential authorizes the holder to teach in a self-contained classroom in grades PreK-12 or in classes organized primarily for adults. In addition, the holder of a Multiple Subject Teaching Credential may serve in a core or team teaching setting. The Single Subject Teaching Credential authorizes the holder to teach in departmentalized classes in any subject within his/her authorized fields in grades PreK-12, or in classes organized primarily for adults. The SB2042 credentials carry with them an authorization to teach English Language Learners both in the general education classroom and in designated classes.

### ADMISSIONS REQUIREMENTS

To be fully admitted into a Preliminary Multiple/Single Subject Credential Program, each candidate must view the recorded credential orientation sent to his/her SOAR Student Message Center and return a completed credential packet to the Credentials Department within 30 days of enrollment.

A Preliminary Multiple/Single Subject Credential Packet is complete when the candidate had filled out and returned the following:

- The Acknowledgement of Terms and Agreements
- Request for Student Teaching Placement
- Negative TB test results (valid within the last four years)
- Proof of Fingerprint Clearance through the CTC
- Initial Faculty Interview
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to scheduling methods courses)
- Proof of Subject Matter Competency may be shown by one of scenarios listed below (Proof of passage is mandatory prior to scheduling methods courses). The Multiple/Single Subject Credential programs admit only those candidates who meet one of the following criteria:
  - » The candidate provides evidence of registration for the next scheduled examination.
  - » The candidate provides evidence of having attempted the appropriate subject matter examination(s).
  - » The candidate provides evidence of having completed a Commission approved appropriate subject matter preparation program (Single Subject Candidates only).
  - » The candidate provides evidence of enrollment in an organized subject matter examination preparation program.

### Teaching Performance Assessment (TPA)

All Multiple and Single Subject credential candidates are required to pass the Teaching Performance Assessment (TPA) mandated by the California Commission on Teacher Credentialing. The TPA is comprised of four Tasks to be completed by candidates throughout his/her program.

- Task 1: Subject Specific pedagogy
- Task 2: Designing Instruction
- Task 3: Assessing Learning

- Task 4: Culminating Teaching Experience

National University's TPA program is housed in the online environment of TaskStream ([www.taskstream.com](http://www.taskstream.com)). Candidates are required to purchase an account upon enrollment. It is recommended that a (\$42) 1 year subscription be purchased. As a candidate progresses through the program coursework, he/she will be working independently on the TPA Tasks. Each completed task is anonymously scored by an assessor.

Upon submitting a task for scoring, the candidate's student account will be charged a fee. Candidates who must resubmit a task will be required to pay the corresponding fee for each submission. Candidates who successfully complete all four TPA tasks will incur a total of \$305 in submission fees and a TaskStream account fee.

TPA Fee Structure:

- Task 1: \$65
- Task 2: \$65
- Task 3: \$65
- Task 4: \$110\*

\*Task 4 requires a 20 minute unedited video of the candidate teaching a lesson

For additional information on the TPA Program at National University please visit the TPA Webpage: <https://w.taskstream.com/ts/manager17/TPANU>

### Methods Prerequisites

In addition to meeting the admissions requirements, to be scheduled in methods courses (i.e. TED 621A, 621B, 623, 632, 633, 634, 635 & 636) candidates must show proof of the following:

- Proof of a Basic Skills Assessment
- Proof of Subject Matter Competency

### Student Teaching Requirements

In addition to meeting the admissions and methods requirements, to be cleared to begin student teaching candidates must also complete and return the following 90 days prior to start date:

- Student Teaching Placement Request Form
- Passage of Teaching Performance Assessments (TPA) Tasks 1 & 2 (passing score is 3)
- Graduate candidates must complete all credential courses (3.0 GPA Grades of "D", "F" and "U" are not accepted)
- Undergraduate candidates must also complete all program & credential courses
- Possess a current account balance
- Attend Screening Interview with a School of Education faculty member
- Attend Student Teaching orientation

Eligible candidates with three or more years of accredited private school experience may be exempt from student teaching under SB 57. See a Credential Program Specialist for details.

Eligible candidates with six or more years of accredited private school experience may apply directly to the California Commission on Teacher Credentialing (CTC) under SB 57 by submitting application form 41-4, fingerprint clearance materials, transcripts, other requested materials, and current applicable fees. Website: <http://www.ctc.ca.gov/>

### Student Teaching Placement Information

Candidates will be placed by the University:

- Under the supervision of a National University Support Provider and Site Support Provider(s)
- In a supervised full-time student teaching assignment within the appropriate credential area, in two different teaching settings, in two different grade spans, for a minimum of 80 instructional days

At least one-half of student teaching, will be conducted in approved public, charter, or private schools that implement state adopted core curriculum content standards within the state of California. Summer school, after-school programs, and outdoor education programs will be reviewed to determine if they meet criteria for a student teaching assignment. Court schools or community alternative schools may be acceptable placements for one-half of the student teaching experience.

### Completion Requirements

In addition to meeting the admissions, methods and student teaching requirements; candidates must also complete and return the following prior to credential recommendation:

- Pass all four Teaching Performance Assessment (TPA) Tasks
- U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor 's degree
- \*Proof of passing the Reading Instruction Competence Assessment (RICA) – Multiple Subject candidates only
- CPR certification for Infant, Child, and Adult
- All credential program coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- Possess a zero account balance

All test results must remain valid in order to apply for credential, except for negative TB test results.

## ALTERNATIVE MULTIPLE/SINGLE SUBJECT CLINICAL PRACTICE ROUTES

### Student Teaching Under Contract Route

National University provides a program whereby actively employed teachers can complete the requirements for his/her teaching credential while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the credential sought.

Credential candidates teaching under contract must be:

- In a regionally (WASC) approved nonpublic school setting must complete a minimum of one course of the four-course sequence student teaching experience in a public school.
- Under the supervision of a University Supervisor and Supervising Teacher who model effective teaching, implement state-adopted academic core curriculum, and mentor the candidate.
- Teaching in an approved assignment that is a match for the credential sought.

### Multiple/Single Subject University Internship

The University internship route provides an opportunity for candidates who have been offered employment to complete his/her clinical practice, while employed in an appropriate position as a Multiple or Single subject teacher of record. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the Preliminary credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years.

Graduate level National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

### Prerequisite Requirements

- Proof of Fingerprint Clearance through the CTC
- Bachelor 's Degree on file
- Passage of a Basic Skills Assessment
- Proof of Subject Matter Competency
- Completion of U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor 's degree

- Negative TB test (valid within the last four years)
- 120 hours of pre-service met by coursework (3.0 GPA grades of “D” and “F” are not accepted)
- Agreement on file between the employing District, School or Agency and National University
- Maintain a current account balance

### Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

- Verification of internship program prerequisites
- Internship candidate acknowledgement
- District or agency offer of employment for the intern as a full time teacher of record in a setting appropriate for the credential being sought with a minimum of 20 instructional hours per week
- Verification of intern eligibility determined in an interview by lead internship faculty

### Internship Early Completion Option (ECO)

The Early Completion Internship Option is intended to provide candidates with requisite skills and knowledge an opportunity to challenge the course work portion of a Multiple or Single Subject Internship Program and demonstrate pedagogical skills through a performance assessment while in a University internship program. The Early Completion Internship Option (ECO) is available to candidates who have completed the Teaching Foundations Exam in the following areas: Multiple Subjects, Mathematics, Science or English.

### ECO Eligibility Requirements

In order to be eligible for the Early Completion Internship Option, candidates must:

- Complete all Internship Prerequisite and Eligibility requirements except the 120 hours of pre-service met by coursework
- Passage of the Teaching Foundations Exam (TFE) within in the candidate's subject matter area (TFE exam and subject matter competency must match)

### ECO Completion Requirements

Candidates who have been granted the University internship credential and are eligible for the Early Completion Internship Option will need to complete the following in order to be recommended for a Preliminary credential:

- Education Technology requirement (EDX 1201X, or an equivalent course/exam)
- Proof of passing the Reading Instruction Competence Assessment (RICA) – Multiple Subject candidates only.
- Successful completion of all four TPA Tasks\*

\* If the candidate does not pass the TPA on the first attempt, he/she is no longer eligible to participate in the Early Completion Internship Option Program and must complete the full intern preparation program through an individualized professional development plan that emphasizes preparation in areas where additional growth is warranted and waives preparation in areas where the candidate has demonstrated competence.

### CLEAR MULTIPLE/SINGLE SUBJECT CREDENTIAL PROGRAM

Individuals who were issued a Preliminary SB 2042 Multiple Subject Teaching Credential with the renewal code R14I must complete a Commission-approved professional teacher induction program in order to obtain the clear teaching credential, unless the employing agency determines that an induction program is unavailable to the credential candidate. Under these circumstances, the applicant may complete a Commission-approved SB 2042 fifth year program.

### Admissions Requirements

To be fully admitted into a Clear Multiple/Single Subject Credential Program, each candidate must return a completed credential packet (sent to his/her SOAR Student Message Center) to the Credentials Department within 30 days of enrollment. A Clear Multiple/Single Subject Credential Packet is complete when the candidate has filled out and returned the following:

- The Acknowledgement of Terms and Agreements
- Verification of Unavailability of a Commission-Approved Induction Program (CL-855)



- Shown proof of:
  - » Be contracted as a teacher of record in a CA PK-12 school or pre-approved long term substitute position.
  - » Hold a Preliminary SB2042 Credential
  - » Show proof of 45 (post-graduate) quarter units

**Completion Requirements**

In addition to meeting the admissions requirements; candidates must also complete and return the following prior to credential recommendation:

- All credential program coursework (3.0 GPA Grades of “D”, “F” and “U” are not accepted)
- Possess a zero account balance

# **SCHOOL OF ENGINEERING, TECHNOLOGY AND MEDIA**

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Dean, John A. Cicero  
Ph. D., Electrical Engineering, Illinois Institute of Technology

- 222 Degrees Offered**
- 223 Degrees Offered by Department**
- 224 Faculty**
- 225 Undergraduate Degree Programs**
- 234 Minors**
- 235 Graduate Degree Programs**
- 244 Certificate Programs**



# DEGREE PROGRAMS OFFERED

## UNDERGRADUATE DEGREES

### Associate of Arts

With a Major in:

- Digital Media Design

### Associate of Science

With a Major in:

- Engineering Technology 








### Bachelor of Arts

with Majors in:




- Digital Media Design 

### Bachelor of Science

with Majors in:

- Biomedical Engineering Technology 
- Computer Science 
- Construction Engineering Technology 
- Construction Management 
- Electrical and Computer Engineering
- Information Systems 
- Information Technology Management 
- Manufacturing Design Engineering 

## MINORS

- Computer Science 
- Information Technology Management 
- Technology 




















## Transition Programs

- Bachelor of Science in Computer Science to Master of Science in Computer Science
- Bachelor of Science Information Systems to Master of Science in Management Information Systems
- Bachelor of Science in Information Technology Management to Master of Science in Engineering Management

## GRADUATE DEGREES


### Master of Science

with Fields of Study in:

- Computer Science   
with Areas of Specialization in:
  - » Advanced Computing 
  - » Database Engineering 
  - » Software Engineering 
- Cyber Security and Information Assurance   
with Areas of Specialization in:
  - » Computer Forensics 
  - » Ethical Hacking and Pen Testing 
  - » Health Information Assurance 
  - » Information Assurance and Security 
- Data Analytics 
- Engineering Management   
with Areas of Specialization in:
  - » Enterprise Architecture
  - » Project Management 
  - » Systems Engineering 
  - » Technology Management 
- Environmental Engineering 
- Homeland Security and Emergency Management 
- Management Information Systems 
- Sustainability Management 
- Wireless Communications 

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Information Technology Management 

### Graduate Level


- Project Management 

The following programs are also listed in the School of Business and Management

### Master of Science in Management Information Systems

### Master of Science in Sustainability Management

 Entire program can be completed online.

 On-site program with possible online courses or prerequisites.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

## DEPARTMENT OF COMPUTER SCIENCE, INFORMATION AND MEDIA SYSTEMS

### Associate of Arts [☞](#)

*With Majors in:*

- Digital Media Design

### Bachelor of Arts

*with Majors in:*

- Digital Media Design [☞](#)

### Bachelor of Science

*with Majors in:*

- Computer Science [☞](#)
- Electrical and Computer Engineering
- Information Systems [☞](#)
- Information Technology Management [☞](#)

### Master of Science

*with Fields of Study in:*

- Computer Science [☞](#)  
*with Specializations in:*
  - » Advanced Computing [☞](#)
  - » Database Engineering [☞](#)
  - » Software Engineering [☞](#)
- Cyber Security and Information Assurance [☞](#)  
*with Specializations in:*
  - » Computer Forensics [☞](#)
  - » Ethical Hacking and Pen Testing [☞](#)
  - » Health Information Assurance [☞](#)
  - » Information Assurance and Security [☞](#)
- Data Analytics [☞](#)
- Management Information Systems [☞](#)

### Minors

- Computer Science [☞](#)
- Information Technology Management [☞](#)
- Technology [☞](#)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- Information Technology Management [☞](#)

## DEPARTMENT OF APPLIED ENGINEERING

### Associate of Science

*With Majors in:*

- Engineering Technology [☞](#)

### Bachelor of Science

*with Majors in:*

- Biomedical Engineering Technology [☞](#)
- Construction Engineering Technology [☞](#)
- Construction Management [☞](#)
- Manufacturing Design Engineering [☞](#)

## GRADUATE DEGREES

### Master of Science

*with Fields of Study in:*

- Engineering Management [☞](#)  
*with Specializations in:*
  - » Enterprise Architecture
  - » Project Management [☞](#)
  - » Systems Engineering [☞](#)
  - » Technology Management [☞](#)
- Environmental Engineering [☞](#)
- Homeland Security and Emergency Management [☞](#)
- Sustainability Management [☞](#)
- Wireless Communications [☞](#)

## CERTIFICATE PROGRAMS

### Graduate Level

- Project Management [☞](#)

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# SCHOOL OF ENGINEERING, TECHNOLOGY AND MEDIA

## ■ ASSOCIATE OF ARTS

### ◆ MAJOR IN DIGITAL MEDIA DESIGN

Faculty Advisor: Brian Arnold; (310)425-5822; barnold@nu.edu

The AA in Digital Media Design will prepare students to begin work in media technology related professions such as graphic design, web design, video editing, and 3D art. Students are commissioned to work on individual and team projects in a number of media technologies and art theory. The program culminates in a design and development of an individual representative professional project and gives the students the necessary skills to enter into the digital media field.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ digital tools in the production of still images and interactive design elements.
- Explain professional and ethical issues related to media production and distribution.
- Discuss industry terminology and current technology through team collaborations and class presentations.
- Design digital projects that apply 2D, 3D, and time-based principles and techniques.
- Examine the digital media production process from storyboard to prototype.
- Create a digital portfolio that includes planning, development and presentation.

#### Degree Requirements

To receive an Associates of Arts in Digital Media Design degree, students must complete at least 90 quarter units, 31.5 of which must be completed at National University. All students must complete the coursework below and the required minimum 34.5 units of the University General Education requirements for the Associate degree. In the absence of transfer credit, students may need to take open electives to meet the overall unit requirement for the degree.

Students are urged to meet English and Mathematics requirements as early as possible in their coursework to gain the fundamental skills necessary for success in their college studies. Refer to the section on undergraduate admissions procedures for specific information regarding application and placement evaluations.

#### Prerequisites for the Major

(4 courses; 15 quarter units)

ENG 100\* Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101\* Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

COM 220\* Media Literacy

COM 100\* Intro to Mass Communication

or

COM 103\* Public Speaking

\* May be used to meet a General Education requirement

#### Requirements for the Major

(7 courses; 31.5 quarter units)

MUL 200 Communication Tools  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*

MUL 205 Principles of Graphic Design  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*

MUL 245 Principles of Web Design  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*

MUL 255 Interactive Design  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*

MUL 265 Digital Audio and Video  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*

MUL 275 3-D Modeling and Rendering  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103*

MUL 295 Professional Project  
*Prerequisite: MUL 200, MUL 205, MUL 245, MUL 255, MUL 265, MUL 275*

## ■ ASSOCIATE OF SCIENCE

### ◆ MAJOR IN ENGINEERING TECHNOLOGY ☑

Faculty Advisor: Shekar Viswanathan; (858) 309-3416; svswana@nu.edu

The growing importance of technology in fields ranging from environmental to medical, and from product development to manufacturing, requires trained engineering technology professionals to design, maintain, troubleshoot, and repair equipment and systems. The Associate of Science in Engineering Technology program prepares students to pursue opportunities in a wide range of industries including manufacturing, hospitals, laboratories, government, and many other industrial sectors. This program provides the student with broad, basic skills in electronics, computer aided design, computer programming and networks, test and measurement, mathematics, and communication. Focus is on the practical and useful application of fundamental engineering tools and techniques, and will prepare students for careers such as: test engineering technician, field engineering technician, production engineering technician, design engineering technician.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use math, science, engineering, and technology to solve technology problems.
- Apply analog and digital electronics, computer networks, programming and software tools to the building, testing and operation of engineering systems.
- Demonstrate laboratory skills, including the use of appropriate hardware, software, and simulation techniques.
- Communicate through written, verbal, and graphical media.
- Apply ethical standards in professional decision-making.
- Function effectively as a member of a technical team.

#### Degree Requirements

To receive an Associate of Science in Engineering Technology, students must complete at least 96 quarter units, 31.5 of which must be taken in residence at National University. All Associate degree students must complete a minimum 34.5 units the University General Education requirements. In the absence of transfer credit, students may need to take additional electives to fulfill overall unit requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Prerequisites for the major

(8 courses; 27 quarter units)

ENG 100\* Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101\* Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

CSC 242\* Intro to Programming Concepts  
*Prerequisite: CSC 208*

PHS 104\* Introductory Physics  
*Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B*

PHS 104A\* Introductory Physics Lab (1.5 quarter units)  
*Prerequisite: PHS 104, or PHS 171 for science majors*

or

PHS 130A Physics Lab for Engineering (1.5 quarter units)

CHE 101\* Introductory Chemistry  
*Recommended Preparation: MTH 204, or MTH 215, or*

*MTH 216A, and MTH 216B*

CHE 101A\* Introductory Chemistry Lab (1.5 quarter units)  
*Prerequisite: CHE 101, or CHE 141 for science majors*

or

CHE 120A Intro to Chemistry Lab for Eng (1.5 quarter units)  
*Prerequisite: CHE 101*

\* May be used to meet a General Education requirement

### Requirements for the Major

(14 courses; 54 quarter units)

EGR 219 Intro to Graphics and Auto CAD  
*Prerequisite: MTH 215*

EGR 220 Engineering Mathematics  
*Prerequisite: MTH 215*

EGR 230 Electrical Circuits & Systems  
*Prerequisite: MTH 215*

EGR 320 Scientific Problem Solving  
*Prerequisite: EGR 220 or CSC 208*

EGR 320L Scientific Problem Solving-LAB (1.5 quarter units)  
*Prerequisite: EGR 320 or CSC 208*

ITM 230 Computer Network Overview

CSC 220 Applied Probability & Stats.  
*Prerequisite: MTH 215*

EGR 225 Statics & Strength of Material  
*Prerequisite: EGR 220*

EGR 240 Electronic Circuits  
*Prerequisite: EGR 230, Corequisite: EGR 240L*

EGR 240L Electronic Circuits Lab (1.5 quarter units)  
*Corequisite: EGR 240*

CSC 340 Digital Logic Design  
*Prerequisite: CSC 208, or EGR 220*

CSC 340L Digital Logic Design Lab (1.5 quarter units)  
*Corequisite: CSC 340*

CSC 252 Programming in C++  
*Prerequisite: CSC 242*

or

CSC 262 Programming in JAVA  
*Prerequisite: MTH 215*

DEN 308 Computer Aided Engineering I  
*Prerequisite: EGR 219*

## ■ BACHELOR OF ARTS

### ◆ MAJOR IN DIGITAL MEDIA DESIGN

*Faculty Advisor: Brian Arnold; (310) 425-5822; barnold@nu.edu*

The Bachelor of Arts in Digital Media Design consists of courses that prepare the student for a broad range of positions requiring a background in digital entertainment and interactive design, multimedia and game production. Students learn and apply theory and practice for producing digital media with a focus on creating original works. Successful completion of the program will enable graduates to compete for employment because they possess a relevant combination of skills and knowledge vital to today's workplace. Positions in the fields of gaming, video and multimedia production, motion graphics and design include Art Director, Web Designer, Game Designer, Video Editor, Project Manager and Multimedia Specialist.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a personal vision in the creation of original multimedia content.
- Apply the principles of graphic and information design in the generation of digital media projects.

- Examine current trends and key technologies in the media industry.
- Demonstrate oral, visual, and written communication skills with clients, project managers, and media production team members.
- Describe and implement the phases of media production, from the initial planning to the final delivery of a professional product.
- Explain the legal and ethical issues related to media production and distribution.
- Create active and interactive content with graphics, animation, sound and video using media authoring software.

### Degree Requirements

To receive a Bachelor of Arts degree with a Major in Digital Media Design, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

### Preparation for the Major

(2 courses; 9 quarter units)

COM 100\* Intro to Mass Communication

or

COM 103\* Public Speaking

and

COM 220\* Media Literacy

\* May be used to meet a General Education requirement

### Requirements for the Major

(16 courses; 72 quarter units)

MUL 300 Convergence Media  
*Prerequisite: COM 100, or COM 103, and COM 220*

BRO 305 Media Storytelling  
*Prerequisite: ENG 100, and ENG 101, and COM 100, or COM 103, or COM 220*

MUL 305 Graphic Design and Artistry  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 309 Camera and Image  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 365 Digital Video Editing  
*Prerequisite: MUL 265 or equivalent.*

MUL 461 Motion Graphics  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 345 Applied Web Design  
*Prerequisite: COM 100, and COM 103, or COM 220*

MUL 370 Digital Interactivity  
*Prerequisite: COM 100, and COM 103, or COM 220*

MUL 315 Video Game Design  
*Prerequisite: COM 100, and COM 103, or COM 220*

MUL 355 Game Scripting  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 375 3-D Modeling for Game Art  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 462 Digital Audio Creation  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 399 Emerging Technologies  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 445 Digital Project Management  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 430 Advanced Design Project  
*Prerequisite: COM 100, or COM 103, and COM 220*

MUL 471 Adv Digital Interactivity Proj  
*Prerequisite: COM 100, or COM 103, and COM 220*

### Capstone Core Course

(1 course; 4.5 quarter units)

MUL 420 \*Multimedia Arts Portfolio Proj  
*Prerequisite: All general core courses and concentration courses.*

\* This is a two-month long class occurring after concentration courses

## ■ BACHELOR OF SCIENCE

### ◆ MAJOR IN BIOMEDICAL ENGINEERING TECHNOLOGY

*Faculty Advisor: Peilin Fu; (858) 309-3432; pfu@nu.edu*

The impact of modern electronics technology in the growing field of medical instrumentation and device area mandates the needs for trained engineering technology professionals, to design, maintain, troubleshoot, and repair medical instruments and devices. This biomedical engineering technology program will cover areas such as electronic circuit design and analysis, digital circuits including microprocessors, medical devices and instrumentation, medical imaging, sensors, safety and compliance in healthcare, as well as such important skills as project management and team building.

This program provides the student with knowledge and skills to function as medical instrumentation technologist/engineer. Students will gain an in-depth understanding of human anatomy, sensing and monitoring principles, and instrumentation and device operation. Graduates of this degree program will find opportunities in manufacturing, hospitals, laboratories, government, and many other industrial sectors. This program will prepare students for the entry level jobs as test engineer, field engineer, production engineer, design engineer, quality engineer, sales engineer.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze and maintain analog and digital sensors, medical devices and other biomedical systems.
- Utilize math, science, engineering, and technology to solve biomedical technology problems.
- Apply laboratory skills, including the use of appropriate hardware, software, simulation techniques, and data analysis in support of biomedical systems.
- Employ creativity in the design and implementation of components and/or systems relevant to biomedical systems.
- Design and manage projects, and function effectively as a member of a technical team.
- Demonstrate a recognition of the need for, and an ability to engage in lifelong learning.
- Communicate through written, verbal, and graphical media.
- Demonstrate awareness of professional, ethical and global issues in a diverse society.
- Apply professional standards in decision-making.

### Degree Requirements

To receive a Bachelor of Science in Biomedical Engineering Technology, students must complete at least 187.5 quarter units, 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the research project classes. All Bachelor degree students must complete a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Prerequisites for the Major

(23 courses; 88.5 quarter units)

PHS 104\* Introductory Physics  
*Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B*

PHS 104A\* Introductory Physics Lab (1.5 quarter units)  
*Prerequisite: PHS 104, or PHS 171 for science majors*

or

PHS 130A Physics Lab for Engineering (1.5 quarter units)

CHE 101\* Introductory Chemistry  
*Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B*

CHE 101A\* Introductory Chemistry Lab (1.5 quarter units)  
*Prerequisite: CHE 101, or CHE 141 for science majors*

or

CHE 120A Intro to Chemistry Lab for Eng (1.5 quarter units)  
*Prerequisite: CHE 101*

ITM 230 Computer Network Overview

CSC 220 Applied Probability & Stats.  
*Prerequisite: MTH 215*

CSC 242\* Intro to Programming Concepts  
*Prerequisite: CSC 208*

CSC 252\* Programming in C++  
*Prerequisite: CSC 242*

or

CSC 262\* Programming in JAVA  
*Prerequisite: MTH 215*

CSC 340 Digital Logic Design  
*Prerequisite: CSC 208, or EGR 220*

CSC 340L Digital Logic Design Lab (1.5 quarter units)  
*Corequisite: CSC 340*

EGR 219 Intro to Graphics and Auto CAD  
*Prerequisite: MTH 215*

EGR 220 Engineering Mathematics  
*Prerequisite: MTH 215*

EGR 225 Statics & Strength of Material  
*Prerequisite: EGR 220*

EGR 230 Electrical Circuits & Systems  
*Prerequisite: MTH 215*

EGR 240 Electronic Circuits  
*Prerequisite: EGR 230, Corequisite: EGR 240L*

EGR 240L Electronic Circuits Lab (1.5 quarter units)  
*Corequisite: EGR 240*

EGR 320 Scientific Problem Solving  
*Prerequisite: EGR 220 or CSC 208*

EGR 320L Scientific Problem Solving-LAB (1.5 quarter units)  
*Prerequisite: EGR 320 or CSC 208*

DEN 308 Computer Aided Engineering I  
*Prerequisite: EGR 219*

CSC 208\* Calculus for Comp. Science I  
*Prerequisite: MTH 215*

BIO 380 Human Biology for Teachers  
*Recommended Preparation: BIO 161, and BIO 162, and Prerequisite: BIO 163, BIO 100A*

ENG 334A\* Technical Writing  
*Prerequisite: ENG 100, and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)*

MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

\* May be used to meet a General Education requirement



## Requirements for the Major

(13 courses; 49.5 quarter units)

EGR 310	Engineering Economics <i>Prerequisite: MTH 215</i>
EGR 324	Linear Systems and Signals <i>Prerequisite: CSC 208, or MTH 220, EGR 230</i>
EGR 324L	Linear Systems and Signals Lab (1.5 quarter units) <i>Corequisite: EGR 324</i>
EGR 340	Embedded Systems
EGR 340L	Embedded Systems Lab (1.5 quarter units) <i>Corequisite: EGR 340</i>
DEN 423	Human Factors in Engineering <i>Prerequisite: MTH 215</i>
EGR 440	Project Management Fundamental
DEN 432	Concurrent Design Engineering <i>Prerequisite: MTH 210</i>
BET 401	Medical Devices I <i>Prerequisite: EGR 240, EGR 324, EGR 340</i>
BET 401L	Medical Devices I Lab (1.5 quarter units) <i>Corequisite: BET 401</i>
BET 402	Medical Devices II <i>Prerequisite: BET 401, BET 401L</i>
BET 403	Medical Imaging Technology <i>Prerequisite: BET 401, BET 402</i>
BET 404	Medical Device Compliance

## Capstone Project

(2 courses; 9 quarter units)

EGR 496A	Senior Capstone Project I <i>Prerequisite: EGR 440 and satisfactory completion of courses as specified by Lead faculty</i>
EGR 496B	Senior Capstone Project II <i>Prerequisite: EGR 496A</i>

## ◆ MAJOR IN COMPUTER SCIENCE

*Faculty Advisor: Alireza Farahani; (858) 309-3438; afarahan@nu.edu*

The Bachelor of Science in Computer Science degree program provides a strong technical background for students planning to begin careers upon graduation and for those interested in graduate study in computer science. Degree requirements include courses in object oriented programming, data structures and algorithms, operating systems, computer communication networks, software engineering, and computer architecture, as well as mathematics, statistics, and the natural sciences. The program features a rigorous academic foundation that is complemented by realistic programming assignments. Emphasis is placed on developing both the technical and design skills necessary to begin and enhance an individual's career. Graduates of this program are well prepared for immediate employment in either the computer industry or many other businesses that increasingly rely on computer science.

## Bachelor of Science in Computer Science/Master of Science in Computer Science (BSCS/MSCS) Transition Program

Students must complete graduate-level coursework taken as part of the BSCS degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Lastly, students must apply for and begin the MSCS program within six months after completing their final BSCS course. Students must complete their MSCS program within four years with no break exceeding 12 months. Students in the BSCS transition program may take up to two MSCS classes as electives during the BSCS. Students may choose from the following courses: SEN 601, SEN 602, DAT 604, CSC606, and CSC607. The number of courses required to earn an MSCS degree for transition program students is reduced from 12 to as few as 10 courses.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling, design and optimization of computer-based systems.
- Analyze a problem and design the computing requirements appropriate to its solution.
- Implement and evaluate a computer-based system, process, component, or program to meet objectives.
- Discuss the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues.
- Use current techniques, skills, and tools necessary for computing practice that supports the recognized need for continual professional development.
- Apply design and development principles in the construction of software-systems.
- Function effectively on teams to accomplish a common goal.
- Demonstrate written and oral communication skills expected of a computer science professional.

## Degree Requirements

To receive a Bachelor of Science in Computer Science, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 quarter units must be completed at the upper-division level, and 45, including the senior project courses (CSC 480A and CSC 480B), must be taken in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Prerequisites for the Major

(12 courses; 48 quarter units)

Students must select two science related courses with labs from Area F of the General Education for a total of 12 quarter units.

Students must select an additional math or a science course from Area B or Area F of General Education excluding MTH 210 and MTH 215 and without duplicating any of the program courses.

MTH 215*	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
CSC 208*	Calculus for Comp. Science I <i>Prerequisite: MTH 215</i>
CSC 209	Calculus for Comp. Science II <i>Prerequisite: CSC 208</i>
CSC 220	Applied Probability & Stats. <i>Prerequisite: MTH 215</i>
CSC 242*	Intro to Programming Concepts <i>Prerequisite: CSC 208</i>
CSC 252*	Programming in C++ <i>Prerequisite: CSC 242</i>
CSC 262*	Programming in JAVA <i>Prerequisite: MTH 215</i>

\* May be used to meet a General Education requirement

## Requirements for the Major

(17 courses; 70.5 quarter units)

CSC 300	Object Oriented Design <i>Prerequisite: CSC 252</i>
CSC 310	Linear Algebra and Matrix Comp <i>Prerequisite: CSC 300</i>
EGR 320	Scientific Problem Solving <i>Prerequisite: EGR 220 or CSC 208</i>

EGR 320L	Scientific Problem Solving-LAB (1.5 quarter units) <i>Prerequisite: EGR 320 or CSC 208</i>
CSC 331	Discrete Structures and Logic <i>Prerequisite: CSC 252, and CSC 310</i>
CSC 335	Data Structures and Algorithms <i>Prerequisite: CSC 300, CSC 331</i>
CSC 338	Algorithm Design <i>Prerequisite: CSC 335</i>
CSC 340	Digital Logic Design <i>Prerequisite: CSC 208, or EGR 220</i>
CSC 340L	Digital Logic Design Lab (1.5 quarter units) <i>Corequisite: CSC 340</i>
CSC 342	Computer Architecture <i>Prerequisite: CSC 340, and CSC 340L</i>
CSC 350	Computer Ethics
CSC 400	OS Theory and Design <i>Prerequisite: CSC 335</i>
CSC 422	Database Design <i>Prerequisite: CSC 300</i>
CSC 430	Programming Languages <i>Prerequisite: CSC 300</i>
CSC 436	Comp. Communication Networks <i>Prerequisite: CSC 335 or CSC 340 and CSC 340L</i>
CSC 480A	Computer Science Project I <i>Prerequisite: Completion of core courses.</i>
CSC 480B	Computer Science Project II <i>Prerequisite: CSC 480A</i>

#### Approved Electives

(2 courses; 9 quarter units)

Students must complete two 400 level technical electives. These electives can be taken from either computer science or computer information systems programs without duplicating any of the core courses.

#### ◆ MAJOR IN CONSTRUCTION ENGINEERING TECHNOLOGY

*Faculty Advisor: Shekar Viswanathan; (858) 309-3416; sviswana@nu.edu*

The Construction Engineering Technology program provides students with a well-rounded education in construction principles, and practices in preparation for a career in the construction industry. Upon completion of this degree, students will be prepared for careers such as construction superintendent, field engineer, project manager, project coordinator, facilities engineer, cost estimator and quality and safety controller. Additionally, graduates of this program with experience, interest, and/or knowledge about specific construction trades, will be capable of performing in a large number of positions within those respective subcontracting firms.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate through written, verbal, and graphical media.
- Demonstrate knowledge of engineering science and mathematics and its application in problem solving.
- Analyze structural systems.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools for engineering problems.
- Apply modern methods for surveying and metrics.
- Exhibit a fundamental understanding of building mechanical and electrical systems.
- Demonstrate cost estimating and scheduling techniques.
- Integrate and apply field inspection techniques and safety standards.
- Apply the principles of project management and control.
- Work effectively in a team environment.

#### Degree Requirements

To receive a Bachelor of Science in Construction Engineering Technology, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the research project classes. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Preparation for the Major

(9 courses; 34.5 quarter units)

CHE 101\* Introductory Chemistry  
*Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B*

CHE 101A\* Introductory Chemistry Lab (1.5 quarter units)  
*Prerequisite: CHE 101, or CHE 141 for science majors*

or

CHE 120A^ Intro to Chemistry Lab for Eng (1.5 quarter units)  
*Prerequisite: CHE 101*

MTH 210\* Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

or

CSC 220 Applied Probability & Stats.  
*Prerequisite: MTH 215*

PHS 104\* Introductory Physics  
*Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B*

PHS 104A\* Introductory Physics Lab (1.5 quarter units)  
*Prerequisite: PHS 104, or PHS 171 for science majors*

or

PHS 130A^ Physics Lab for Engineering (1.5 quarter units)

CSC 208\* Calculus for Comp. Science I  
*Prerequisite: MTH 215*

EGR 220 Engineering Mathematics  
*Prerequisite: MTH 215*

EGR 225 Statics & Strength of Material  
*Prerequisite: EGR 220*

EGR 219 Intro to Graphics and Auto CAD  
*Prerequisite: MTH 215*

^ For online students only

\* May be used to meet a General Education requirement

#### Requirements for the Major

(17 courses; 73.5 quarter units)

EGR 320 Scientific Problem Solving  
*Prerequisite: EGR 220 or CSC 208*

EGR 320L Scientific Problem Solving-LAB (1.5 quarter units)  
*Prerequisite: EGR 320 or CSC 208*

EGR 310 Engineering Economics  
*Prerequisite: MTH 215*

EGR 316 Legal Aspects of Engineering

DEN 308 Computer Aided Engineering I  
*Prerequisite: EGR 219*

CEN 320 Surveying, Metrics and GIS  
*Prerequisite: EGR 219*

CEN 323 Structural Analysis  
*Prerequisite: EGR 220, and EGR 225*

CEN 325 Soil Mechanics and Foundation  
*Prerequisite: CEN 323*

CEN 410	Constr Materials and Methods <i>Prerequisite: MTH 215</i>
CEN 413	Plans and Specifications <i>Prerequisite: EGR 219</i>
CEN 416	Mech and Electrical Systems <i>Prerequisite: MTH 215</i>
CEN 419	Est., Scheduling and Control <i>Prerequisite: CEN 410</i>
CEN 420	Est., Scheduling & Control II <i>Prerequisite: CEN 419</i>
CEN 422	Field Inspection and Safety <i>Prerequisite: CEN 410</i>
EGR 440	Project Management Fundamental

### Engineering Senior Project

EGR 486A	Engineering Senior Project I <i>Prerequisite: Completion of 10 BSCET core courses.</i>
EGR 486B	Engineering Senior Project II <i>Prerequisite: EGR 486A</i>

### ◆ MAJOR IN CONSTRUCTION MANAGEMENT

*Faculty Advisor: Shekar Viswanathan; (858) 309-3416; svswana@nu.edu*

This program fills a pressing need in the construction industry for individuals to conduct and manage activities within the construction industry. It has been developed with significant industry guidance and assistance. The industry experts are aware that there has been substantial growth in this industry, causing a shortage of individuals with the proper training due to a lack of alignment of academic programs and industry needs. The purpose of the Bachelor of Science in Construction Management program is to provide students with a well-rounded education in written and verbal communication, technical construction fundamentals, mathematics, business, law, humanities, fine arts, and social, behavioral and natural sciences that will prepare them for a career at management, administrative, and ownership positions in the construction industry.

This degree program will prepare the student for careers such as construction executive, project manager, project engineer/coordinator, field engineer, planning/scheduling engineer, cost engineer, cost estimator, quality and safety controller, construction superintendent and facilities engineer. Additionally, graduates with experience, interest, and/or knowledge about specific construction trades will be capable of performing in a large number of management and administrative positions within respective subcontracting companies.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate through written, verbal, and graphical media.
- Demonstrate knowledge of engineering science and mathematics and its application in problem solving.
- Analyze structural system.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools for engineering problems.
- Apply modern methods for surveying and metrics.
- Exhibit a fundamental understanding of building mechanical and electrical systems.
- Demonstrate cost estimating and scheduling techniques.
- Integrate and apply field inspection techniques and safety standards.
- Apply the principles of project management and control.
- Apply construction accounting principles and analyze financial reports.
- Demonstrate knowledge of the legal aspects of construction contracting.
- Assess conflict and identify resolution strategies.
- Work effectively in a team environment.

### Degree Requirements

To receive a Bachelor of Science in Construction Management, students must complete at least 180 units as articulated below; to include a minimum of 70.5 units of the University General Education requirements; 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students are expected to possess or have access to a computer and Internet connection including an e-mail account outside of National University for course projects and assignments. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

### Preparation for the Major

(15 courses; 64.5 quarter units)

COM 103*	Public Speaking
MTH 210*	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>

or

CSC 220	Applied Probability & Stats. <i>Prerequisite: MTH 215</i>
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ILR 260*	Information Literacy <i>Prerequisite: ENG 100, and ENG 101</i>
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ECO 204*	Principles of Macroeconomics
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ECO 203*	Principles of Microeconomics
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PSY 100*	Introduction to Psychology
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PHS 104*	Introductory Physics <i>Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
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PHS 104A*	Introductory Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 104, or PHS 171 for science majors</i>
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or

PHS 130A^	Physics Lab for Engineering (1.5 quarter units)
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ACC 201	Financial Accounting Funds.
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CIS 425	Programming for IT Environment
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EGR 220	Engineering Mathematics <i>Prerequisite: MTH 215</i>
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EGR 225	Statics & Strength of Material <i>Prerequisite: EGR 220</i>
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EGR 219	Intro to Graphics and Auto CAD <i>Prerequisite: MTH 215</i>
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MTH 215*	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
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ENG 334A*	Technical Writing <i>Prerequisite: ENG 100, and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)</i>
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^ For online students only

\* May be used to meet a General Education requirement

### Requirements for the Major

(19 courses; 82.5 quarter units)

HUB 401	Conflict Resolution <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
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MGT 309C	Prin. of Mgmt & Organizations
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EGR 320	Scientific Problem Solving <i>Prerequisite: EGR 220 or CSC 208</i>
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EGR 320L	Scientific Problem Solving-LAB (1.5 quarter units) <i>Prerequisite: EGR 320 or CSC 208</i>
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EGR 310	Engineering Economics <i>Prerequisite: MTH 215</i>
EGR 316	Legal Aspects of Engineering
DEN 308	Computer Aided Engineering I <i>Prerequisite: EGR 219</i>
CEN 320	Surveying, Metrics and GIS <i>Prerequisite: EGR 219</i>
CEN 323	Structural Analysis <i>Prerequisite: EGR 220, and EGR 225</i>
CEN 325	Soil Mechanics and Foundation <i>Prerequisite: CEN 323</i>
CEN 410	Constr Materials and Methods <i>Prerequisite: MTH 215</i>
CEN 413	Plans and Specifications <i>Prerequisite: EGR 219</i>
CEN 416	Mech and Electrical Systems <i>Prerequisite: MTH 215</i>
CEN 419	Est., Scheduling and Control <i>Prerequisite: CEN 410</i>
CEN 420	Est., Scheduling & Control II <i>Prerequisite: CEN 419</i>
CEN 421	Constr, Acct, Finance and Law <i>Prerequisite: ACC 201</i>
CEN 422	Field Inspection and Safety <i>Prerequisite: CEN 410</i>
CEN 425	Design & Const Process Integra
EGR 440	Project Management Fundamental

### Engineering Senior Project

(2 courses; 9 quarter units)

EGR 486A	Engineering Senior Project I <i>Prerequisite: Completion of 10 BSCET core courses.</i>
EGR 486B	Engineering Senior Project II <i>Prerequisite: EGR 486A</i>

### ◆ MAJOR IN ELECTRICAL AND COMPUTER ENGINEERING

*Faculty Advisor: Mudasser Wyne; (858) 309-3433; mwyne@nu.edu*

The Electrical and Computer Engineering program involves the study of hardware, software, communications, and the interactions between them. Its curriculum focuses on the theories, principles, and practices of traditional electrical engineering and mathematics and applies them to the design of computers and computer-based devices. Electrical and Computer Engineering students study the design of digital hardware systems including communications systems, computers, and devices that contain computers. They study software development, focusing on software for digital devices and their interfaces with users and other devices. The program emphasizes a balanced approach between hardware and software, both built on an engineering and mathematics foundation. Currently, a dominant area within Electrical and Computer engineering is embedded systems, the development of devices that have software and hardware embedded within. For example, devices such as cell phones, digital audio players, digital video recorders, alarm systems, x-ray machines, and laser surgical tools all require integration of hardware and embedded software and all are the result of computer engineering. The undergraduate program is structured to establish analytical thinking and design skills in areas such as computer architecture, digital logic design, circuits analysis, computer communication networks, digital computer control, integrated circuit engineering, project management, VLSI design, digital signal processing and embedded systems.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply knowledge of mathematics, science, and engineering to solve problems.
- Analyze and interpret data.

- Design a component, a system, or a process to meet desired needs within realistic constraints.
- Function on a team and be able to communicate orally and in writing to accomplish a common goal.
- Identify, formulate, and solve engineering problems.
- Use professional ethics in making engineering decisions.
- Identify the impact of engineering solutions in a global, and economic environment.
- Use the techniques, skills, and modern engineering tools necessary for engineering practice.

### Degree Requirements

To receive a Bachelor of Science in Electrical and Computer Engineering, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 quarter units must be completed at the upper-division level, and 45, including the senior project courses (CEE498 and CEE499), must be taken in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Prerequisites for the Major

(8 courses; 33 quarter units)

MTH 215*	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
PHS 104*	Introductory Physics <i>Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
PHS 130A	Physics Lab for Engineering (1.5 quarter units)
CSC 208*	Calculus for Comp. Science I <i>Prerequisite: MTH 215</i>
CSC 209	Calculus for Comp. Science II <i>Prerequisite: CSC 208</i>
CSC 220	Applied Probability & Stats. <i>Prerequisite: MTH 215</i>
CSC 242*	Intro to Programming Concepts <i>Prerequisite: CSC 208</i>
CSC 252*	Programming in C++ <i>Prerequisite: CSC 242</i>

\* May be used to meet a General Education requirement

### Requirements for the Major

(21 Courses; 85.5 quarter units)

CSC 350	Computer Ethics
CSC 300	Object Oriented Design <i>Prerequisite: CSC 252</i>
CSC 310	Linear Algebra and Matrix Comp <i>Prerequisite: CSC 300</i>
CSC 331	Discrete Structures and Logic <i>Prerequisite: CSC 252, and CSC 310</i>
PHS 231	Calculus-based Physics 1 <i>Prerequisite: PHS 104, and MTH 220, or CSC 208, and MTH 221, or CSC 209</i>
PHS 232	Calculus-based Physics 2 <i>Prerequisite: PHS 104 PHS 231, MTH 220 or CSC 208, and MTH 221 or CSC 209</i>
CSC 340	Digital Logic Design <i>Prerequisite: CSC 208, or EGR 220</i>
CSC 340L	Digital Logic Design Lab (1.5 quarter units) <i>Corequisite: CSC 340</i>

CSC 342	Computer Architecture <i>Prerequisite: CSC 340, and CSC 340L</i>
MTH 433	Differential Equations <i>Prerequisite: MTH 223, and MTH 435, or CSC 209, and CSC 310</i>
CEE 310	Circuit Analysis <i>Prerequisite: MTH 433</i>
CEE 310L	Circuit Analysis Lab (1.5 quarter units) <i>Corequisite: CEE 310</i>
EGR 340	Embedded Systems
EGR 340L	Embedded Systems Lab (1.5 quarter units) <i>Corequisite: EGR 340</i>
CSC 436	Comp. Communication Networks <i>Prerequisite: CSC 335 or CSC 340 and CSC 340L</i>
EGR 440	Project Management Fundamental
CEE 420	Microelectronics <i>Prerequisite: CEE 310</i>
CEE 430	Digital Signal Processing <i>Prerequisite: CEE 420</i>
CEE 440	VLSI Design <i>Prerequisite: CEE 430</i>
CEE 498	Capstone Design Project I <i>Prerequisite: Complete all core courses except CEE499 OR Permission of the program lead.</i>
CEE 499	Capstone Design Project II <i>Prerequisite: CEE 498 with a minimum grade of S</i>

## ◆ MAJOR IN INFORMATION SYSTEMS

*Faculty Advisor: Mudasser Wyne; (858) 309-3433; mwyne@nu.edu*

The Bachelor of Science in Information Systems (BSIS) program links business and technology, and there is great demand in the corporate world for people who can integrate all elements of the enterprise into a comprehensive network of responsive, proactive information delivery systems. Information systems have become increasingly important in fields such as healthcare and criminal justice. The BSIS program includes: data communications, systems analysis, system development, database administration, project management, computer forensics, health information management, and quality/information assurance.

### Transition Programs

The transition program that is available for students in the BSIS is a BSIS to Master of Science in Management Information Systems. Students must meet certain requirements as specified.

### BSIS/ Master of Science in Management Information Systems (MSMIS) Transition Program

Students can select CIS 601 and either of the following two courses: DAT 604 and CIS 602. The number of courses required to earn an MSMIS degree for Transition Program students is reduced from 12 to 10 courses, depending on courses selected and grades earned. Students must complete graduate-level coursework taken as part of the BSIS degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average.

Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Students must apply for and begin the MSMIS program within six months after completing their final BSIS course. Students must complete their MSMIS program within four years with no break exceeding 12 months.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply analytical and critical thinking skills, and information systems concepts for solving organizational problems.
- Discuss the potential global impact of specific information systems solutions.
- Evaluate and implement organizational planning, design, and integration of information systems solutions in competitive environment.

- Plan and design organizational communications infrastructure and networking topology.
- Improve strategic information management procedures and processes.
- Identify innovative and efficient solutions to solve organizational problems.
- Demonstrate written and oral communication skills in a collaborative environment.

### Degree Requirements

To receive a Bachelor of Science in Information Systems, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

Students should be computer literate and have a basic understanding of computer usage.

### Requirements for the Major

(14 courses; 63 quarter units)

CIS 301	Mgmt Information Systems
CIS 310	Technology Project Management
CIS 320	Systems Analysis & Integration
CIS 330	System Development
CIS 340	Data Communications
CIS 350	Database Management Systems
CIS 416	Database Administration <i>Prerequisite: CIS 340</i>
CIS 425	Programming for IT Environment
CIS 430	Web/EB Design & Development
CIS 440	Systems Quality Assurance
CIS 450	Information/Systems Assurance
CIS 460	Human Factor /Ergonomic Design
CIS 420A	Information Systems Project I <i>Prerequisite: CIS 310 and 80 percent of courses in the major, except CIS 420B</i>
CIS 420B	Information Systems Project II <i>Prerequisite: CIS 420A</i>

### Upper-Division Electives

(2 courses; 9 quarter units)

Select two courses from the following list:

CIS 470	Computer Forensics
CIS 480	Health Information Management
ITM 434	Wireless LAN Administration
ITM 435	Wireless LAN Security <i>Prerequisite: ITM 434</i>
ITM 470	Information Security Management
ITM 475	Information Security Technology <i>Prerequisite: ITM 470</i>

## ◆ MAJOR IN INFORMATION TECHNOLOGY MANAGEMENT

*Faculty Advisor: Bhaskar Raj Sinha; (858) 309-3431; bsinha@nu.edu*

The Bachelor of Science in Information Technology Management (BSITM) program is designed to meet the increasing demand for technology expertise in consulting, marketing and sales support, customer services and support, information and library science, and general management. This program is designed to pro-

vide students with understanding of basic information technology management concepts and practical technology skills. Graduates are prepared for positions in the areas of (1) Information Desktop Management and Administration, (2) Database Management Systems (DBMS) Development, Administration and Support, (3) Network Management and Support.

Two transition programs are available to students in the BSITM degree who meet certain requirements as specified below:

#### **BSITM/ Master of Science in Engineering Management with Specialization in Technology Management (MSENM-TM) Transition Program**

Students must complete graduate-level coursework taken as part of the BSITM degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Students must apply for and begin the MSENM-TM program within six months after completing their final BSITM course. Students must complete their MSENM-TM program within four years with no break exceeding 12 months. This transition allows currently enrolled BSITM students to register for two MSENM-TM courses as electives for their BSITM degree. Students can select any two of the following courses: TMG620, TMG625, TMG635, or TMG640. The number of courses required to earn an MSENM-TM degree for Transition Program students is reduced from 12 to 10 courses, depending on courses taken and grades earned.

#### **BSITM / Master of Science in Management Information Systems (MSMIS) Transition Program**

Students must complete graduate-level coursework taken as part of the BSITM degree with a grade of B or better. This coursework, which counts as BSITM electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Students must apply for and begin the MSMIS program within six months after completing their final BSITM course. Students must complete their MSMIS program within four years with no break exceeding 12 months. This Transition Program allows currently enrolled BSITM students with a cumulative grade point average of at least a 3.0, who are within completing their last six courses, to register for two MSMIS courses as electives for their BSITM degree. Students can take the following two courses: CIS601 and CIS607. The number of courses required to earn the MSMIS degree for Transition Program students is reduced from 12 to 10 courses, depending on courses taken and grades earned.

#### **Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate an ability to set up and integrate local and remote server and workstation computers with proper user authentication to preserve user privacy and confidentiality.
- Demonstrate the ability to plan an integrated system that involves computer applications to satisfy specific business processes.
- Demonstrate, manage and administer a LAN and wireless networking environment.
- Design, develop, administer, and support a robust relational database management system.
- Apply concepts of best practices in information technology management and security to enterprise processes.
- Describe the ethical challenges that confront an IT professional
- Demonstrate written and oral communication skills in collaborative environments by participating on teams that address solutions for IT management challenges.

#### **Degree Requirements**

To receive a Bachelor of Science in Information Technology Management, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level, 45 of which must be taken in residence, including the capstone project classes (ITM 490 A/B) and a minimum 70.5 units of University

General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### **Prerequisites for the Major**

(4 courses; 18 quarter units)

Students should be computer literate and have a basic understanding of computer usage.

ITM 200	Computer Hardware & Software
ITM 205	Office Productivity Software
ITM 210	Introduction to IT
ITM 230	Computer Network Overview

#### **Requirements for the Major**

(14 courses; 63 quarter units)

ITM 320	Information Technology Management <i>Prerequisite: ITM 210</i>
ITM 340	IT Clients Using MS Windows
ITM 345	IT Servers Using Linux
ITM 350	Desktop Application Support <i>Prerequisite: ITM 205</i>
ITM 420	Local Area Networks
ITM 430	Wide Area Networks <i>Prerequisite: ITM 420</i>
ITM 434	Wireless LAN Administration
ITM 435	Wireless LAN Security <i>Prerequisite: ITM 434</i>
ITM 440	Database Concepts & Data Model
ITM 450	DB Processing & Administration <i>Prerequisite: ITM 440</i>
ITM 470	Information Security Management
ITM 475	Information Security Technology <i>Prerequisite: ITM 470</i>
ITM 490A	Info Technology Project I <i>Prerequisite: 10 of the core ITM courses must be successfully completed.</i>
ITM 490B	Info Technology Project II <i>Prerequisite: ITM 490A</i>

#### **Upper-Division Electives**

(2 courses; 9 quarter units)

Students can choose any approved upper-division degree related electives from the School of Business and Management or the School of Engineering, Technology, and Media. Students who are eligible and enroll in a transition program should take transition program classes as their electives.

#### **◆ MAJOR IN MANUFACTURING DESIGN ENGINEERING**

*Faculty Advisor: Shekar Viswanathan; (858) 309-3416; svswana@nu.edu*

The Bachelor of Science in Manufacturing Design Engineering provides students with the theoretical foundations, hands-on experience, and teaming skills required for effective conceptual, logistical, developmental, and interdisciplinary design of complex engineering devices, product life cycles, and engineering systems through integration of state-of-the-art computer-aided tools, concurrent engineering standards, and simulation modeling techniques. Graduates of this program will have competency in the fundamentals of evolving automated manufacturing technology and provide the industry with a source for qualified graduates to apply engineering principles in the design of automated and computer integrated manufacturing systems.

Upon completion of this degree, students will be prepared to hold positions such as manufacturing system design engineer, design supervisor for engineering projects, and product design engineer. The program blends together professional components from the traditional engineering curricula with the practical aspects of programming applications, engineering project management standards, and simulation modeling techniques. It also combines knowledge and practices needed for professionals working on engineering projects that require innovative and interdisciplinary background, skills, and experience.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Combine knowledge and practices needed to work on engineering projects that require innovative and interdisciplinary skills
- Utilize product reliability and design optimization concepts in engineering applications
- Apply state-of-the-art computer-aided engineering tools and engineering graphics techniques and methodologies
- Integrate engineering project management standards for efficient and competitive design of engineering products and processes
- Apply the concepts of engineering experiment design and analysis
- Analyze human factors, ergonomics, and safety issues as part of the requirements for design of engineering systems, products, and services
- Analyze a production problem and design and/or develop a manufacturing system
- Develop oral and written communication skills appropriate for engineering professionals
- Demonstrate global awareness and team skills needed in manufacturing design engineering

### Degree Requirements

To receive a Bachelor of Science in Manufacturing Design Engineering, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the research project classes, and a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

(10 courses; 39 quarter units)

- CHE 101\* Introductory Chemistry  
*Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B*
- CHE 101A\* Introductory Chemistry Lab (1.5 quarter units)  
*Prerequisite: CHE 101, or CHE 141 for science majors*
- MTH 210\* Probability and Statistics  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*
- or
- CSC 220 Applied Probability & Stats.  
*Prerequisite: MTH 215*
- PHS 104\* Introductory Physics  
*Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B*
- PHS 104A\* Introductory Physics Lab (1.5 quarter units)  
*Prerequisite: PHS 104, or PHS 171 for science majors*
- CSC 208\* Calculus for Comp. Science I  
*Prerequisite: MTH 215*
- EGR 220 Engineering Mathematics  
*Prerequisite: MTH 215*
- EGR 225 Statics & Strength of Material  
*Prerequisite: EGR 220*

- EGR 219 Intro to Graphics and Auto CAD  
*Prerequisite: MTH 215*
- MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

\* May be used to meet a General Education requirement

### Requirements for the Major

(15 courses; 64.5 quarter units)

- EGR 320 Scientific Problem Solving  
*Prerequisite: EGR 220 or CSC 208*
- EGR 320L Scientific Problem Solving-LAB (1.5 quarter units)  
*Prerequisite: EGR 320 or CSC 208*
- EGR 310 Engineering Economics  
*Prerequisite: MTH 215*
- EGR 316 Legal Aspects of Engineering
- DEN 308 Computer Aided Engineering I  
*Prerequisite: EGR 219*
- DEN 411 Computer Aided Engineering II  
*Prerequisite: EGR 219*
- DEN 417 Computer Aided Engineering IV  
*Prerequisite: EGR 219*
- DEN 420 Computer Aided Engineering V  
*Prerequisite: EGR 219*
- DEN 422 Materials and Manufacturing  
*Prerequisite: EGR 225*
- DEN 423 Human Factors in Engineering  
*Prerequisite: MTH 215*
- DEN 426 Reliability Engineering  
*Prerequisite: MTH 215*
- DEN 429 Product Design Optimization  
*Prerequisite: MTH 215*
- DEN 432 Concurrent Design Engineering  
*Prerequisite: MTH 210*
- DEN 435 Design & Analysis of Experiment
- EGR 440 Project Management Fundamental

### Engineering Senior Project

(2 courses; 9 quarter units)

- EGR 496A Senior Capstone Project I  
*Prerequisite: EGR 440 and satisfactory completion of courses as specified by Lead faculty*
- EGR 496B Senior Capstone Project II  
*Prerequisite: EGR 496A*

## MINORS

### ● MINOR IN COMPUTER SCIENCE

Faculty Advisor: Alireza Farahani; (858) 309-3438; afarahan@nu.edu

### Requirements for the Minor

Students can complete a minor in computer science to fulfill requirements for a Bachelor's degree with a major other than computer science. Prior to enrolling in the minor, students must complete the prerequisite courses listed below or waive them through challenge exams.

### Prerequisites for the Minor

(5 courses; 22.5 quarter units)

- MTH 215\* College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

CSC 200	Orientation to Comp. Science
CSC 208*	Calculus for Comp. Science I <i>Prerequisite: MTH 215</i>
CSC 242*	Intro to Programming Concepts <i>Prerequisite: CSC 208</i>
CSC 252*	Programming in C++ <i>Prerequisite: CSC 242</i>

\* May be used to meet a General Education requirement

### Requirements for the Minor

(6 courses; 27 quarter units)

CSC 300	Object Oriented Design <i>Prerequisite: CSC 252</i>
CSC 331	Discrete Structures and Logic <i>Prerequisite: CSC 252, and CSC 310</i>
CSC 335	Data Structures and Algorithms <i>Prerequisite: CSC 300, CSC 331</i>
CSC 340	Digital Logic Design <i>Prerequisite: CSC 208, or EGR 220</i>

Choose two upper-division level (300-400) Computer Science (CSC) courses provided that all required prerequisites have been met. Students may not take CSC 480A/B.

### ● MINOR IN INFORMATION TECHNOLOGY MANAGEMENT

*Faculty Advisor: Bhaskar Raj Sinha; (858) 309-3431; bsinha@nu.edu*

A Minor in Information Technology Management is available to students in any bachelor's degree program other than the BS in Information Technology Management. To fulfill the requirements for the minor, students can take any six courses listed as upper-division requirements for the major and beginning with ITM prefixes. See Bachelor of Science in Information Technology Management section. Prerequisites may be required.

### Requirements for the Minor

(6 courses; 27 quarter units)

To constitute a technology minor, students must select any six upper division courses from the following technology areas. All prerequisites must be met for courses selected.

- Information Technology Management (ITM)
- Information Systems (CIS)

### ● MINOR IN TECHNOLOGY

*Faculty Advisor: Mudasser W̄yne; (858) 309-3433; mwyn@nu.edu*

### Requirements for the Minor

(6 courses; 27 quarter units)

To constitute a technology minor, students must select any six upper division courses from the following technology areas. All prerequisites must be met for courses selected.

- Information Technology Management (ITM)
- Information Systems (CIS)

## GRADUATE DEGREES

### ● MASTER OF SCIENCE IN COMPUTER SCIENCE

*Faculty Advisor: Pradip Dey; (858) 385-9218; pdey@nu.edu*

The Master of Science in Computer Science (MSCS) program at National University provides students with a solid foundation, in the fundamental knowledge and skills of software engineering, database theory and design and cloud computing, exposing them to best practice methodologies using a variety of tools and techniques required for solving real world problems and to be of immediate benefit to the computing industry.

National University's MSCS program not only prepares students in the theoretical and practical aspects of solving complex computing problems but also it develops other essential communication skills. MSCS graduates are able to clearly discuss issues, trends, and solutions with both technical and non-technical audiences. In

addition, every part of the curriculum is devoted towards developing "people skills," ethics, and standards of professionalism.

The rigorous scientific and analytical techniques taught in the MSCS program have four primary goals: (1) to provide a clear understanding of scope and limitations of computational models, (2) to facilitate acquisition of marketable skills throughout the program, (3) to facilitate logical discussion of concepts, trends and issues including cloud computing and security in computing, and underlying problem solving strategies, and (4) to facilitate lifelong learning. National University's approach to teaching in the MSCS program allows graduates to immediately become highly productive members of a real-world computing team.

### Specializations

After acquisition of common fundamental concepts, students select one of the following three specializations in order to concentrate on specialized knowledge and skills in one of the advanced areas: (1) Advanced Computing, (2) Software Engineering, and (3) Database Engineering.

### Integration

The two master's project classes provide an integrating mechanism for acquiring realistic experience through building a computationally complex project. It is a three-month project solving a real problem for a real client against a time deadline using all available tools and resources as students work together in teams. This component addresses the need to integrate a broad range of technologies and skills. Students are given the opportunity to crystallize the ideas learned earlier and to implement comprehensive systems across an organization.

### Career Tracks

In the MSCS program, graduates are proficient in analytical and critical thinking skills, have a sense of professionalism, and are instilled with a strong set of values essential for success in computer science. This program reflects current and future industry needs, and graduates are trained and prepared to assume a leadership role in the field.

### Admission Requirements

Candidates seeking admission to the program should possess a baccalaureate degree in Computer Science (CS), Software Engineering (SE), Information Systems (IS), Information Technology (IT) or a closely related area. Non-CS students should fulfill the program prerequisites either through additional equivalent coursework or waiver through a course challenge exam.

### MSCS Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSCS transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSCS degree. The number of units required for the MSCS program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create software requirements specifications, and design and develop complex software systems
- Evaluate computer security vulnerabilities and threats and countermeasures that are effective and ethical.
- Analyze, design and develop database solutions by translating database modeling theory into sound database design and implementation.
- Analyze and design complex front-end applications for cloud and client-server architectures and integrate them with backend databases.
- Compare and contrast alternative systems for process and memory management.
- Demonstrate ability to conduct in-depth research, both individually as well as in teams, in a specific computer science area.
- Demonstrate critical thinking and ability to analyze and synthesize computer science concepts and skills with ethical standards.

### Degree Requirements

(15 courses; 67.5 quarter units)

To receive a Master of Science in Computer Science, students must complete 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another accredited institution, as it applies to this degree, and provided the units were not used



in earning another advanced degree. The degree program consists of ten courses plus the two-part MSCS graduate project (two courses, 4.5 quarter units each) that cannot be taken until all other courses have been completed.

### Program Prerequisites

(3 courses; 13.5 quarter units)

Students with non-computer related baccalaureate degrees can qualify for admission to the program by choosing one or a combination of the following options:

Complete the following prerequisites:

CSC 242 Intro to Programming Concepts  
*Prerequisite: CSC 208*

CSC 252 Programming in C++  
*Prerequisite: CSC 242*

CSC 262 Programming in JAVA  
*Prerequisite: MTH 215*

or

Gain permission of the lead faculty of the MSCS program based on equivalent coursework supported by verifiable documented proof.

### Core Requirements

(8 courses; 36 quarter units)

SEN 601 Software Eng Fundamentals

SEN 602 Software Architecture Princip  
*Prerequisite: SEN 601 or approval of lead faculty.*

DAT 604 Database Design and Impl.

DAT 605 Web and Cloud Computing  
*Prerequisite: DAT 604 or approval of lead faculty.*

CSC 606 Modern Operating Systems

CSC 607 Security in Computing

CSC 686 Computer Science Project I  
*Prerequisite: Completion of all MSCS core courses or permission of the instructor.*

CSC 687 Computer Science Project II  
*Prerequisite: CSC 686*

### Requirements for the Specialization

(4 courses; 18 quarter units)

All students must choose one Specialization defined below:

#### ▲ Specialization in Advanced Computing

Students in this specialization learn to solve computational problems combining mathematical modeling, domain analysis, information processing techniques, and user interface engineering.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Construct a computational model for a given problem and examine its consequences
- Evaluate programming models
- Compare emerging computing concepts
- Design and implement a user interface for a software system in order to maximize its usability

#### Program Requirements

(4 courses; 18 quarter units)

CSC 610 Mathematical Foundations

CSC 615 Advanced Programming

CSC 668 Topics in Computing

CSC 670 User Interface Engineering

#### ▲ Specialization in Database Engineering

Students in this specialization learn to solve complex database problems combining analysis, design, implementation and testing techniques.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate logical and physical database architecture components.
- Demonstrate proficiency in advanced database programming skills.
- Configure and deploy database systems.
- Demonstrate database administration and management skills.

#### Program Requirements

(4 courses; 18 quarter units)

DAT 615 Advanced Database Programming

DAT 625 Database Management Systems  
*Prerequisite: DAT 604 or approval of lead faculty.*

DAT 635 Database Installation & Config  
*Prerequisite: DAT 615 or approval of lead faculty.*

DAT 645 DB Management & Security  
*Prerequisite: DAT 635 or approval of lead faculty.*

#### ▲ Specialization in Software Engineering

Students in this specialization learn to solve complex software engineering problems combining analysis, design, implementation and testing techniques and user interface engineering.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate design methodologies of hardware/software integration, networking and graphical user interface for software projects.
- Develop and evaluate comprehensive software test plans at both the software module and the systems level
- Analyze and manage software configuration to ensure conformance to Total Quality Assurance standards
- Design and implement a user interface for a software system in order to maximize its usability

#### Program Requirements

(4 courses; 18 quarter units)

SEN 632 Software Architecture Appl.

SEN 635 Software Testing

SEN 662 Engineering Software Quality

CSC 670 User Interface Engineering

#### ● MASTER OF SCIENCE IN CYBER SECURITY AND INFORMATION ASSURANCE

*Faculty Advisor: Ronald Gonzales; (858) 309-3435; rgonzales@nu.edu*

The Master of Science in Cyber Security and Information Assurance is a professional degree for those who endeavor through technical and managerial measures to ensure the security, confidentiality, integrity, authenticity, control, availability and utility of the world's computing and information systems infrastructure. The program has a required core and a required specialization which can be selected from some alternatives. The core is designed to provide a means of supporting the variety of backgrounds (both education and work experience) that those who wish to study this area may bring to the program. The core is also a statement of the knowledge domain that is common to most efforts in this area. The specializations provide for study in particular domains of knowledge within the field - which are also tied to communities of effort within the field.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the interaction and relative impact of human factors, processes and technology in CSIA infrastructures.

- Devise a mitigation plan against both external and internal vulnerabilities to enterprise computer infrastructures and sensitive digital assets.
- Support multiple risk assessment strategies and processes to maximize effectiveness and minimize costs of CSIA in a high assurance information system.
- Integrate systems-level-infrastructure thinking into CSIA problem identification and resolution and effectively communicate the solution.
- Differentiate among the models, architectures, challenges and global legal constraints of secure electronic commerce technologies used to ensure transmission, processing and storage of sensitive information.
- Prescribe how to provide message privacy, integrity, authentication and non-repudiation using network security practices and infrastructure hardening techniques.
- Evaluate and contrast the impact of diverse ethical perspectives, cultural customs and organizational political dynamics on CSIA.
- Assess, from both a national and global perspective, the relative demands of Internet-openness, legislation and law-enforcement, and individual right-to-privacy.
- Forecast the impact of continually advancing technology and national and international cyber-legislation on CSIA.
- Conduct in-depth research into a specific CSIA topic, including finding and integrating relevant research results of others.
- Generate critical thinking in analysis and synthesis of enterprise and global CSIA issues through effective individual and team graduate-level written and oral assignments.
- Integrate project development skills in producing a security system.

### Degree Requirements

To obtain the Master of Science in Cyber Security and Information Assurance, students must complete 54 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. All students must complete the eight core requirements and choose an Area of Specialization. Please refer to the graduate admissions requirements for specific information regarding application and evaluation.

### Core Requirements

(8 Courses; 36 quarter units)

CYB 600	Cyber Security Technology
CYB 601	Cyber Sec. Toolkit Utilization <i>Prerequisite: CYB 600 with a minimum grade of B</i>
CYB 602	Threat Mitigation Policy/Audit <i>Prerequisite: CYB 601</i>
CYB 603	Cyber Security Ethical Issues <i>Prerequisite: CYB 602</i>
CYB 604	Wireless and Mobile Security <i>Prerequisite: CYB 603</i>
CYB 606	Net Defense & Countermeasures <i>Prerequisite: CYB 604</i>
CYB 699A	Cyber Security Project I <i>Prerequisite: CYB 608 and completion of one specialization area.</i>
CYB 699B	Cyber Security Project II <i>Prerequisite: CYB 699A</i>

All students must choose one Specialization defined below:

#### ▲ Specialization in Computer Forensics

The specialization in Computer Forensics provides study in the professional domain of Cyber Security and Information Assurance that seeks to build and present facts about computer and network usage generally for the purposes of explaining what has happened and holding those responsible to account. This requires particular attention to servers as well as clients, and particularly data servers.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce a successful project using project development skills.
- Organize a functional forensic security tool kit.
- Derive a network usage history, identify and characterize event origins, and recreate the chronology of events.
- Create an application of forensic principles for SQL Server databases.

### Program Requirements

(4 courses; 18 quarter units)

CYB 608	Ethical Hacking <i>Prerequisite: CYB 606</i>
CYB 621	Computer Forensics Principles <i>Prerequisite: CYB 608</i>
CYB 622	Computer Forensics Technology <i>Prerequisite: CYB 621</i>
CYB 623	Database Forensic Principles <i>Prerequisite: CYB 622</i>

#### ▲ Specialization in Ethical Hacking & Pen Testing

The Ethical Hacking & Pen Testing specialization is designed to provide unique applications involved in the professional domain of Cyber Security and Information Assurance (CSIA). The curriculum focus is directed toward ethical hacking and penetration (Pen) testing. Penetration tests probe network and information system security components by conducting simulated attacks on systems. This specialization prepares the professional to develop rules of engagement, prepare a tool kit, discover and exploit system vulnerabilities, ethically conduct a penetration test and prepare penetration test documentation. Red Teaming practices are utilized and Red vs. Blue team exercises are executed.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce a pen test authorization and rules of engagement document.
- Prepare and synthesize process specifications of Red Team actions against a Blue Team defense of a computer infrastructure.
- Prepare and synthesize process specifications of a Blue Team defense used to protect the computer infrastructure against a Red Team attack

### Program Requirements

(4 courses; 18 quarter units)

CYB 608	Ethical Hacking <i>Prerequisite: CYB 606</i>
CYB 632	Info Sys Vulnerab & Attacks <i>Prerequisite: CYB 608</i>
CYB 633	Red Teaming <i>Prerequisite: CYB 632</i>
CYB 634	Red vs. Blue Team Exercise <i>Prerequisite: CYB 633</i>

#### ▲ Specialization in Health Information Assurance

The specialization in Health Information Assurance provides study in the professional domain of Cyber Security and Information Assurance that seeks to apply the concepts and practices of this field to a specific industry domain - Health. This domain has sensitive information on individuals and depends on this information for its practice so security in this industry is particularly important.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce a successful project using project development skills.
- Prepare a health information risk mitigation and security plan.
- Propose information privacy policies that maintain the confidentiality of personal data in health care.
- Prescribe information assurance requirements for health care.

### Program Requirements

(4 courses; 18 quarter units)

CYB 608	Ethical Hacking <i>Prerequisite: CYB 606</i>
CYB 613	Information Assurance <i>Prerequisite: CYB 608</i>
CYB 614	Privacy of Information <i>Prerequisite: CYB 608</i>
CYB 615	Securing the Enterprise <i>Prerequisite: CYB 614</i>

### ▲ Specialization in Information Assurance and Security Policy

The specialization in Information Assurance and Security Policy provides study in the professional domain of Cyber Security and Information Assurance that focuses on the organizational and informational portion of the field. This arena particularly involves larger organizations, often in government, that have codified standards, policies and practices for this field.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce a successful project using project development skills.
- Prepare an IT risk mitigation and security plan.
- Prepare and create an enterprise disaster recovery and business continuity plan.
- Derive information assurance from an INFOSEC perspective.

### Program Requirements

(4 courses; 18 quarter units)

CYB 608	Ethical Hacking <i>Prerequisite: CYB 606</i>
CYB 612	Disaster Rec./Bus. Continuity <i>Prerequisite: CYB 608</i>
CYB 613	Information Assurance <i>Prerequisite: CYB 608</i>
CYB 616	Certification & Accreditation <i>Prerequisite: CYB 613</i>

### ■ MASTER OF SCIENCE IN DATA ANALYTICS

*Faculty Advisor: Jodi Reeves; (858) 309-3426; jreeves@nu.edu*

The Master of Science in Data Analytics program is designed to provide students with a comprehensive foundation for applying statistical methods to solve real-world problems. One goal of this program is to prepare students for careers in data analytics with a broad knowledge of the application of statistical tools, techniques, and methods as well as the ability to conduct in-depth analysis, synthesis, and evaluation. Another goal is to prepare students for careers with analytical database knowledge, the ability to apply analytical database tools, techniques, and methods, and the ability to design, develop, implement, program, and maintain data marts and data warehouses.

To address the spectrum of issues in data analytics, this curriculum has been designed to include core courses in statistical topics as well as areas for advanced applications of data analytics in unique fields. Core topics include analytical and predictive modeling, data acquisition, data mining, data security and privacy, continuous and categorical data methods and applications, teamwork, and communication. Advanced topics include how to develop, implement, and maintain the hardware and software tools needed to make efficient and effective use of big data including databases, data marts, data warehouses, machine learning, and analytic programming. State-of-the-art analytical software will be used in all courses.

The culmination of this program is a three-month capstone project where real data from sponsoring organizations or publicly available data will be used to solve specialized problems in analytical database design, programming, implementation, or optimization.

Previous academic studies or industrial experience in such areas as statistics, computer programming, engineering or science are helpful prerequisites for this masters program. This degree is appropriate for both experienced professionals as well as recent college graduates.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate components of data analytics to produce knowledge-based solutions for real-world challenges using public and private data sources.
- Evaluate data management methods and technologies used to improve integrated use of data.
- Construct data files using advanced statistical and data programming techniques to solve practical problems in data analytics.
- Design an analytic strategy to frame a potential issue and solution relevant to the community and stakeholders.
- Develop team skills to ethically research, develop, and evaluate analytic solutions to improve organizational performance.
- Design data marts.
- Analyze complex database queries for real-world analytical applications.
- Design medium to large data warehouses.
- Evaluate machine learning methods and strategies for advanced data mining.

### Degree Requirements

To obtain the Master of Science in Data Analytics, students must complete 54 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Please refer to the graduate admissions requirements for specific information regarding application and evaluation.

### Core Requirements

(12 courses; 54 quarter units)

ANA 605	Analytic Models & Data Systems
ANA 610	Data Management for Analytics <i>Prerequisite: ANA 605</i>
ANA 615	Data Mining Techniques <i>Prerequisite: ANA 610</i>
ANA 620	Continuous Data Methods, Appl <i>Prerequisite: ANA 615</i>
ANA 625	Categorical Data Methods, Appl <i>Prerequisite: ANA 620</i>
ANA 630	Advanced Analytic Applications <i>Prerequisite: ANA 625</i>
ANA 650	Database Design for Analytics <i>Prerequisite: ANA 630</i>
ANA 655	Data Warehouse Design & Devel <i>Prerequisite: ANA 650</i>
ANA 660	Advanced SQL Programming <i>Prerequisite: ANA 655</i>
ANA 665	Data Mining & Machine Learning <i>Prerequisite: ANA 660</i>
ANA 699A	Analytic Capstone Project I <i>Prerequisite: ANA 665</i>
ANA 699B	Analytic Capstone Project II <i>Prerequisite: ANA 699A</i>

### ■ MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

*Faculty Advisor: Shekar Viswanathan; (858) 309-3416; sviswana@nu.edu*

The Master of Science in Engineering Management program (M.S.) is designed to bring the benefits of modern technology and high quality graduate-level instruction to engineers/ scientists/technologists interested in furthering their skills in engineering management with specialization in any of the following areas:

- Project / Program Management, so as to become effective future project/ program managers
- Enterprise Architecture education so as to become expert in technology oriented Enterprise Architectures and executing decisions in technological

and scientific organizations

- Systems management expert related to the life cycle of systems including definition, development, deployment and decommissioning
- Technology Management experts to manage and lead technology in global marketplace

These M.S. programs offer practical business perspectives necessary for engineering management. Unlike traditional MBA programs, these programs emphasize required management skills that are specifically built on the students' technical backgrounds and experience. The custom-designed mix of management concepts and technical expertise will help prepare professionals to direct major public and private organizations in the increasingly complicated managerial environment of today's competitive global, technical environment. In this program, engineering management principles are broadly based and draw from many different disciplines such as: applied sciences, engineering, natural sciences, mathematics, economics, business and social sciences.

### Relevance to the Real World

Engineering Management leadership has become a highly sought skill in today's competitive global technological marketplace. It is now a well recognized profession in most industries. Within this curriculum are the following areas of specializations: project/program management, systems engineering, technology management, and enterprise architecture. These four specializations provide a broad perspective of engineering management careers that are of current interest and need.

### MSENM Transition Program

National University students who completed a transition program as part of their undergraduate BSITM degree and who satisfy MSENM transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSENM degree. The number of units required for the MSENM program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate quantitative analytical and critical thinking skills and techniques to manage projects and processes (products and services)
- Examine a multidisciplinary approach involving the integration of engineering, management, quality and risk analysis in projects and processes (products and services).
- Identify, prioritize and select relevant solutions in solving complex engineering problems and processes.
- Assess tools and techniques, resources, organizational systems, and decision making processes for the successful management of projects and processes (products and services).
- Apply global mindset and a detailed knowledge of business environments in engineering management solutions.
- Demonstrate organizational and team skills needed to manage projects and processes.
- Communicate graduate level oral and writing skills.
- Demonstrate professional and ethical responsibility.

### Degree Requirements

(14 courses; 63 quarter units)

To receive a Master of Science in Engineering Management, students must complete 63 quarter units of which 54 quarter units of graduate credit are required. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and matriculation.

### Program Prerequisites

(2 courses; 9 quarter units)

Candidates for the program must possess a Bachelor's degree in engineering, engineering technology, or physical sciences or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission would be based on relevant experience and the following program prerequisites:

MGT 309C Prin. of Mgmt & Organizations

CSC 220 Applied Probability & Stats.  
*Prerequisite: MTH 215*

or

MNS 205 Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

### Core Requirements

(8 courses; 36 quarter units all except FEAC specialization)

(9 courses; 40.5 quarter units FEAC specialization students)

ENM 600 Engineering Mgmt Concepts

ENM 601 Project Management Principles

ENM 602 Risk, Contracts, and Legal Iss

PME 602 Skills Management

ENM 604 Quality Management

TMG 610 Global Trends in Technology

ENM 607A Capstone Course I  
*Prerequisite: All core classes in program.*

ENM 607B Capstone Course II  
*Prerequisite: ENM 607A*

Students in the FEAC specialization must also take the following course as an additional core course:

ENM 603 Operation Management  
*Prerequisite: ENM 600*

All students must choose one Area of Specialization.

### ▲ Specialization in Enterprise Architecture

This specialization is designed to prepare technically qualified individuals for responsible management role in the management of Enterprise Architecture. The specialization courses relevant to this program are offered by FEAC Institute, an independent, framework, methodology and tool agnostic organization that focuses on pragmatic Enterprise Architecture hands-on education and training leading to formal Certification.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply a multidisciplinary approach involving the integration of enterprise architecture, management, quality, and Department of Defense Architecture Framework (DODAF).
- Design and implement comprehensive architecture enterprise in accordance with DODAF architecture process.
- Develop an integrated Infrastructure Architecture and relate it to the Federal Enterprise Architecture Program Management Office (FEAPMO).
- Use the Federal Enterprise Architecture Vision and Principles and the Government Accounting Office's view of Enterprise Architecture, Office of Management and Budget.

Courses for the Enterprise Architecture specialization are offered by Federal Enterprise Architecture Institute through National University's Extended Learning Division. Accordingly, the fee and schedule structures may differ from regular National University courses.

## DoDAF [DEPARTMENT OF DEFENSE ARCHITECTURE FRAMEWORK] CERTIFICATION PROGRAM COURSES

DFX 1201X Architecture Framework Basics

DFX 1202X Core and Supporting Products

DFX 1203X Enterprise Architecture Planni

DFX 1204X Advanced Architecture Modeling

## FEA(F) [FEDERAL ENTERPRISE ARCHITECTURE (FRAMEWORK)] CERTIFICATION PROGRAM COURSES

EAX 1201X Enterprise Architecture Concep

EAX 1202X Enterprise Architecture Planni

EAX 1203X Enterprise Architecture Implem

EAX 1204X Enterprise Architecture Integr

### ▲ Specialization in Project Management

From small companies to giant global institutions, project managers are fueling much of the successful development of exciting technical enterprises. Talented and knowledgeable project managers command the best assignments, salaries, other compensation and bonuses. They are the future leaders and entrepreneurs. Good project managers are not born, but are nurtured from a combination of experience, time, talent, and training. Successful projects do not happen spontaneously; they require preparation, planning, and organization. This program is designed to provide systematic training to those would like to pursue an engineering project management career.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply a multidisciplinary approach involving the integration of engineering, management, quality, and cultural analysis to the conduct of project management engineering.
- Evaluate the financial impact of projects on corporations and businesses and develop appropriate action plans through project management engineering.
- Integrate state-of-the-art technological advances to the practice of project-management engineering.
- Achieve agreed upon scope, budget and schedule requirements using resources, organizational systems, and decision-making processes.

#### Program Requirements

(4 courses; 18 quarter units)

ENM 603 Operation Management  
*Prerequisite: ENM 600*

PME 601 Advanced Project Management  
*Prerequisite: ENM 600, ENM 601, ENM 602, and ENM 603*

PME 603 Product Management  
*Prerequisite: ENM 600, ENM 601, ENM 602, and ENM 603*

PME 604 Project Financing Management  
*Prerequisite: ENM 600, ENM 601, ENM 602, ENM 603*

### ▲ Specialization in Systems Engineering

This specialization focuses on complex technology systems that have a far reaching effect on society and its people. These systems are comprised of three types of entities: a) complex products such as aircraft, ships, land vehicles, and military hardware; b) networks of information and infrastructure such as air traffic control, highways, and public works and environmental processes; and, c) the organizations that design, build, and maintain these products, systems and related services, i.e., businesses (public and private, for-profit and non-profit), military command, and government agencies. The systems engineering program provides knowledge in the activities related to the life cycle of systems including definition, development, deployment, and decommission.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend the fundamentals of systems and general systems theory.
- Design discrete and continuous systems utilizing appropriate systems theory, operational requirements, and component integration.

- Validate system performance with testing and evaluation methods.
- Maintain system operations at optimal conditions through the application of systems management fundamentals.

#### Program Requirements

(4 courses; 18 quarter units)

SYE 600 Introduction to Systems Design

SYE 601 Systems Analysis & Design Eval  
*Prerequisite: SYE 600*

SYE 602 Advanced System Design  
*Prerequisite: SYE 601*

SYE 603 System Dynamics  
*Prerequisite: SYE 602*

### ▲ Specialization in Technology Management

This specialization prepares individuals to manage and lead the technology in any organizations. From the Internet Renaissance, a new way of managing information technology resources in organizations has emerged. Information technology has expanded the technological management responsibilities beyond desks, offices, labs, manufacturing sites, cities, and countries. Technology has become the essential force in any industry. Over the past decade the synergy of business, technology, and people have created the abundance of opportunities in all fields of technology management, especially information technology.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Implement and manage technologies aligned with the business of an organization.
- Perform organizational systems analysis, design, planning, and integration of technology.
- Evaluate hardware, software, and systems applications that support technologies.

#### Program Requirements

(4 courses; 18 quarter units)

TMG 620 Principles of Technology Mgmt.

TMG 635 Mgmt. of Tech & Innovation

TMG 640 Managing Technology Change

TMG 625 Systems Analysis and Design

### ■ MASTER OF SCIENCE IN ENVIRONMENTAL ENGINEERING

*Faculty Advisor: Hassan Badkoobehi; (858) 309-3487; hbadkoob@nu.edu*

The Master of Science in Environmental Engineering (MSENE) program is designed to provide students with the requisite mathematical foundations and environmental processing skills for solving real world problems. Environmental engineers are the technical professionals who identify and design solutions for environmental problems. They are responsible for safe drinking water, treatment and proper disposal of wastes, maintaining air quality, controlling water pollution, and remediating contaminated sites. Environmental engineers also develop new and improved means to protect the environment.

This program involves traditional engineering components such as mathematics, physics, chemistry, and engineering design. In addition, it also includes disciplines such as biology, microbiology, ecology, public health, geology, meteorology, economics, and political science. To address the spectrum of issues facing the environment, environmental engineers are broadly educated as well as technically trained. The following subjects are now considered essential in the background of an environmental engineer: ecology, microbiology, chemistry, statistics, ground water, solid waste, environmental impact assessment, environmental legislation and modeling, and remediation of site contamination with spills or improper disposal of hazardous materials.

Environmental engineers are employed by engineering consulting firms, industries that need to comply with pollution emission and discharge regulation, private and municipal agencies that supply drinking water and treat and dispose wastes, government agencies that monitor and regulate waste discharges and air emissions, private and government laboratories, universities that conduct envi-

ronmental research, international agencies that transfer knowledge to developing countries, and public-interest groups that advocate environmental protection.

### Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree in any one of the area such as in science, chemistry, engineering, microbiology from a regionally accredited institution. The non-engineering/non-science student will find the technical focus of many courses challenging. These students should fulfill the program prerequisites or waive them through a course challenge exam. Students considering this program should contact the program lead faculty prior to enrollment.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Examine the economical, social, legal, ethical, global and political aspects of sound and sustainable environmental solutions.
- Analyze water, air, and land resource problems relative to environmental standards.
- Utilize critical thinking skills to solve air, water and hazardous waste problems to meet environmental standards.
- Evaluate the potential impact of product, processes and activities through life cycle assessment.
- Evaluate water, waste water, air pollutant and hazardous waste quality using physical, biological and chemical treatment methods.
- Develop environmental project plans that include risk management strategies.
- Provide a methodology to determine and control the hazardous air pollutants from industrial/commercial sources.
- Communicate through oral and written skills appropriate for this profession.
- Collaborate with other professionals in analyzing, designing, and evaluating environmental projects.

### Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Environmental Engineering, students must complete 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Program Prerequisites

(6 courses; 21 quarter units)

Students who have a Bachelor of Science in Engineering or related field are exempt from the prerequisites. All other applicants with a non-engineering Bachelor's degree must make up the deficiencies with the following prerequisites:

CHE 101	Introductory Chemistry <i>Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
CHE 101A	Introductory Chemistry Lab (1.5 quarter units) <i>Prerequisite: CHE 101, or CHE 141 for science majors</i>
CSC 208	Calculus for Comp. Science I <i>Prerequisite: MTH 215</i>
CSC 220	Applied Probability & Stats. <i>Prerequisite: MTH 215</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>

### Core Requirements

(12 courses; 54 quarter units)

SUS 601	Introduction to Sustainability
ENE 610	Microbiological Processes <i>Prerequisite: BIO 203, and BIO 203A</i>
ENE 611	Water Treatment Processes <i>Prerequisite: CSC 208, and CSC 220 or permission from lead faculty</i>
SEM 604	Life Cycle and Risk Assessment
ENE 605	Air Pollution Control
SEM 606	Environmental Management
ENE 607	Solid & Hazardous Waste Remedi <i>Prerequisite: CHE 101, or CHE 101A</i>
SEM 608	Sustainable Buildings
ENE 608	Site Remediation
ENM 600	Engineering Mgmt Concepts
ENE 609A	Research Project I <i>Prerequisite: Satisfactory completion of 70% of core requirements with a GPA of 3.0 or better</i>
ENE 609B	Research Project II <i>Prerequisite: ENE 609A</i>

### ■ MASTER OF SCIENCE IN HOMELAND SECURITY AND EMERGENCY MANAGEMENT

*Faculty Advisor: Shekar Viswanathan; (858) 309-3416; svswana@nu.edu*

The terrorist events of 9/11 highlighted the national and international need for highly educated and experienced professionals in the area of Homeland Security and Emergency Management. Naturally occurring events such as Hurricane Katrina, Southern California Wildfires, Joplin tornados, and Japanese tsunami are further evidence of the ongoing requirement for specialized knowledge in this area. Businesses, governments, and private industry must be able to prepare for, respond to, and recover from potentially debilitating natural and man-made catastrophes. The Master of Science degree program in Homeland Security and Emergency Management represents an interdisciplinary area of research and application that brings together fields of engineering, science, and management from the most traditional to the most technologically advanced and novel. A well-developed curriculum, with emphasis on fundamentals and practices that define the theory and effective practice of asset and people protection, provides the focus for the Homeland Security and Emergency Management degree.

There are three well-known external certifications related to security, safety, and emergency management professionals. The Certified Protection Professional (CPP) program is the product of the American Society for Industrial Security (ASIS), an international organization for professionals responsible for security. This includes managers and directors of security departments or organizations, as well as full-time security practitioners. With more than 32,000 members worldwide, ASIS draws from corporate and organizational executive and management ranks, plus security consultants and architects, attorneys, and law enforcement professionals. The CPP program was officially launched in 1977, making it the longest running security certification program. Today, more than 9,500 individuals are CPP-certified, representing one of the largest certified groups of security professionals in existence.

The Certified Safety Professional (CSP) designation has become the mark of the professional within the safety field. This certification is administered by the Board of Certified Safety Professionals (BCSP). The importance of this designation as a measure of professional standing and competence is accepted not only by the profession but is also gaining acceptance by federal, state, and local governments; by employers; and by the public.

Becoming a Certified Emergency Manager (CEM) provides international recognition of qualifications. Administered by the International Association of Emergency Managers (IAEM), CEM credentialing validates the experience, knowledge, and understanding of the CEM professional. The Homeland Security and Emergency Management program is designed in such a way that anyone successfully completing this program would be academically trained to apply for CPP, CSP, and/or CEM credentialing.

### MSHSSE Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSHSSE transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSHSSE degree. The number of units required for the MSHSSE program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ risk analysis to assess the safety and security of assets, as well as processes
- Illustrate the issues related to safety and security of both natural and man-made hazards
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful implementation of safety and security plans
- Demonstrate global mindset to safety/security issues, planning, and strategy
- Assess the impact of safety/security issues for the operation of corporations, governments, and private industry and develop appropriate action plans.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful implementation of safety and security plans
- Develop oral, written and technological communication skills appropriate with this profession
- Appraise legal, ethical and professional responsibility

### Degree Requirements

To receive a Master of Science in Homeland Security and Emergency Management, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and matriculation.

### Program Prerequisites

(1 course; 4.5 quarter units)

Candidates for the program must possess a Bachelor's degree in engineering, engineering technology, physical sciences, or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission is based on relevant experience and the following minimum program prerequisites:

CHE 101    Introductory Chemistry  
*Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B*

This course may be waived if their equivalents have been completed at the undergraduate level with a grade of C or better.

### Core Requirements

(12 courses; 54 quarter units)

Students enrolled in this program are advised to take the courses in the order specified below:

SSE 602    Evaluation of Safety Programs  
SSE 613    Policies of Homeland Security  
SSE 604    Security - Planning and Design  
SSE 605    Chemical Plant Process Safety  
*Prerequisite: SSE 602*  
SSE 606    Managing Information Security  
SSE 607    Fire and Explosion Engineering

SSE 608    Explosives and Bio Materials  
SSE 614    Infrastructure Protection  
SSE 611    Emergency Management  
SSE 615    Fundamentals of Recovery  
*Prerequisite: SSE 611*  
SSE 610A    Capstone Course  
*Prerequisite: SSE 602, SSE 604, SSE 605, SSE 606, SSE 607, SSE 608, SSE 613, SSE 614, SSE 615*  
SSE 610B    Second Capstone Course  
*Prerequisite: SSE 610A*

### ■ MASTER OF SCIENCE IN MANAGEMENT INFORMATION SYSTEMS

*Faculty Advisor: Rell Snyder; (714) 429-5282; rsnyder@nu.edu*

*Faculty Advisor: Farnaz Sharifrazi; (858) 642-8468; fsharifrazi@nu.edu*

The Master of Science in Management Information Systems (MSMIS) program is designed to provide students with the requisite management, business, strategic, and technical skills needed to help them apply information systems technology more efficiently and effectively. The MSMIS program's objective is to close this gap by providing the needed education and career development foundations, including oral, written, and presentation skills; technical skills; people and business skills; and ethics and professionalism, which are integrated throughout its individual courses. The curriculum is designed as a set of interrelated building blocks consisting of foundations, core, integration, and career tracks.

### Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree. This program is designed to offer information systems expertise to those from various education backgrounds. Enrolling students must have an undergraduate degree in information systems, information technology, computer science, or software engineering, business or must have approval of the lead faculty and have some background in business and technology.

### Transition programs

National University students who completed a transition program as part of their BSITM undergraduate degree and who satisfy MSMIS transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSMIS degree. The number of units required for the MSMIS program is dependent on the coursework completed in the Bachelors transition program and the grades earned.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use analytical and critical thinking skills to develop organizational project management strategies and strategic solutions for information system processes.
- Perform systems analysis that addresses requirements among information systems technology, people and organizational goals.
- Evaluate current and emerging systems integration and distributed computing alternatives to maximize efficiencies and meet organizational goals.
- Develop decision support system solutions inclusive of knowledge based systems, expert systems and artificial intelligence.
- Illustrate managerial principles and applications of networking and telecommunications.
- Communicate and advise organizations using written and oral skills required for IS professionals.
- Integrate legal, ethical, and global implications in decision making processes.

### Degree Requirements

To receive a Master of Science in Management Information Systems, students must complete 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate work completed at another regionally accredited institution may be transferred to meet stated requirements in the program provided those units were not used in earning another advanced degree. The degree program consists of ten courses plus the two-part MSMIS graduate project (two courses at 4.5 quarter units each) that cannot be taken until all other core courses have been completed or by approval of the lead faculty.

**Core Requirements**

(12 courses; 54 quarter units)

CIS 601	Information Systems Strategies
CIS 602	Network Services & Protocols <i>Prerequisite: CIS 601</i>
DAT 604	Database Design and Impl.
CIS 604	Management and Security <i>Prerequisite: CIS 601</i>
LED 606	Information Mgmt for Leaders
MGT 604	Project and Program Management
BKM 600	Knowledge Mgmt for Bus Strateg
BKM 610	Managerial Sup Syst, DSS & ESS
TMG 625	Systems Analysis and Design
CIS 607	Systems Integration <i>Prerequisite: CIS 601</i>
CIS 620A	Master's Research Project I <i>Prerequisite: All core requirements with a GPA of 3.0 or approval of lead faculty.</i>
CIS 620B	Master's Research Project II <i>Prerequisite: CIS 620A</i>

**■ MASTER OF SCIENCE IN SUSTAINABILITY MANAGEMENT** *Faculty Advisor: Nelson Altamirano; (858) 642-8428; naltamirano@nu.edu**Faculty Advisor: Ben Radhakrishnan; (858) 309-3423; bradhakrishnan@nu.edu*

This blended program prepares students for the industrial revolution of the 21st century. There is no doubt that we need to re-think our way of living, producing and consuming in order to eliminate the current contradictions between the natural world, the community and the profitability of businesses. In fact, many corporations, cities, states and countries are introducing new policies and programs from an emphasis on pollution control to pollution prevention to sustainable practices. Sustainability in the sense that programs do incorporate all social, ecological and economic conditions, as well as, the general principle of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.

This program is designed to provide methods and theories appropriate to the study of sustainability from business perspectives to practical engineering. After a comprehensive interdisciplinary introduction to sustainability, students are exposed to managerial key ideas and practices with sustainable perspectives: risk assessment, life cycle, lean supply chain, firm excellence and innovation. Students are also exposed to combine engineering and sustainability concepts into the management practices of energy, environment, watershed and buildings. The strength of the program comes from its engineering and management blended nature, as well as its theoretical and practical approach.

**Career Tracks**

After completing the MS in Sustainability Management degree, students can enter the job market or pursue further higher educational degrees. Possible types of jobs include: Project Manager, Sustainability Manager, Sustainability Analyst, Sustainable Design Professional, Engineer, Environmental Consultant, Sustainability Consultant, Energy Efficiency Analyst, Operations Manager, Development Specialist, Resource Manager, etc. Students interested in continuing their educational careers can pursue doctoral degrees in sustainability, management, sustainable development, natural resources and sustainability, or other related doctoral degrees.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Apply scientific knowledge and methods required to evaluate sustainability concepts and systems.
- Design, manufacture, and manage processes in an environmentally conducive manner.
- Analyze engineering and management problems in their social and environmental context.

- Develop economic, environmental, and social sound sustainable decisions.
- Evaluate the impact of products, processes, and activities through life cycle assessment.
- Develop written communication skills required for this profession.
- Demonstrate professional, legal, and ethical responsibility in decision making practices.

**Degree Requirements**

(12 courses; 54 quarter units)

To receive a Master of Science in Sustainability Management, students must complete 49.5 quarter units of graduate level credit. A total of 9.0 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission section for specific information regarding application and evaluation.

**Program Prerequisites**

(1 course; 4.5 quarter units)

Candidates for the program must possess a Bachelor's degree in engineering, engineering technology, sciences, business, management or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission is based on relevant experience and the completion of the following program prerequisite:

CSC 220\* Applied Probability & Stats.  
*Prerequisite: MTH 215*

\* This course may be waived if its equivalent has been completed at the undergraduate level with a grade of C or better.

**Core Requirements**

(11 courses; 49.5 quarter units)

SUS 601	Introduction to Sustainability
SUS 602	Enterprise Excellence <i>Prerequisite: CSC 220 or permission from lead faculty.</i>
SUS 603	Sustainable Innovation
SEM 604	Life Cycle and Risk Assessment
SEM 605	Energy Management
SEM 606	Environmental Management
SEM 607	Watershed Management
SEM 608	Sustainable Buildings
SUS 604	Sustainable Supply Chain
SEM 610A	Project I <i>Prerequisite: SUS 601, SUS 602, SUS 603, SEM 604, SUS 604, SEM 605, SEM 606, SEM 607, SEM 608</i>
SEM 610B	Project II <i>Prerequisite: SEM 610A</i>

**■ MASTER OF SCIENCE IN WIRELESS COMMUNICATIONS** *Faculty Advisor: Mohammad Amin; (858) 309-3422; mamin@nu.edu*

The Master of Science in Wireless Communications (MSWC) program is a professional degree that integrates communication techniques, problem solving strategies, simulation skills and mathematical foundations with hands-on training required to solve real world problems in telecommunications.

The program is designed for professionals and managers to facilitate the learning and application of skills in the field of wireless communications. The program uses a distinctive and challenging curriculum that emphasizes multidisciplinary knowledge and integrates theory through applications and design concepts.

Classes combine lectures, case and hands-on studies, individual and team projects, research papers and participant presentations.



## Careers

With National's MSWC program, faculty, students, and employers will be assured that our graduates are proficient in analytical, technical and critical thinking skills, they have a sense of professionalism, and are instilled with a strong set of values essential for success in the wireless communications field. This program reflects current and future industry needs, and graduates from the MSWC program are trained and prepared to assume a leadership role in the field.

The MSWC arms students with the tools necessary to achieve professional success in both theoretical and practical aspects of communication fields. Graduates are equipped to seek employment in research organizations, computer centers, or wireless communications businesses and enterprises. This program also prepares students for further education in wireless communications enabling graduates to pursue Ph.D. studies, if they desire.

## Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree in engineering, engineering technology, or physical/computational science from an accredited university.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate wireless networking, protocols, architectures, and standards to the development and design of wireless communication systems.
- Evaluate and select the appropriate kinds of coding and decoding schemes for constructing, detecting and filtering wireless communications signals.
- Build security into wireless communications systems and contrast ethical and legal issues in the global telecommunications industry.
- Plan, integrate and implement multiple types of Second (2G) and Third Generation (3G) wireless networks.
- Create strategic analysis software and tools to develop wireless, networks and service plans.
- Develop simulation models of the radio components of wireless systems using MATLAB, SIMULINK and its communication tools.
- Evaluate and forecast economic impact of continually advancing technologies on wireless service, equipment, application providers, and consumers.
- Conduct research into a specific wireless communication topic, including finding and integrating relevant research results of others.
- Demonstrate critical thinking and ability to analyze and synthesize wireless communications concepts, project management principles, and ethical standards.

## Degree Requirements

(16 courses; 72 quarter units)

The MSWC program requires the completion of 54 quarter units of graduate course work. Where appropriate, a maximum of 13.5 quarter units of graduate work completed at another accredited institution may be transferred to meet stated requirements in the program if the courses were not used in earning another advanced degree. The degree program consists of ten courses plus the two part MSWC Masters Research Project. It is recommended that all courses be taken in sequence.

## Program Prerequisites

(4 courses; 18 quarter units)

Students without a baccalaureate degree in Electrical Engineering or in a closely related area must complete the following four courses:

MTH 215	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
CSC 208	Calculus for Comp. Science I <i>Prerequisite: MTH 215</i>
CSC 209	Calculus for Comp. Science II <i>Prerequisite: CSC 208</i>
PHS 104	Introductory Physics <i>Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>

Lead Faculty may waive any prerequisites based on verifiable documented proof that the student has acquired the equivalent learning.

## Core Requirements

(12 courses; 54 quarter units)

Students are encouraged to take the following 12 courses in the order of presentation. Courses WCM 600, WCM 601 and WCM 602 are foundation courses that must be completed before taking any other courses and the project courses.

WCM 600	Signal Processing Theory
WCM 601	Digital Wireless Fundamentals <i>Prerequisite: WCM 600</i>
WCM 602	Wireless Principles/Standards
WCM 604	Coding and Modulation for W/C <i>Prerequisite: WCM 601, WCM 602</i>
WCM 605	Wireless Systems Security <i>Prerequisite: WCM 602</i>
WCM 606	CDMA Wireless Systems <i>Prerequisite: WCM 604</i>
WCM 607	3G & 4G Wireless Networks <i>Prerequisite: WCM 604</i>
WCM 608	Wireless Engineering Software <i>Prerequisite: WCM 604</i>
WCM 609*	Radio Systems Modeling <i>Prerequisite: WCM 604</i>
WCM 612*	Wireless Economics Topics <i>Prerequisite: WCM 601, WCM 602, WCM 604, WCM 605, WCM 606, WCM 607, WCM 608, and WCM 609 or approval of lead faculty</i>
WCM 611A*	Master's Research Project I <i>Prerequisite: Satisfactory completion of a minimum of eight out of ten courses, WCM 601 through WCM 609, WCM 612</i>
WCM 611B*	Master's Research Project II <i>Prerequisite: WCM 611A</i>

\* With approval of the Lead faculty, any student may earn up to 10% of their grade in the sequence of the last four courses, WCM 609, WCM 612, WCM 611A and WCM 611B through an internship or Curricular Practical Training with a company or organization approved by the Lead faculty.

## CERTIFICATES

### ● UNDERGRADUATE CERTIFICATE IN INFORMATION TECHNOLOGY MANAGEMENT

*Faculty Advisor: Bhaskar Raj Sinha; (858) 309-3431; bsinha@nu.edu*

This certificate program offers students interested in technology related careers the opportunity to develop the professional expertise to apply and manage technology in a variety of situations. With this certificate, students can pursue careers in fields such as marketing, information management, customer service, data management, and sales. Students who later want to pursue a baccalaureate degree can apply some or all of the credits awarded in the certificate program toward their degree assuming they meet the GPA and other requirements of that program.

#### Certificate Prerequisite

(1 course; 4.5 quarter units)

ITM 210 Introduction to IT

#### Certificate Requirements

(5 courses; 22.5 units)

ITM 320	Information Technology Management <i>Prerequisite: ITM 210</i>
ITM 340	IT Clients Using MS Windows
ITM 420	Local Area Networks

- ITM 430 Wide Area Networks  
*Prerequisite: ITM 420*
- ITM 440 Database Concepts & Data Model

**Elective**

(1 course; 4.5 quarter units)

Choose one of the following:

ITM 345 IT Servers Using Linux

**or**

ITM 434 Wireless LAN Administration

**or**

ITM 470 Information Security Management

● **GRADUATE CERTIFICATE IN PROJECT MANAGEMENT** 

*Faculty Advisor: Shekar Viswanathan; (858) 309-3416; sviswana@nu.edu*

From small companies to giant global institutions, project managers are fueling much of the successful development of exciting business enterprises. Talented and knowledgeable project managers command the best assignments, salaries, other compensation, and bonuses. They are the future leaders and entrepreneurs. Good project managers are not born but are nurtured from a combination of experience, time, talent, and training. Successful projects do not happen spontaneously; they require preparation, planning, and organization. This certificate program is designed to provide systematic training to students pursuing a project management certification offered by Project Management Institute. To earn this certificate, students are required to take the following courses in the order specified below:

**Core Requirements**

(5 courses, 22.5 quarter units)

- ENM 601 Project Management Principles
- ENM 602 Risk, Contracts, and Legal Iss
- PME 601 Advanced Project Management  
*Prerequisite: ENM 600, ENM 601, ENM 602*
- PME 602 Skills Management
- PME 604 Project Financing Management  
*Prerequisite: ENM 600, ENM 601, ENM 602*



NATIONAL UNIVERSITY

# SCHOOL OF HEALTH AND HUMAN SERVICES

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Dean, Gloria McNeal  
Ph.D., Higher Education Administration, University of Pennsylvania

- 248 Degrees Offered**
- 248 Degrees Offered by Department**
- 250 Faculty**
- 252 Undergraduate Degree Programs**
- 256 Nursing Programs**
- 267 Graduate Degree Programs**
- 275 Doctoral Degree Programs**
- 277 Certificate Programs**



# DEGREE PROGRAMS OFFERED

## UNDERGRADUATE DEGREES


### Associate of Science

with Majors in:

- Health Informatics 





### Bachelor of Arts

with a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California) 

### Bachelor of Science

with Majors in:

- Allied Health 
- With concentration in:
  - » Health Informatics
- Clinical Laboratory Science 
- Healthcare Administration 
- Nursing (Generic Entry)
- Nursing (Accelerated Post-Bachelor Degree)
- Nursing (Licensed Vocational Nurse/ Licensed Practical Nurse to BSN)
- Nursing (RN Completion)
- Public Health 
- Radiation Therapy

## GRADUATE DEGREES

### Master of Healthcare Administration







### Master of Public Health

with Specialization in:

- Health Promotion
- Healthcare Administration
- Mental Health

### Master of Science

with Fields of Study in:


- Clinical Affairs 
- Clinical Regulatory Affairs
- Health Informatics 
- Health and Life Science Analytics 
- Nurse Anesthesia
- Nursing 
- with Specialization in:
  - » Forensic Nursing 
  - » Nursing Administration 
  - » Nursing Informatics 

## DOCTORATE PROGRAM




### Doctor of Nursing Practice

## CERTIFICATE PROGRAMS

### Undergraduate Level

- LVN “30 Unit” Option 

### Graduate Level

- Clinical Informatics
- Health Coaching 
- Nursing Administration 
- Nursing Informatics 

The following program is also listed in the School of Education Section:

### Bachelor of Arts

with Majors in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California)

 Entire program can be completed online.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

# DEGREE PROGRAMS BY DEPARTMENT

## DEPARTMENT OF COMMUNITY HEALTH

### Associate of Science

with Majors in:

- Health Informatics [📄](#)

### Bachelor of Arts

With a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California) [📄](#)

### Bachelor of Science

with Majors in:

- Healthcare Administration [📄](#)
- Public Health [📄](#)

### Master of Healthcare Administration [📄](#)

### Master of Public Health [📄](#)

with Specialization in:

- Health Promotion
- Healthcare Administration
- Mental Health

### Master of Science

with Fields of Study in:

- Health and Life Science Analytics [📄](#)
- Health Informatics [📄](#)

## CERTIFICATE PROGRAMS

### Graduate Level

- Clinical Informatics

## DEPARTMENT OF HEALTH SCIENCES

### Bachelor of Science

with Majors in:

- Allied Health [📄](#)  
With concentration in:  
» Health Informatics

- Clinical Laboratory Science [📄](#)
- Radiation Therapy [📄](#)

### Master of Science

with Fields of Study in:

- Clinical Affairs [📄](#)
- Clinical Regulatory Affairs

## CERTIFICATE PROGRAMS

### Graduate Level

- Health Coaching [📄](#)

## DEPARTMENT OF NURSING

### Bachelor of Science

with Majors in:

- Nursing (Generic Entry)
- Nursing (Accelerated Post-Bachelor Degree)
- Nursing (Licensed Vocational Nurse/ Licensed Practical Nurse to BSN)
- Nursing (RN Completion)

### Master of Science

with Fields of Study in:

- Nurse Anesthesia
- Nursing [📄](#)

with Specialization in:

- » Forensic Nursing [📄](#)
- » Nursing Administration [📄](#)
- » Nursing Informatics [📄](#)

## DOCTORATE PROGRAM

### Doctor of Nursing Practice [📄](#)

## CERTIFICATE PROGRAMS

### Undergraduate Level

- LVN “30 Unit” Option

### Graduate Level

- Nursing Administration [📄](#)
- Nursing Informatics [📄](#)

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# SCHOOL OF HEALTH AND HUMAN SERVICES

## ■ ASSOCIATE OF SCIENCE

### ◆ MAJOR IN HEALTH INFORMATICS

Faculty Advisor: Tyler Smith; (858) 309-3487; tsmith@nu.edu

The Associate of Science with a Major in Health Informatics will prepare students as specialists in the organization and management of healthcare information systems and technologies in small to medium sized healthcare organizations. Graduates are prepared to assist as a team member in the implementation, management and assessment of health information technologies and systems to improve health outcomes and safety. Graduates of the program are qualified to seek entry-level employment opportunities in health clinics, long term care, home health, hospice, consulting firms, health systems vendors, community health agencies, government agencies and other small to medium sized healthcare organizations.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the components of the healthcare delivery system in the United States and the impact of social, cultural, political, economic and environmental factors that affect the management and operation of healthcare organizations.
- Identify information systems used to assess health in communities.
- Describe health data management technologies and methods to improve the quality, efficiency, organization, equity and safety of healthcare practice.
- Demonstrate the ability to effectively use a health information system that involves computer applications to satisfy health organization processes.
- Demonstrate the ability to assist others to use a health information system that involves computer applications.
- Implement health information technology strategies and systems that optimize clinical workflow and improve health outcomes.
- Describe how healthcare administrators collaborate and lead others, ethically, in a healthcare organization.
- Describe how healthcare administrators improve health organization performance.
- Communicate effectively orally and in writing about health informatics to stakeholders in a healthcare organization.

#### Degree Requirements

To receive an Associate of Science in Health Informatics, students must complete at least 96 quarter units, 31.5 of which must be taken in residence at National University. All Associate degree students must complete a minimum 34.5 units of the University General Education requirements. In the absence of transfer credit students may need to take additional electives to fulfill overall unit requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

#### Requirements for the Major

(13 courses; 55.5 quarter units)

HCA 100	U.S. Healthcare System
COH 150	Healthcare Terminology
ITM 210	Introduction to IT
HTM 200	Health Information Systems
HTM 200L	Health Information Systems Lab <i>Prerequisite: HTM 200 with a minimum grade of C</i>
COH 250	Public Health IT
ITM 230	Computer Network Overview
HTM 212	Electronic Health Records
HTM 210	Healthcare Workflow Processes
HTM 214	Quality Improvement

HCA 200	Health Organization Management
MUL 200	Communication Tools <i>Prerequisite: ENG 100, ENG 101, and COM 100, or COM 103</i>
HTM 290	EHR Implementation Project (1.5 quarter units) <i>Prerequisite: HCA 100, and COH 150, and ITM 210, and HTM 200, and COH 250, and HTM 200L, and ITM 230, and HTM 210, and HTM 212, and HTM 214, and HCA 200, and MUL 200</i>

## ■ BACHELOR OF ARTS

### ◆ MAJOR IN HEALTH SCIENCES WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA)

Faculty Advisor: Alba Diaz; (858) 309-3497; adiaz@nu.edu

For Credential: Carol Shepherd; (916) 855-4115; cshepher@nu.edu

The Bachelor of Arts with a Major in Health Sciences with a Preliminary Single Subject Credential provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education and prepares a candidate for a career as a teacher in the middle and secondary school levels. The students are required to think critically, write clearly, and speak articulately. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the School of Education Credential Information section of the catalog.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of developmentally appropriate grade level health education content domains.
- Describe the relationship of personal, family, school, community, cultural and environmental factors as related to health behavior and physical, emotional, and mental well-being.
- Identify cognitive, social, and physical characteristics, growth, and development of healthy adolescents, at-risk adolescents and those who have health problems.
- Examine components of research-based health education and health promotion programs / practices including coordinated school health programs.
- Discuss the evolving role of a health science teacher as a culturally responsive health educator, counselor, advocate, and resource for individuals, families, and communities.
- Analyze the role of mass media, technology and the Internet in promoting physical, mental and emotional health literacy and behaviors.
- Utilize health promotion materials, lessons, and programs to reduce health risk behavior and increase positive health behaviors.
- Discuss the personal, social, and legal requirements and appropriate prevention and intervention strategies in providing a safe, inclusive school environment.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts with a Major in Health Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. All undergraduate students must complete a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

### Preparation for the Major

(11 courses; 46.5 quarter units)

CHE 101*	Introductory Chemistry <i>Recommended Preparation: MTH 204, or MTH 215, or MTH 216A, and MTH 216B</i>
PSY 100*	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
COH 100*	Personal Health
MTH 204*	Mathematics for Science <i>Prerequisite: MTH 12A, and MTH 12B, or Accuplacer test placement</i>
MTH 209A*	Fundamentals of Mathematics I <i>Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B</i>
COM 220*	Media Literacy
BIO 100*	Survey of Bioscience
BIO 100A*	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100, or BIO 161 for science majors</i>
BIO 380	Human Biology for Teachers <i>Recommended Preparation: BIO 161, and BIO 162, and Prerequisite: BIO 163, BIO 100A</i>
SOC 344	Marriage, Sex and the Family <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement + Diversity Enriched Offering

### Requirements for the Major

(23 courses; 99 quarter units)

### Health Science Requirements

(11 courses, 49.5 quarter units)

COH 320	Chronic & Communicable Disease
COH 321	Health Behavior
COH 416	PH & Physical Activity
COH 317	Public Health Nutrition
COH 318	Drug Use and Abuse
COH 319	Human Sexuality
COH 420	Health of Vulnerable Groups
HED 311	Health Literacy
HED 414	Violence & Bullying Prevention
HED 308	Mental and Emotional Health <i>Recommended: Prior completion of: COH 318</i>
HED 351	Coordinated School Health <i>Prerequisite: COH 100, Recommended: Prior completion of: COH 321</i>

### Education Theory /Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
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TED 300	Fundamentals of Education <i>Prerequisite: TED 320, or TED 305, or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305, or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305, or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305, or TED 320, or TED 306</i>
TED 464	Mths Teach Sec Health Sci <i>Prerequisite: TED 305, TED 300, TED 310, TED 430, HED 351, Recommended: Prior completion of: TED 330B, TED 420, COH 320, COH 416, COH 317, COH 318, COH 319, HED 308, COH 100, HED 311, HED 414, COH 321</i>

### Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of Pass, and TED 531A with a minimum grade of pass, and Corequisite: TED 530B</i>

### Credentialing Requirements

(1 course; 4.5 quarter units)

EDX 1201X	Computer Tech in Classroom
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Students must have senior standing to enroll in EDX1201X. The class is considered graduate level, but may be completed within the bachelor degree. The grade earned must be a "B" or better. This course will not transfer to any graduate level program at National University or elsewhere due to it being completed within a bachelor degree.

## ■ BACHELOR OF SCIENCE

### ◆ MAJOR IN ALLIED HEALTH

*Faculty Advisor: Ricardo Parker; (714) 429-5149; rparker@nu.edu*

The allied health profession refers to occupations that support, aid and increase the efficiency of the physician, dentist, or primary healthcare specialist. Allied health professionals are involved with the delivery of health or related services pertaining to the identification, evaluation, and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management. The Bachelor of Science, Major in Allied Health degree program provides a broad-based foundation in global and national healthcare issues and trends, ethical and legal issues, health promotion and disease prevention, evidence-based practice, allied healthcare research, healthcare systems management, and healthcare based informatics. The program is designed to articulate with Associate of Arts allied health related degree programs at community colleges. It prepares graduates with additional knowledge, skills, and values to advance in the allied health profession; meet societal and healthcare delivery demands; and work in a variety of settings with diverse patients, families, and communities. Graduates are prepared to assume supervisory, management, and/or educational positions. In addition, successful completion of this program allows students to pursue graduate education in the healthcare field.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the relative health effects of environment, socioeconomic conditions, behavior, health services, and biology.

- Explain how a team approach that is coordinated, comprehensive and continuous facilitates successful treatment outcomes.
- Compare and contrast a medical model of healthcare delivery with a health promotion and disease prevention approach.
- Explain the process of active participation in healthcare from a provider, patient, family, and community perspective.
- Assess the impact of effective and ineffective applications of technology in health services.
- Analyze health services from social, workforce, financial, regulatory, technological, and organizational viewpoints.
- Commit to a code of professional ethics when providing services to clients, families and communities under all circumstances.
- Utilize culturally competent strategies and practices that respect the cultural, social, religious, racial, and ethnic diversity of the patient and family regarding disease and their health.

### Degree Requirements

To receive a Bachelor of Science degree with a Major in Allied Health, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 quarter units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### Requirements for the Major

(10 courses; 45 quarter units)

HSC 310	Issues & Trends in Healthcare
BST 322	Intro to Biomedical Statistics
GER 310	Healthy Aging
HSC 400	Mgmt for Health Professionals
HSC 300	Legal/Ethical Issues & Hlth Pr
HSC 330	Health Education & Promotion
HSC 410	Informatics for Health Profs
HSC 420	Healthcare Research
HSC 430	Case and Outcomes Management
HSC 440	Allied Health Capstone Project <i>Prerequisite: Completion of the major requirements</i>

Students may choose to complete 6 upper-division electives or the Concentration in Health Informatics.

### Upper-Division Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units (6 courses) of electives to fulfill the upper-division unit requirements for the Bachelor of Science in Allied Health.

The following are strongly recommended.

HTM 520	Health Information Exchange
HTM 552	EHR Meaningful Use
HTM 460	Health IT Virtual Simulation <i>Prerequisite: HSC 410 with a minimum grade of C</i>
COH 320	Chronic & Communicable Disease
COH 310	Culture and Health
COH 321	Health Behavior
BIO 305	Genetics <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A</i>
COM 303	Digital Literacy 2.0 <i>Prerequisite: ENG 100, ENG 101</i>

HCA 402 Intro to HA QA Management  
*Recommended: Prior completion of: Completion of all coursework in Preparation for the Major and HCA 400 (BSHA students).*

CIS 301 Mgmt Information Systems

### ▲ Concentration in Health Informatics

The Health Informatics Concentration focuses on effective and innovative use of information and communication technologies in healthcare organizations. Graduates are prepared to advance their careers as entry level health informatics specialists in a healthcare profession, support informatics teams and communicate effectively with healthcare and technology professionals.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the requirements, design usability, product selection and life cycle for the software system that supports the different clinical and administrative healthcare information and communication technologies.
- Communicate effectively with healthcare and information technology professionals and staff working in the healthcare ecosystem.
- Demonstrate the ability to effectively use clinical and administrative healthcare information and communication systems.
- Design the quality improvement in a healthcare organization following the implementation of information and communication technologies.

Students in the Health Informatics Concentration are required to complete six specialized courses in addition to the core major requirements for the BS with a Major in Allied Health.

### Requirements for the Concentration

(6 courses; 27 quarter units)

CIS 301	Mgmt Information Systems
HTM 520	Health Information Exchange
HTM 552	EHR Meaningful Use
HTM 460	Health IT Virtual Simulation <i>Prerequisite: HSC 410 with a minimum grade of C</i>
COM 303	Digital Literacy 2.0 <i>Prerequisite: ENG 100, ENG 101</i>
HCA 402	Intro to HA QA Management <i>Recommended: Prior completion of: all Course work in Preparation for the Major.</i>

### ◆ MAJOR IN CLINICAL LABORATORY SCIENCE

Faculty Advisor: Philip Payne; (858) 309-3475; ppayne@nu.edu

The Bachelor of Science degree with a Major in Clinical Laboratory Science will provide the students an opportunity to complete their degree entirely online, at a pace that suits their needs. The program contains necessary prerequisites to make application to the Laboratory Field Services Branch of the California Department of Health for a trainee license. After successful completion of a 52 week CLS training program at a California approved training facility, the student can apply for the licensing examination for licensure as a Clinical Laboratory Scientist. Some graduates may choose to find employment in the clinical diagnostics/medical device industry or pursue advanced degrees such as in Healthcare Management.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess clinical laboratory practice and procedure by applying the knowledge of technical skills and theory obtained.
- Identify problems in the clinical laboratory and establish a course of action to correct them.
- Distinguish among laboratory methods which use advanced analytical, immunological, microbiological, hematological, and molecular techniques.
- Evaluate laboratory procedure theory, methodology and results.
- Utilize critical thinking skills in Clinical Laboratory situations.

- Conduct research using primary literature sources.
- Produce written work of the standards required by employers in the industry or post graduate programs.

### Degree Requirements

To receive the Bachelor of Science degree with a Major in Clinical Laboratory Science, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 quarters units of the University General Education requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation.

### Requirements for the Major

(11 courses; 49.5 quarter units)

BST 322	Intro to Biomedical Statistics
HSC 300	Legal/Ethical Issues & Hlth Pr
CLS 320	Clinical Lab Management
CLS 301	Clinical Biochemistry <i>Recommended: Prior completion of: CHE 142</i>
CLS 401	Quantitative Analysis <i>Recommended: Prior completion of: CHE 142</i>
CLS 305	Clinical Immunology <i>Recommended: Prior completion of: CHE 101, BIO 161, BIO 203 or equivalent</i>
CLS 315	Molecular Diagnostics <i>Recommended: Prior completion of: BIO 162, and CHE 142</i>
CLS 310	Clinical Virology <i>Recommended: Prior completion of: CHE 101, BIO 161, BIO 203 or equivalent</i>
CLS 405	Clinical Microbiology <i>Recommended Preparation: CLS 301 with a minimum grade of B, CLS 305 with a minimum grade of B, CLS 315 with a minimum grade of B</i>
CLS 410	Clinical Hematology <i>Recommended Preparation: CLS 301 with a minimum grade of B, CLS 315 with a minimum grade of B, CLS 305 with a minimum grade of B</i>
CLS 495	Clinical Lab Science Capstone <i>Prerequisite: Must have completed all required core classes.</i>

### Upper-Division Electives

(7 courses; 31.5 quarter units)

Students must complete a minimum of 31.5 quarter units of upper division electives to fulfill the upper-division unit requirements for the B.S. with a Major in Clinical Laboratory Science.

The following courses are strongly recommended:

CIS 301	Mgmt Information Systems
HSC 310	Issues & Trends in Healthcare
COM 354	Professional Presentations <i>Prerequisite: ENG 101</i>
HSC 410	Informatics for Health Profs
HSC 400	Mgmt for Health Professionals
CIS 440	Systems Quality Assurance
CIS 480	Health Information Management
HSC 420	Healthcare Research

### ◆ MAJOR IN HEALTHCARE ADMINISTRATION

Faculty Advisor: Lockford Jones; (858) 309-3483; ljones@nu.edu

The Bachelor of Science, Major in Healthcare Administration (BSHA) is an undergraduate professional degree designed to prepare students for entry level administrative / management positions in healthcare organizations. Ideal candidates

for the BSHA program are those students looking for career entry in administration and supervisory roles in the healthcare system. Graduates will enhance their opportunities for professional growth and job placement through carefully planned internships and a capstone experience.

Healthcare administration involves the organization, financing and delivery of services to prevent and treat illness and disease, including programs that serve the public and private sectors at all levels—local, state and federal. The BSHA program emphasizes the conceptual and analytical skills required to manage in contemporary healthcare organizations. The program features opportunities in project management, teamwork and leadership. The BSHA program is an associate member institution of the Association of University Programs in Health Administration (AUPHA).

### Background Checks

Agencies used by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of a student into an internship or practicum. Students who do not pass the background check and/or drug test may be unable to attend the internship or practicum course and, therefore, may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate the roles and perspectives of clinical practitioners, nonclinical staff, supervisors, and managers within healthcare organizations
- Describe the management, leadership and healthcare theories and components of the health care delivery system in the United States
- Evaluate the impact of factors that affect the policies, management and operation of healthcare organizations
- Analyze quantitative and qualitative healthcare data and information for effective decision-making
- Explain the legal and ethical principles and responsibilities of healthcare organizations to individual patient and community healthcare needs
- Solve problems and improve performance in healthcare organizations using principles of accounting, law, financial analysis, human resources management, operations analysis, management information systems analysis, strategic planning, and marketing
- Explain strategic and marketing priorities of healthcare organizations in relationship to the needs and values of a community
- Describe the determinants and measurements of health and disease in the population and the responsibilities of healthcare organizations to individual consumers and the community
- Demonstrate principles of collaborative leadership and team building strategies

### Degree Requirements

To receive a Bachelor of Science degree in Healthcare Administration, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

### Preparation for the Major

(13 courses; 58.5 quarter units)

COH 100*	Personal Health
COH 150	Healthcare Terminology
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
PSY 100*	Introduction to Psychology

or

SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
BST 322*	Intro to Biomedical Statistics
COH 310	Culture and Health
COH 315	Introduction to Epidemiology <i>Prerequisite: BST 322</i>
COH 320	Chronic & Communicable Disease
COH 321	Health Behavior
ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

### Requirements for the Major

(15 courses; 67.5 quarter units)

HCA 400	Foundations of HC Leadership <i>Recommended Preparation: Completion of all Coursework in Preparation for the Major</i>
HSC 300	Legal/Ethical Issues & Hlth Pr
HSC 310	Issues & Trends in Healthcare
HTM 310	Health Informatics
HCA 401	Intro to HA HR Management <i>Recommended: Prior completion of: all Coursework in Preparation for the Major</i>
HCA 402	Intro to HA QA Management <i>Recommended: Prior completion of: Completion of all Coursework in Preparation for the Major.</i>
HSC 430	Case and Outcomes Management
HCA 403	Intro to Health Economics <i>Recommended: Prior completion of: all Coursework in Preparation for the Major.</i>
HCA 405	Basic HA Budgeting & Finance <i>Recommended: Prior completion of: all Coursework in Preparation for the Major.</i>
HCA 407	Intro to HC Planning and Eval <i>Recommended Preparation: Completion of all courses in Preparation for the Major, Recommended: Prior completion of: HSC 410, HCA 402, HCA 403, HCM 405</i>
HCA 409	Intro to HC Marketing <i>Recommended Preparation: Completion of all courses in Preparation for the Major, Recommended: Prior completion of: HCA 407</i>
ODV 420	Intro to Organizational Behavi
HCA 425	Healthcare Politics & Policy <i>Recommended: Prior completion of: all Coursework in Preparation for the Major.</i>
HCA 450	Global Health Systems <i>Recommended: Prior completion of: all Coursework in Preparation for the Major.</i>
HCA 494A	Healthcare Internship <i>Prerequisite: HSC 300, HSC 310, HCA 400, HCA 401, HCA 402, HCA 403, HSC 410, HSC 430, HCA 405, HCA 407, HCA 409, HCA 425, HCA 450, ODV 420</i>

## NURSING PROGRAMS

### INFORMATION APPLICABLE TO ALL PRELICENSURE NURSING PROGRAMS

- Generic Entry
- LVN to BSN
- Accelerated Post Bachelor

Individuals expressing interest in studying nursing at National University will be provided with objective counseling regarding all of the options available to them through the Department of Nursing. Enrollment in the University does not automatically include admission to a nursing program.

### Admission Requirements

Students seeking to study nursing at National University must:

- Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog
- Have obtained a 2.75 cumulative GPA in the General Education and prerequisite courses (Courses must have been taken at a regionally accredited institution.)
- Have earned a grade of “C” or higher in all prerequisite courses.
- Have a clear criminal background check and drug screen
- Submit a separate application for admission into a specific nursing program (see below) \*Note: Meeting the minimum requirements, as listed above, does not guarantee admission into a nursing program.
- Complete all non-nursing courses prior to starting nursing courses
- Attend a Pre-Nursing Program Information Forum which will describe the process for applying to and acceptance into the Nursing Program. The specifics described are: number of Nursing courses, sequence of courses, requirements for progression in the program. Note: Prospective students must attend a Pre-Nursing Forum before submitting the application packet. These forums will be offered monthly (schedules are available by e-mailing the student’s assigned advisor or advisor@nu.edu).
- Attend the mandatory new nursing student orientation and sign the attendance roster to complete the admission process

### Admission Process

Admission into the pre-licensure nursing programs at National University is a two-step process: 1) Application to the University; and 2) Application to the respective nursing program.

Prospective students should follow the University application requirements listed in the general admission procedures section of this catalog.

In addition, prospective nursing students will complete a separate application for admission to a specific nursing program. These applications, with supporting documents, should be sent to the Department of Nursing, to the campus at which you plan to enroll; San Diego, Fresno, or Los Angeles. These addresses are found on the Nursing application, online, and on the back of the University Catalog. Students taking their preparation courses at National University are held to the same standard as those who transfer preparation courses in from other schools.

A prospective student should first meet with an admissions advisor. The advisors are located at each of the University campus offices. The prospective student will arrange to have transcripts from all other Colleges and Universities sent to National University. These courses will be evaluated for equivalency to National University Department of Nursing required prerequisite courses. All non-nursing courses required for the BSN degree must be completed with a passing grade prior to enrollment in the first nursing course.

A Calculation Worksheet will be used to evaluate each prospective student’s application packet by the Admissions Committee of the Department of Nursing. The prospective student will be ranked in comparison to the other applicants for that application cycle. The scoring system will be explained at the pre-nursing forum. Items considered in the scoring system may include but are not limited to:

- Grades and other indicators of mastery of the prerequisite course content
- Testing: Including at least the Test of Essential Academic Skills Score (TEAS) (explained below) and a proctored essay.

Please note: Students will be contacted by the Department of Nursing to schedule tests (such as the proctored essay and TEAS exam) once a complete Nursing application packet is on file, after the application deadline.

All prospective students must take the Test of Essential Academic Skills (TEAS) to be considered for admission to the Nursing Program, following completion of all Math and Science prerequisite courses. The procedure for taking the TEAS will be explained at the Pre-Nursing Forum. The TEAS may be taken a total of 3 times (see Re-Application Process below), with no less than 60 days between tests.

All prospective students must complete a proctored essay. One essay topic will be drawn from questions developed by the Nursing Faculty and typed on a computer. Prospective students have the option of re-writing the essay should they be denied admission to the Nursing Program (see Re-Application Process below).

Following the receipt of all application items, the prospective student's packet will be reviewed by the Admissions Committee for the Department of Nursing, and a decision made regarding acceptance. Tentative acceptance will be offered to students achieving the highest rank scores, until all class positions are filled for any one cohort. Final admission is confirmed upon the student signing the roster during the mandatory New Nursing Student Orientation Session. All prospective students must attend Orientation before they will be admitted to the nursing program. The prospective student will receive a letter confirming admission to the nursing program.

Students who are not accepted may re-apply for admission to the Nursing Program, up to a maximum of three applications. If the prospective student chooses to re-take the TEAS, she/he will need to follow the TEAS application process, and is responsible for any associated fees. If the prospective student chooses to re-do the essay question, she/he must contact the Nursing Department at the campus where the student applied for admission.

Students are not eligible for financial aid until the Nursing application, Evaluation Packet, and the formal degree evaluation is completed by the Office of the Registrar.

### Clinical Facility Requirements

National University wishes to inform prospective students of the general nature of qualifications and restrictions of the clinical facilities. Further, National University wishes to assist applicants in meeting all essential qualifications. Applicants should assess their own capability to meet requirements of nursing prior to application to the program.

Before participating in clinical practice, students must submit proof of a health clearance that complies with the health facility's requirements for immunizations and health screening tests. In addition, before engaging in clinical practice at health facilities, students will be required to obtain professional liability insurance in the amount of \$1,000,000 per occurrence/ \$3,000,000 aggregate. Continued liability coverage as well as current health clearance, clear background check and drug screen, and immunity coverage is required throughout the program. \*Note: failure to maintain health clearance and a clear background check during the nursing program may result in dismissal from the nursing program, and possibly refusal of the BRN to allow the student to take the RN licensure exam. Students must possess a social security number to disclose to the California Board of Registered Nursing (BRN) at the time of Application for Licensure by Examination.

The Department of Nursing requires that students who participate in fieldwork in healthcare facilities maintain current health insurance coverage and Cardio-Pulmonary Resuscitation (CPR) certificate from the American Heart Association (BLS-Basic Life Support for Healthcare Providers plus AED certification). The student is responsible to determine if his/her personal health insurance coverage includes provisions for emergency room visits in the event of a needle stick or other high risk exposure in the clinical setting, as well as the costs of anti-HIV drugs if the physician determines the medications are warranted. Please note: if a student is out of the program for 5 months or more, she/he must re-do the drug screen and background check. Students are responsible to meet all requirements established by clinical facilities. If a student's background check changes such that he/she has a flag on the report at any time during the program, the student will

be dismissed from the nursing program if a clinical placement for his/her clinical course(s) cannot be obtained.

Students must provide their own transportation to class and all clinical experiences. \*Note: Proof of auto insurance, a current car registration, and a valid driver's license is required for access to clinical facilities located on military installations.

### Mental and Physical Qualifications for Professional Nursing

Please be advised that there are minimum mental and physical qualifications to professional nursing practice. Typically, each nursing employer sets minimal physical and mental standards for employment as a Registered Nurse. These employers are also in control of providing National University nursing students with the clinical placements necessary to complete a nursing program. Their restrictions may affect some students' decision about whether to pursue a nursing career. At the present time, all clinical placements forbid visible tattoos and piercings (other than a single small earring in one or both ears). Any tattoos or piercings must be able to be concealed with clothing for a student to be able to pursue a nursing degree at National University. Synthetic fingernails and nail polish are prohibited.

The following are MINIMUM mental and physical qualifications for admission of applicants to a professional nursing program:

- Frequently work in a standing position and do frequent walking.
- Lift and transfer patients up to 6 inches from a stooped position, then push or pull the weight up to 3 feet.
- Lift and transfer patients from a stooped to an upright position to accomplish bed-to-chair and chair-to-bed transfers.
- Physically apply up to 10 pounds of pressure to bleeding sites or in performing CPR.
- Respond and react immediately to auditory instructions/requests/monitor equipment and perform auditory auscultation without auditory impediments.
- Physically perform a twelve hour clinical laboratory experience.
- Perform close and distance visual activities (may use glasses) involving objects, persons, and paperwork, as well as discriminate depth and color perception.
- Discriminate between sharp/dull and hot/cold when using hands.
- Perform mathematical calculations for medication preparation and administration.
- Communicate effectively, both orally and in writing, using appropriate English grammar, vocabulary and wording.
- Make appropriate and timely decisions under stressful situations.

All students of the Department of Nursing are required to meet these qualifications and to abide by the rules and policies of clinical placement facilities. Additionally, students must successfully complete other course requirements in the Nursing program. Individuals applying for admission to the Department of Nursing should consider their eligibility in light of these qualifications and restrictions, and assess their ability to meet the physical and mental qualifications required in nursing. In carrying out the nondiscrimination policy of the Department of Nursing with regard to students and applicants with disabilities, the Department will endeavor to make reasonable modifications and otherwise reasonably accommodate students and applicants with disabilities. Students with disabilities should consider their ability to meet the above qualifications with reasonable accommodation. Any requests for accommodation will be considered through the University's Office of Special Services as described in the University Catalog.

For those female students who become pregnant during the Program, the above physical and mental qualifications should be kept in mind both during the pregnancy and during the postnatal recovery period. The student may be asked to provide a physician's clearance for return to the Program. This is especially important for women who deliver via cesarean section where the typical recovery period is 6-weeks.

### Program Advisement

All accepted students will be assigned a Nursing Faculty Counselor prior to the mandatory new student orientation. Students are encouraged to periodically communicate with both the Nursing Faculty Counselor and the admissions advisor throughout the program.

## Progression Requirements

All transfer courses accepted from another college or university must be equivalent in content and credit. Students with previous preparation in nursing are admitted to the program as space is available, providing requirements are met for admission to the University and the Department of Nursing. Prior nursing courses will be evaluated for equivalence and comparable content to nursing courses at National University. Transfer credit is not assured for prior nursing courses taken at another institution. All students with healthcare coursework from a foreign institution must have a foreign transcript evaluation completed by an approved agency. Healthcare coursework includes, but is not limited to, courses taken in pursuit of a nursing, physician, dental, or other medical profession licensure. Please contact [foreignevaluations@nu.edu](mailto:foreignevaluations@nu.edu) for additional information.

Students who have not had continual enrollment in National University's nursing program (defined as not taking nursing coursework for more than one calendar year) or who are transferring from another nursing program must demonstrate level appropriate proficiency skills prior to readmission to the program, and may be required to pass proficiency examinations for prior courses to demonstrate current competency. Likewise, these students will need to retake the medication calculation examinations successfully. The pre-licensure nursing programs at National University are cohort programs. Students who are unsuccessful in their first attempt at any of the nursing courses or who take a break from the course sequencing for any reason will be placed in subsequent cohorts on a space available basis; that is if and when openings in the class are available. If a student leaves his/her original cohort for any reason, there is no guarantee of space in another cohort and the student might not be able to finish his/her nursing program.

Students who are absent for a period of 12 months or more are dis-enrolled from the nursing program and must re-apply and will be held to the nursing requirements of the catalog requirements in force when they are readmitted. For students who take a break from the Program, a schedule change form must be submitted which will then be evaluated by the Nursing Department. Students should contact the Nursing Department for assistance with this process.

Students must be aware that grading, scheduling, clinical and other department of nursing policies may change at any time during the program. Students will receive notice, if possible, at least 30 days in advance of policy changes. However, if hospitals and other clinical facilities change clinical policies, new policies may have to be implemented with no notice to satisfy the requirements for clinical placements. Due to requirements of clinical agencies in which we place students for clinical courses, class and clinical schedules may be changed at any time prior to the start of a course. Unfortunately, the Department of Nursing does not control access to clinical agencies, and if the agency requires a last minute change, students must be prepared to make that change in order to continue in the program. For this reason, and due to the intensity of study requirements in nursing, students are strongly urged to avoid working during the nursing program.

Any student who wishes to challenge a nursing course (with an NSG prefix) or earn academic credit by examination must successfully complete the culminating examination(s) appropriate to the course. University policies, found in this catalog, should be followed to apply for Challenge or Credit by Examination opportunities. In the nursing theory or non-clinical courses, the terminal measures are often a final exam and/or term paper. In nursing theory courses, the challenge exam is typically a nationally standardized comprehensive test for which the passing standards are provided by the vendor of the test, or a course final exam, which must receive a passing grade of 80 percent or higher. In the nursing clinical laboratory classes students will demonstrate competent clinical care by way of return demonstration for all skills listed in the course syllabus being challenged. In the clinical courses where critical or life-threatening maneuvers are required, the student must perform the return demonstration with 100 percent skill and accuracy. Regardless of how many courses students take as challenge/credit by exam, they must still meet National University residency requirements.

Students requesting to take one or more NSG courses in a non-degree status are required to submit a letter of intent to the Nursing Department Director in San Diego along with any BRN-issued documents related to course requirements. Students will complete a two-part interview process and may be required to demonstrate clinical competency in a nursing laboratory. Successful candidates will be enrolled in classes on a space available basis.

## The Student Agreement

To ensure that graduates of National University's nursing programs are able to meet the legal requirements of the California Board of Registered Nursing (the Board), all newly admitted nursing students must enter into a student agreement. A copy of the student agreement is distributed at the mandatory student orientation. The student agreement gives National University the right to suspend or terminate the student's participation in the nursing program upon showing that the student has:

- Committed acts or engaged in conduct that could constitute grounds for denial of an RN license
- Failed to demonstrate the requisite skills and qualifications to satisfy the requirements for an RN license
- Become impossible to place in a clinical agency due to a flag on the background check, or conduct that results in the agency refusing to admit the student for a clinical lab course.
- Demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the student for an RN license.

The student agreement also authorizes National University to release to the Board of Registered Nursing all pertinent information pertaining to the qualification or fitness for an RN license.

## Time Management

The professional nursing program, with its intense clinical practice component, is very demanding in terms of time and energy allocation. Students are advised not to undertake a work schedule that could jeopardize successful completion of the program. Specifically, students who work more than 8 hours per week while in the nursing program are at jeopardy of being dismissed from the program due to failing nursing courses.

## Student Assistance, Notice of Need to Improve, and Dismissal from School of Nursing Programs

National University is committed to maintaining quality standards throughout its nursing programs and to graduating competent professional nurses. As required by the Board, National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry into or advancement in the nursing profession. The Board is charged by the state with evaluating the moral character and fitness of all persons who wish to work as a registered nurse in California healthcare facilities. Every person who is an applicant for, or who now holds any nursing license is answerable to the Board for his or her fitness-related conduct.

## Learning Contracts

Learning contracts will be used by faculty to notify students of low performance in either the classroom or clinical lab. If the student fails to meet the standard set forth in the learning contract, the following may result: 1) Immediate removal from a clinical laboratory or facility site, 2) Immediate removal from a theory course, and/or 3) Recommendation of dismissal from the program of study if the situation warrants.

Students will receive a copy of the contract and an additional copy will be maintained in the student's file in the Department of Nursing.

## Procedures Governing Problems with Progress in the Program

When a student is having an academic performance problem with the nursing program or a student is notified that she/he is not meeting the standards in either the classroom, nursing skills laboratory, or clinical facility, the student should meet first with the course lead or (if the deficit is in clinical practice) with the course lead and the clinical nursing faculty. The student should seek clarification of the deficit and work with the faculty to construct a plan for improvement which may or may not include the creation of a Student/Faculty Learning Contract.

Following the receipt of an unsatisfactory grade of C- or below (graded courses) or a U (a non-graded course) for any Nursing course, the student will receive a letter via mail notifying her/him of this unsatisfactory grade with a reminder that one more unsatisfactory grade of C-/U or below in any Nursing course will result in dismissal from the Program. The only appeal to dismissal for unsatisfactory grades as defined is if one of the unsatisfactory grades meets the grounds for a grade appeal. In that case students should follow the grade appeal process as noted in the Policies and Procedures section of this catalog.

## Application for Licensure

Students seeking an RN license must apply to the Board of Registered Nursing for such a license. It is the student's responsibility to keep current on the laws pertaining to the practice of registered nursing, as these laws are subject to change. Students will be assisted with the submission of the Application for Licensure by Examination at the appropriate time and before their graduation date. All requests for transcript forms must be signed after the completion/graduation date. All first time applicants are required to submit fingerprints with the application.

The Board requires applicants to take an examination administered by computer. The number of questions may vary from a minimum of 75 to a maximum of 265. The standard testing time for such examinations is a maximum of six hours.

## BACHELOR OF SCIENCE IN NURSING (BSN) (CALIFORNIA)

Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu

The Bachelor of Science in Nursing (BSN) program prepares degree candidates to develop critical thinking, communication and therapeutic nursing skills within the framework of transcultural nursing. Graduates are able to manage the nursing care of culturally diverse clients in a variety of settings.

The BSN program is accredited by the Commission on Collegiate Nursing Education (CCNE) through June 2021. The community health nursing course sequencing and content (NSG 412, NSG 411, and NSG 410) meet requirements for certification as a public health nurse in California.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Formulate accurate nursing diagnoses based on multiple sources of collected data.
- Plan, implement, and evaluate strategies with patient-related identified nursing diagnoses.
- Work with families across the lifespan to identify learning needs and implement teaching strategies to achieve mutually defined healthcare goals.
- Manage multiple patients in a variety of settings by prioritizing and appropriately using/incorporating available resources.
- Effectively communicate with both patients/families and other members of the healthcare team.
- Assume professional, ethical, and legal behavior upholding the standards of entry into the profession.
- Practice professional nursing using theory and knowledge as a basis for practice.
- Demonstrate competency by meeting standards of care in providing nursing care to a diverse set of clients in a multicultural community.
- Demonstrate competency and leadership in organizing care for a caseload of clients.
- Analyze and synthesize current findings from nursing research and research in related fields.
- Evaluate current findings from relevant research for utilization in practice.
- Develop a critical stance on professional issues related to nursing practice, education, and knowledge development by analyzing the historical and contemporary environments in nursing.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.

## BACHELOR OF SCIENCE IN NURSING GENERIC ENTRY (B.S.N.) (CALIFORNIA)

Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu

## Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

## Required General Education Preparation

(18 courses; 69 quarter units)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, B, C, D, E, and F

## AREA A: ENGLISH COMMUNICATION

(10.5 quarter units)

### CATEGORY 1 - Writing

(6 quarter units)

ENG 100 Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101 Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

### CATEGORY 2 - Oral Communication

(4.5 quarter units)

COM 103 Public Speaking

## AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

BST 322 Intro to Biomedical Statistics

## AREA C: INFORMATION LITERACY

(4.5 quarter units)

ILR 260 Information Literacy  
*Prerequisite: ENG 100, and ENG 101*

## AREA D: ARTS, HUMANITIES, AND LANGUAGES

(18 quarter units)

SPN 340A Spanish for the Work Place

SPN 341 Cross-Cultural Communication

For the remaining 9 units, see the General Education section of the catalog for applicable courses

## AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

PSY 100 Introduction to Psychology

SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*

+ Diversity Enriched Offering

## AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

BIO 201 Human Anatomy & Physiol I  
*Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.*

BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)  
*Prerequisite: BIO 201*

BIO 202 Human Anatomy & Physiol II  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*

BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)  
*Prerequisite: BIO 202*

BIO 203 Introductory Microbiology  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*

BIO 203A Introductory Microbiology Lab (1.5 quarter units)  
*Prerequisite: BIO 203*



## AREA A-G: GENERAL EDUCATION

(4.5 quarter units)

SOC 500 Cultural Pluralism in the USA  
*Prerequisite: ENG 100, and ENG 101*

or

HUB 500 Cross-Cultural Dynamics  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

### Preparation for the Major

(9 courses; 36 quarter units)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, Area B, Area C, Area E, and Area F.

NSG 403 Nursing Theories and Models  
*Recommended Preparation: Nursing Student Group*

NSG 211T Health Assessment (3 quarter units)  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: Admission to nursing program and completion of  
required general education preparation with a minimum GPA 2.75*

NSG 211A Health Assessment Clinical (1.5 quarter units)  
*Recommended Preparation: Nursing Student Group*

NSG 304 Pharmacology in Nursing  
*Recommended Preparation: Nursing Student Group*

NSG 422 Nursing Research  
*Prerequisite: NSG 322*

NSG 200 Foundations of Nursing  
*Prerequisite: C or better in, NSG 211T and S in NSG 211A,  
Corequisite: NSG 200A*

NSG 200A Foundations Clinical Lab  
*Prerequisite: C or better in NSG211T and S in NSG 211A.*

NSG 205 Medical-Surgical Nursing I  
*Prerequisite: NSG 200, and NSG 200A, or NSG 204,  
and NSG 204A*

NSG 205A Medical-Surgical I Clinical  
*Prerequisite: NSG 200, and NSG 200A, or NSG 204,  
and NSG 204A*

### Nursing Core Courses

(14 courses; 60 quarter units)

NSG 320\*\* Medical-Surgical Nursing II  
*Prerequisite: C" or better in NSG 315 and S in NSG 315A,  
Recommended Preparation: Nursing Student Group*

NSG 320A\*\* Medical-Surgical II Clinical  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: C" or better in NSG 315 and S in NSG 315A*

NSG 314\*\* Child-bearing Family Nursing  
*Prerequisite: C or better in NSG 205 and S in NSG 205A,  
Recommended Preparation: Nursing Student Group*

NSG 314A\*\* Child-bearing Family Clinical  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: C or better in NSG 205 and S in NSG 205A*

NSG 315\*\* Pediatric Nursing  
*Prerequisite: NSG 314, and NSG 314A*

NSG 315A\*\* Pediatric Nursing Clinical  
*Prerequisite: NSG 314, and NSG 314A*

NSG 325\*\* Psychosocial Nursing  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: C or better in NSG 320 and S in NSG 320A*

NSG 325A\*\* Psychosocial Nursing Clinical  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: C or better in NSG 320 and S in NSG 320A or  
see specific degree*

NSG 412\*\*\* Community Healthcare Delivery

NSG 411\*\*\* Community Health Frameworks  
*Prerequisite: NSG 412*

NSG 410\*\*\* Community: Population Focus  
*Prerequisite: NSG 411*

NSG 340\*\* Nursing Leadership/Management  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: C or better in NSG 325 and S in NSG 325A*

NSG 340A\*\* Leadership/Management Clinical (1.5 quarter units)  
*Recommended Preparation: Nursing Student Group,  
Prerequisite: C or better in NSG 325 and S in NSG 325A*

NSG 440 Issues in Professional Nursing  
*Recommended Preparation: Prerequisites: completion of all other  
required nursing courses*

\*\* Content required for licensure by CA Board of Registered Nurses

\*\*\* This course requires a clinical practicum of 32 hours

## BACHELOR OF SCIENCE IN NURSING (B.S.N.) ACCELERATED POST-BACHELOR DEGREE (CALIFORNIA)

*Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu*

This program is for individuals with prior earned bachelor's degree (i.e., B.A., B.S.) who wish to be prepared for licensure as a registered nurse while simultaneously earning a Bachelor of Science in Nursing degree.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Formulate accurate nursing diagnoses based on multiple sources of collected data.
- Plan, implement, and evaluate strategies with patient-related identified nursing diagnoses.
- Work with families across the lifespan to identify learning needs and implement teaching strategies to achieve mutually defined healthcare goals.
- Manage multiple patients in a variety of settings by prioritizing and appropriately using/incorporating available resources.
- Effectively communicate with both patients/families and other members of the healthcare team.
- Assume professional, ethical, and legal behavior upholding the standards of entry into the profession.
- Practice professional nursing using theory and knowledge as a basis for practice.
- Demonstrate competency by meeting standards of care in providing nursing care to a diverse set of clients in a multicultural community.
- Demonstrate competency and leadership in organizing care for a caseload of clients.
- Analyze and synthesize current findings from nursing research and research in related fields.
- Evaluate current findings from relevant research for utilization in practice.
- Develop a critical stance on professional issues related to nursing practice, education, and knowledge development by analyzing the historical and contemporary environments in nursing.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.

### Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Preparation for the Major

(19 courses; 72 quarter units)

- COM 103\* Public Speaking
- BST 322\* Intro to Biomedical Statistics
- PSY 100\* Introduction to Psychology
- SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*
- BIO 201\* Human Anatomy & Physiol I  
*Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.*
- BIO 201A\* Human Anatomy & Physiol Lab I (1.5 quarter units)  
*Prerequisite: BIO 201*
- BIO 202\* Human Anatomy & Physiol II  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*
- BIO 202A\* Human Anatomy & Physiol Lab II (1.5 quarter units)  
*Prerequisite: BIO 202*
- BIO 203\* Introductory Microbiology  
*Recommended: Prior completion of: BIO 201, and BIO 201A BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*
- BIO 203A\* Introductory Microbiology Lab (1.5 quarter units)  
*Prerequisite: BIO 203*
- NSG 403 Nursing Theories and Models  
*Recommended Preparation: Nursing Student Group*
- NSG 211T\*\* Health Assessment (3 quarter units)  
*Recommended Preparation: Nursing Student Group, Prerequisite: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75*
- NSG 211A\*\* Health Assessment Clinical (1.5 quarter units)  
*Recommended Preparation: Nursing Student Group*
- NSG 304 Pharmacology in Nursing  
*Recommended Preparation: Nursing Student Group*
- NSG 422 Nursing Research  
*Prerequisite: NSG 322*
- NSG 200\*\* Foundations of Nursing  
*Prerequisite: C or better in, NSG 211T and S in, NSG 211A, Corequisite: NSG 200A*
- NSG 200A\*\* Foundations Clinical Lab  
*Prerequisite: C or better in NSG211T and S in NSG 211A. Corequisite: NSG 200*
- NSG 205\*\* Medical-Surgical Nursing I  
*Prerequisite: NSG 200, and NSG 200A, or NSG 204, and NSG 204A*
- NSG 205A\*\* Medical-Surgical I Clinical  
*Prerequisite: NSG 200, and NSG 200A, or NSG 204, and NSG 204A*
- \*\* Content required for licensure by CA Board of Registered Nursing  
\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

## Nursing Core Courses

(14 courses; 60 quarter units)

- NSG 320\*\* Medical-Surgical Nursing II  
*Prerequisite: C or better in NSG 315 and S in NSG 315A, Recommended Preparation: Nursing Student Group*
- NSG 320A\*\* Medical-Surgical II Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 315 and S in NSG 315A*

- NSG 314\*\* Child-bearing Family Nursing  
*Prerequisite: C or better in NSG 205 and S in NSG 205A, Recommended Preparation: Nursing Student Group*
- NSG 314A\*\* Child-bearing Family Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 205 and S in NSG 205A*
- NSG 315\*\* Pediatric Nursing  
*Prerequisite: NSG 314, and NSG 314A*
- NSG 315A\*\* Pediatric Nursing Clinical  
*Prerequisite: NSG 314, and NSG 314A*
- NSG 325\*\* Psychosocial Nursing  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 320 and S in NSG 320A*
- NSG 325A\*\* Psychosocial Nursing Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 320 and S in NSG 320A or see specific degree*
- NSG 412\*\*\* Community Healthcare Delivery
- NSG 411\*\*\* Community Health Frameworks  
*Prerequisite: NSG 412*
- NSG 410\*\*\* Community: Population Focus  
*Prerequisite: NSG 411*
- NSG 340\*\* Nursing Leadership/Management  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 325 and S in NSG 325A*
- NSG 340A\*\* Leadership/Management Clinical (1.5 quarter units)  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 325 and S in NSG 325A*
- NSG 440 Issues in Professional Nursing  
*Recommended Preparation: Prerequisites: completion of all other required nursing courses*

\*\* Content required for licensure by CA Board of Registered Nursing

\*\*\* This course requires a clinical practicum of 32 hours

## LICENSED VOCATIONAL NURSE TO BACHELOR OF SCIENCE IN NURSING (L.V.N. - TO-B.S.N.) (CALIFORNIA)

Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu

### Departmental Admission Requirements

To be eligible for admission to the LVN-BSN program, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Hold a current, active license to practice as a licensed vocational nurse in the state of California
- Submit the appropriate Nursing program application
- Attend a Pre-Nursing Program Information Forum
- Complete all prerequisites courses
- Take the Test of Essential Academic Skills
- Complete a proctored written essay
- Submit the appropriate nursing program application

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Formulate accurate nursing diagnoses based on multiple sources of collected data.
- Plan, implement, and evaluate strategies with patient-related identified nursing diagnoses.
- Work with families across the lifespan to identify learning needs and implement teaching strategies to achieve mutually defined healthcare goals.
- Manage multiple patients in a variety of settings by prioritizing and appro-

priately using/incorporating available resources.

- Effectively communicate with both patients/families and other members of the healthcare team.
- Assume professional, ethical, and legal behavior upholding the standards of entry into the profession.
- Practice professional nursing using theory and knowledge as a basis for practice.
- Demonstrate competency by meeting standards of care in providing nursing care to a diverse set of clients in a multicultural community.
- Demonstrate competency and leadership in organizing care for a caseload of clients.
- Analyze and synthesize current findings from nursing research and research in related fields.
- Evaluate current findings from relevant research for utilization in practice.
- Develop a critical stance on professional issues related to nursing practice, education, and knowledge development by analyzing the historical and contemporary environments in nursing.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.

### Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. Students exiting after completing the courses required for licensure by the California Board of Registered Nursing (as designated below) without completing at least 180 quarter units (at National University or through credit transfer) will not be granted the BSN degree.

### Required General Education Preparation

(18 courses; 69 quarter units)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, B, C, D, E, and F).

#### AREA A: ENGLISH COMMUNICATION

(10.5 quarter units)

##### CATEGORY 1 - Writing

(6 quarter units)

- ENG 100 Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*
- ENG 101 Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

##### CATEGORY 2 - Oral Communication

(4.5 quarter units)

- COM 103 Public Speaking

#### AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

- NSG 322 Intro to Biomedical Statistics

#### AREA C: INFORMATION LITERACY

(4.5 quarter units)

- ILR 260 Information Literacy  
*Prerequisite: ENG 100, and ENG 101*

#### AREA D: ARTS, HUMANITIES, AND LANGUAGES

(18 quarter units)

- SPN 340A Spanish for the Work Place

- SPN 341 Cross-Cultural Communication

For the remaining 9 units, see the General Education section of the catalog for applicable courses

#### AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

- PSY 100 Introduction to Psychology
- SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*

+ Diversity Enriched Offering

#### AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

- BIO 201 Human Anatomy & Physiol I  
*Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.*
- BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)  
*Prerequisite: BIO 201*
- BIO 202 Human Anatomy & Physiol II  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*
- BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)  
*Prerequisite: BIO 202*
- BIO 203 Introductory Microbiology  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*
- BIO 203A Introductory Microbiology Lab (1.5 quarter units)  
*Prerequisite: BIO 203*

#### AREA A-G: GENERAL EDUCATION

(4.5 quarter units)

- SOC 500 Cultural Pluralism in the USA  
*Prerequisite: ENG 100, and ENG 101*
- or
- HUB 500 Cross-Cultural Dynamics  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

#### Nursing Core Courses

(16 courses; 64.5 quarter units)

- NSG 310\*\* Professional Nursing Values  
*Recommended Preparation: Nursing Student Group*
- NSG 403 Nursing Theories and Models  
*Recommended Preparation: Nursing Student Group*
- NSG 211T\*\* Health Assessment (3 quarter units)  
*Recommended Preparation: Nursing Student Group, Prerequisite: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75*
- NSG 211A\*\* Health Assessment Clinical (1.5 quarter units)  
*Recommended Preparation: Nursing Student Group*
- NSG 404 Pharmacology for Nurses  
*Recommended Preparation: Nursing Student Group*
- NSG 422 Nursing Research  
*Prerequisite: NSG 322*
- NSG 320\*\* Medical-Surgical Nursing II  
*Prerequisite: C" or better in NSG 315 and S in NSG 315A, Recommended Preparation: Nursing Student Group*
- NSG 320A\*\* Medical-Surgical II Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 315 and S in NSG 315A*

- NSG 325\*\* Psychosocial Nursing  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 320 and S in NSG 320A*
- NSG 325A\*\* Psychosocial Nursing Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 320 and S in NSG 320A or see specific degree*
- NSG 412\*\*\* Community Healthcare Delivery
- NSG 411\*\*\* Community Health Frameworks  
*Prerequisite: NSG 412*
- NSG 410\*\*\* Community: Population Focus  
*Prerequisite: NSG 411*
- NSG 340\*\* Nursing Leadership/Management  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 325 and S in NSG 325A*
- NSG 340A\*\* Leadership/Management Clinical (1.5 quarter units)  
*Recommended Preparation: Nursing Student Group, Prerequisite: C or better in NSG 325 and S in NSG 325A*
- NSG 440 Issues in Professional Nursing  
*Recommended Preparation: Prerequisites: completion of all other required nursing courses*

\*\* Content required for licensure by CA Board of Registered Nursing

\*\*\* This course requires a clinical practicum of 32 hours

## ■ BACHELOR OF SCIENCE IN NURSING (B.S.N.) RN COMPLETION (CALIFORNIA)

*Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu*

### Information applicable to RN to BSN Completion Program (Online-Hybrid)

Individuals expressing interest in studying nursing at National University will be provided with objective counseling regarding all of the options available to them through the Department of Nursing. Enrollment in the University does not automatically include admission to a nursing program.

### Equivalency Requirements

Licensed RNs who have not earned the Associate of Science in Nursing degree can meet equivalency requirements by completing the general education requirements, the preparation for the major and Anatomy and Physiology (12 quarter units). Students can use Anatomy and Physiology to meet the Physical and Biological Sciences general education requirements, or they can use prior coursework from other regionally accredited institutions. The basic nursing education program must have included coursework in those areas required by the California Board of Registered Nursing.

### Admission Requirements

Students seeking to study nursing at National University must:

1. Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.
2. Have obtained a 2.0 cumulative GPA from all regionally accredited institutions attended.
3. Submit a separate application for admission into a specific nursing program
4. Provide proof of current, active, and unencumbered RN license in the state of residence.
5. Submit the appropriate nursing program application.
6. Provide evidence of current AHA Healthcare Provider BLS CPR Card throughout the program.
7. Provide evidence of current, active professional liability and malpractice insurance coverage throughout the program.
8. Provide one official transcript from each college or university attended.

\*Note: Meeting the minimum requirements, as listed above, does not guarantee admission into a nursing program. If at any time after the student is found to be in violation of any of these requirements, the student will be dismissed from the BSN program.

### Additional Prerequisite Requirement

Students should be proficient in operating a personal computer, including: demonstrated competency in standard computer operating systems and electronic filing systems, basic keyboarding skills, organizing and sorting electronic documents; demonstrated knowledge of standard computer applications to include Microsoft Word, Excel, and Powerpoint; familiarity with using internet browsers and standard email systems such as MS Outlook.

### Admission Process

Admission into the nursing programs at National University is a two-step process: 1) Application to the University; and 2) Application to the respective nursing program. Prospective students should follow the University application requirements listed in the general admission procedures section of this catalog. In addition, prospective nursing students will complete a separate application for admission to a specific nursing program. These applications, with supporting documents, should be sent to the Department of Nursing RN BSN Completion program and indicate instructional format preferred, on-line or hybrid. Please select which campus for hybrid instruction; San Diego, Fresno, Henderson, Los Angeles, Woodland Hills. These addresses are found on the Nursing application, online, and on the back of the University Catalog. Students taking their preparation courses at National University are held to the same standard as those who transfer preparation courses in from other schools. A prospective student should first meet with an admissions advisor. The advisors are located at each of the University campus offices. The prospective student will arrange to have transcripts from all other colleges and universities sent to National University. These courses will be evaluated for equivalency to National University Department of Nursing required prerequisite courses.

Following the receipt of all application items, the prospective student's packet will be reviewed by the Admissions Committee for the Department of Nursing, and a decision made regarding acceptance. Admission will be offered to students achieving complete applicant files, until all class positions are filled for any one cohort. The prospective student will receive a letter regarding this decision. Students who are not accepted may re-apply for admission to the Nursing Program a total of 3 times, if she/he is interested.

Students are not eligible for financial aid until the Nursing application, Evaluation Packet, and the formal degree evaluation is completed by the Office of the Registrar.

Before participating in practicum, students must submit proof of a health clearance that complies with the health facility's requirements for immunizations and health screening tests. In addition, before engaging in practicum practice at health facilities, students will be required to obtain professional liability insurance in the amount of \$1,000,000 per occurrence/\$3,000,000 aggregate. Continued liability coverage as well as current health clearance and immunity coverage is required throughout the program.

The Department of Nursing requires that students who participate in fieldwork in healthcare facilities maintain current health insurance coverage and Cardio-Pulmonary Resuscitation (CPR) certificate from the American Heart Association (BLS-Basic Life Support for Healthcare Providers plus AED certification). The student is responsible to determine if his/her insurance coverage includes provisions for emergency room visits in the event of a needle stick or other high risk exposure in the clinical setting, as well as the costs of anti-HIV drugs if the physician determines the medications are warranted.

Students will need to provide their own transportation to class and all practicum experiences.

In carrying out the nondiscrimination policy of the Department of Nursing with regard to students with disabilities, the Department will make reasonable modifications for students with disabilities. Any requests for accommodation will be considered through the University's Office of Special Services as described in the University Catalog.

### Program Advisement

All accepted students will be assigned a Nursing Faculty Counselor. Students are encouraged to periodically communicate with both the Nursing Faculty Counselor and the University Advisor throughout the program.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop caring, therapeutic nursing relationships with individuals, families and groups
- Provide safe, high quality, culturally competent, patient-centered nursing care for individuals across the life span in a variety of settings.
- Participate in the continuous improvement of nursing care quality and safety.
- Use nursing judgment to manage, prioritize, and delegate patient care in a variety of health care settings.
- Effectively communicate and collaborate with patients and the interdisciplinary team.
- Demonstrate professional identity by incorporating established standards of practice within the legal and ethical framework of nursing.
- Apply best, current evidence into nursing practice to achieve desired outcomes.

## Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated in the general catalog, 45 of which must be completed at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 quarter units of the University General Education requirements. In absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Remedial courses accepted for the ASN degree may not transfer. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

A maximum of 45 quarter units (30 semester units) of lower division credit may be allowed for clinical courses for a registered nurse who is a graduate of a three-year hospital nursing school. Up to 22.5 quarter units (15 semester units) of additional lower division credit may be granted for academically equivalent coursework. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

## Preparation for the Major

(6 courses; 27 quarter units)

ILR 260*	Information Literacy <i>Prerequisite: ENG 100, and ENG 101</i>
COH 317*	Public Health Nutrition
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>
PHL 337*	Ethics <i>Prerequisite: ENG 100, and ENG 101</i>
BST 322*	Intro to Biomedical Statistics
ENG 334A*	Technical Writing <i>Prerequisite: ENG 100, and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)</i>

\* May be used to meet a General Education requirement + Diversity Enriched Offering

## Nursing Core Courses

(10 courses; 40.5 quarter units)

GER 310	Healthy Aging
HTM 310	Health Informatics
NSG 440	Professional Issues in Nursing
NSG 414	Nursing Leadership (3 quarter units) <i>Corequisite: NSG 414A</i>
NSG 414A	Nursing Leadership Practicum (1.5 quarter units) <i>Corequisite: NSG 414</i>
NSG 413	Population Based Nursing (6 quarter units) <i>Corequisite: NSG 413A</i>

NSG 413A	Population Based Nursing Lab (3 quarter units) <i>Corequisite: NSG 413</i>
NSG 332	Evidence-Based Practice <i>Prerequisite: BST 322</i>
NSG 445	Quality Improvement/Proj Mgmt <i>Prerequisite: BST 322, NSG 332</i>
NSG 446	Quality Improvement Practicum <i>Prerequisite: BST 322, NSG 332, Corequisite: NSG 445</i>

## Upper-Division Electives

(3 courses; 13.5 quarter units)

In the absence of upper-division transfer units, 13.5 quarter units of upper-division coursework may be needed to meet the minimum upper-division requirement of 76.5 quarter units. In the absence of upper-division or lower-division transfer units, 9 quarter units of coursework may be needed to meet the overall unit requirements for the degree of 180 quarter units. Electives should be chosen in consultation with the faculty and/or admission advisor.

Students should choose from the following Upper Division Electives:

HSC 330	Health Education & Promotion
HSC 310	Issues & Trends in Healthcare
HSC 300	Legal/Ethical Issues & Hlth Pr
SPN 340A	Spanish for the Work Place
SPN 341	Cross-Cultural Communication

## ◆ MAJOR IN PUBLIC HEALTH

*Faculty Advisor: Brandon Eggleston; (858) 309-3428; beggleston@nu.edu*

*Faculty Advisor: Marie Boman-Davis; (858) 309-3465; mbomandavis@nu.edu*

The Bachelor of Science in Public Health features a broad-based foundation in the liberal arts and sciences and an ecological perspective of public health and the role that public health professionals play in preventing disease while maintaining or increasing quality of life. Graduates of the program will possess an understanding of the contributions of core public health disciplines to the nation's health. At the same time, graduates will also learn how to apply knowledge and skills relating to the interactions and interdependencies of health behavior, the physical and social environment, and public policy to affect health at local, state, national and international levels. The program is designed to prepare entry-level public health professionals to begin careers in a variety of health agencies: governmental health agencies, voluntary health agencies, community based/non-governmental agencies, medical care services, education agencies, and business and industry. Within these practice settings, entry-level public health practitioners address significant health challenges from individual, family, group, organization, neighborhood, community, and societal perspectives. Graduates will apply their competencies to assess needs, plan and implement prevention programs, assess program outcomes, communicate and advocate for public health issues, and participate in the development of public health as a profession. Graduates will also enhance their opportunities for professional growth and job placement through planned field practicum. Upon graduation, entry-level public health practitioners will be eligible to sit for the Certified Health Education Specialists exam (CHES) through the National Commission on Health Education Credentialing, Inc.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the core principles of public health and their relationship to the health status of groups, communities, and populations at the local, state, national, and international levels.
- Describe behavioral and non-behavioral variables contributing to morbidity and mortality.
- Describe the contributions of health disparities to morbidity and mortality among specific groups, communities, and societies.
- Assess the need for health promotion programs in response to the characteristics of diverse communities of interest using primary and secondary data.
- Employ a variety of strategies to plan, implement, monitor and evaluate health promotion programs in a variety of settings to meet stated goals, objectives and established standards.

- Choose appropriate strategies and tactics to influence behavioral, environmental, and public policy change to address the health needs in a given community.
- Evaluate the progress and outcomes of prevention programs in meeting stated goals and objectives and established standards
- Design a plan for lifelong learning incorporating high professional and ethical standards, leadership, and cultural competencies and their evolving role in society.

### Degree Requirements

To receive a Bachelor of Science degree in Public Health, students must complete at least 180 quarter units as articulated below including a minimum 70.5 quarter units of the University General Education requirements, 45 quarter units of which must be completed in residence at National University, 76.5 quarter units of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

### Preparation for the Major

(14 courses; 54 quarter units)

PSY 100*	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
BST 322*	Intro to Biomedical Statistics
BIO 201*	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.</i>
BIO 201A*	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202*	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 202A*	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203*	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>
BIO 203A*	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
COH 100*	Personal Health
COH 317*	Public Health Nutrition
COH 318*	Drug Use and Abuse
COH 319*	Human Sexuality
HTM 310	Health Informatics

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

### Requirements for the Major

(15 courses; 67.5 quarter units)

COH 300	The Ecology of Public Health <i>Prerequisite: COH 100, COH 310, and COH 320</i>
COH 310	Culture and Health
COH 315	Introduction to Epidemiology <i>Prerequisite: BST 322</i>
COH 320	Chronic & Communicable Disease
COH 321	Health Behavior
COH 380	HP Program Planning & Eval <i>Prerequisite: COH 300, COH 315, HTM 310</i>

COH 400	Environmental Health
COH 401	Health Promotion Concepts <i>Prerequisite: COH 300, COH 315, COH 400, and HTM 310</i>
COH 412	Injury Prevention
COH 416	PH & Physical Activity
COH 422	Global Health Promotion
COH 430	HP Strategies & Tactics <i>Prerequisite: COH 300, COH 315, COH 400, and HTM 310</i>
COH 435	PH Communications & Advocacy <i>Prerequisite: COH 300, COH 315, COH 400, and HTM 310</i>
COH 440	Preparedness & Disaster Mgmt <i>Prerequisite: COH 300</i>
COH 499	Public Health Field Practicum <i>Prerequisite: COH 100, COH 150, COH 300, COH 310, COH 315, COH 320, COH 321, COH 380, COH 400, COH 401, COH 412, COH 416, COH 317, COH 318, COH 319, COH 422, COH 430, COH 435, COH 440</i>

### ◆ MAJOR IN RADIATION THERAPY

*Faculty Advisor: Gary Parham; (714) 429-5117; gparham@nu.edu*

The Bachelor of Science in Radiation Therapy builds on a broad-based foundation in liberal arts and sciences designed to strengthen critical thinking and communication skills to work with a diverse population in multiple healthcare settings. Graduates of this program will be able to understand all aspects of radiation therapy including effective patient care and education, treatment planning and radiation physics as well as the biological effects of radiation in a rapidly advancing high touch, highly technical profession.

The Radiation Therapy Program combines classroom with clinical experiences to prepare graduates for an entry level position in the profession as an integral member of the healthcare team using radiation to treat cancer and some benign diseases. Graduates will use their competencies to assess the physical, emotional and educational needs of the patients they serve, determine the efficacy of a prescribed treatment and carry out the accurate delivery and documentation of treatment.

The Radiation Therapy Program is a full-time, lock-step program in which each cohort of students progress in unison, taking each of the courses in a sequenced manner. Courses in the program build on knowledge from courses previously completed with medical terminology as an integral component of all courses. Students will also take two courses in one month as scheduled. Once the program is completed, students will be eligible to apply to sit for the American Registry of Radiologic Technologists (ARRT) national examination and apply for certification from the California Department of Public Health, Radiologic Health Branch. The Radiation Therapy Program has received accreditation by the California Department of Public Health, Radiologic Health Branch and is an applicant program with the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606 (312) 704-5300.

The Radiation Therapy Program prepares the graduate to be able to fulfill the following outcomes as an entry-level professional.

### Mission Statement

The mission of the Radiation Therapy major is to prepare students to assume the professional role of a radiation therapist. Graduates of the major will be skilled in critical thinking to provide the highest quality of patient care, education and treatment.

### Goals

1. Students will be competent in the delivery of radiation therapy treatments.
2. Students will communicate effectively.
3. Students will utilize critical thinking and problem solving skills.
4. Students will demonstrate professional and ethical behavior.

### Admission Requirements

Students seeking to study radiation therapy at National University must:

- A. Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.

- B. Have obtained a 2.50 cumulative GPA from all regionally accredited institutions attended.
- C. Students must complete a minimum of 40 hours of observation in a radiation therapy department. A completed time sheet must be signed by the therapist at the observation site. Time sheets and a list of observations sites are available in the radiation therapy office.
- D. Submit a minimum of 3 letters of reference forms from radiations therapists in the department where the student observed, teachers, and/or an employer. Reference forms are available from the radiation therapy office.
- E. Submit a separate application for admissions to the Department of Health Science, Radiation Therapy program.
- F. Complete the written essay included with the application packet.
- G. Interview with the Radiation Therapy Admissions Committee.
- H. Have been formally evaluated by the University Office of the Registrar.

\*Note: According to California Department of Public Health requirements, a student must be at least 18 years of age to participate in Clinical Internship.

\*Note: Meeting the minimum requirements, as listed above, does not guarantee admissions into the radiation therapy program.

### Admission Process

Admission to the radiation therapy program is a three-step process: 1) Application to the University; 2) Application to the respective radiation therapy program; and 3) Participation in an interview with the Radiation Therapy Program Admission Committee. Prospective students should follow the University application requirements listed in the general admission procedures section of this catalog. In addition, prospective radiation therapy students will complete a separate application for admission. These applications, with supporting documentation, are accepted in January and should be sent to the Radiation Therapy Program Director. A minimum GPA of 2.50 is required for entry into the Radiation Therapy program.

A prospective student should first meet with an admissions advisor. The advisors are located at each of the University campus offices. The prospective student will arrange to have transcripts from all other Colleges and Universities sent to National University. These courses will be evaluated for equality to National University Department of Radiation Therapy required prerequisite courses. All prospective students will enroll in RIT 201 Introduction to Radiation Therapy. This course will review all aspects of the Radiation Therapy curriculum, program and profession to provide applicants with a knowledge base to form their decision to enter the program.

A Calculation Worksheet will be used to evaluate each prospective student's application packet by the Radiation Therapy Admissions Committee. The prospective student will be ranked in comparison to the other applicants during that application year.

The scoring will be based on:

- Quality of grades in the prerequisite courses.
- Number of attempts to achieve a passing grade in the prerequisite courses.
- Ranking of the recommendation letters.
- Number of hours of clinical observation.
- Knowledge of the profession.
- Written essay included with the application packet.
- Ranked interview.

Once all prospective students for a given year have been interviewed, the Radiation Therapy Admissions committee will rank applicants based on the interview and application materials. The highest ranked individuals will be admitted to the program until all class positions are filled. There is no waiting list. Students who are not accepted may re-apply for admissions process in the following year. They are encouraged to speak with the Program Director about strategies to strengthen their application. Before participating in clinical internship, students must submit proof of the Radiation Therapy Health Clearance, current health insurance and current Cardio-Pulmonary Resuscitation (CPR) certificate from the American Heart Association (BLS-Basic Life Support for Health Care Providers). Students are responsible for determining if their health insurance coverage includes provisions for emergency room visits in the event of a needle stick or other injury in the clinical setting. Students are responsible for meeting all of the above requirements.

### Background Checks

Radiation therapy departments used by the Radiation Therapy Option require criminal background and drug screening prior to internship. Students who do not pass the background check and/or drug test may be unable to attend the internship, therefore, may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student. Students will need to provide their own transportation to class and clinical internship. Proof of auto insurance and a valid driver's license is required. Students successfully completing the Radiation Therapy Program will be eligible to apply for state and national examinations. Application for the national exam will be provided in the last course of the Program. Students are responsible for submitting applications and fees to the State of California and the American Registry of Radiologic Technologists (ARRT).

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate with patients/families and members of the healthcare community.
- Demonstrate patient, radiation, and equipment safety at all times.
- Demonstrate clinical competence in the areas of patient care, treatment, and simulation.
- Formulate priorities in daily clinical practice.
- Apply concepts of teamwork.
- Evaluate the clinical significance of treatment parameters as prescribed and suspend treatment as appropriate.
- Develop plans based on patient assessment to address physical, emotional, and educational needs.
- Demonstrate the ability to think critically and apply knowledge to new situations.
- Analyze clinical data to ensure safety and quality improvement of radiation therapy operations.
- Evaluate treatment plans to ensure accurate and effective treatment delivery.
- Demonstrate values and attitudes congruent with the profession's standards and ethics.
- Analyze current health care research for application to radiation therapy practice.
- Apply strategies that promote professional development and lifelong learning.

### Degree Requirements

To receive a Bachelor of Science degree in Radiation Therapy, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper division level and a minimum 70.5 quarter units of the University General Education requirements. In the absence of transfer credit, additional general education electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and matriculation.

### Preparation for the Major

(17 courses; 65.25 quarter units)

- COM 103\* \*\*Public Speaking
- MTH 215\* \*\*College Algebra & Trigonometry  
*Prerequisite: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*
- BST 322\* \*\*Intro to Biomedical Statistics
- ILR 260\* \*\*Information Literacy  
*Prerequisite: ENG 100, and ENG 101*
- PSY 100\* Introduction to Psychology
- SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*
- BIO 161\* \*\*General Biology 1

BIO 201*	**Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.</i>	RTT 411	Clinical Radiation Physics II <i>Prerequisite: RTT 410 with a minimum grade of C</i>
BIO 201A*	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>	RTT 306	Patient Care II <i>Prerequisite: RTT 305 with a minimum grade of C</i>
BIO 202*	**Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>	RTT 415	Clinical Oncology I (2.25 quarter units) <i>Prerequisite: RTT 305 with a minimum grade of C, RTT 306 with a minimum grade of C, RTT 310 with a minimum grade of C, and RTT 480 with a minimum grade of C Corequisite: RTT 316</i>
BIO 202A*	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>	RTT 316	Clinical Concepts II (2.25 quarter units) <i>Prerequisite: RTT 315 with a minimum grade of C, and RTT 480 Corequisite: RTT 415</i>
BIO 203*	**Introductory Microbiology <i>Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses</i>	RTT 416	Clinical Oncology II (2.25 quarter units) <i>Prerequisite: RTT 415 with a minimum grade of C</i>
BIO 203A*	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>	RTT 317	Clinical Concepts III (2.25 quarter units) <i>Prerequisite: RTT 316 with a minimum grade of C, Corequisite: RTT 416</i>
PHS 181	**Physics for Non-Sci Majors I <i>Prerequisite: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, or MTH 216B</i>	RTT 481	Internship II <i>Prerequisite: RTT 480 with a minimum grade of C</i>
or		RTT 420	Radiation Biology (3 quarter units) <i>Prerequisite: RTT 410 with a minimum grade of C, RTT 411 with a minimum grade of C, RTT 415 with a minimum grade of C, RTT 416 with a minimum grade of C, and RTT 481 with a minimum grade of C Corequisite: RTT 460</i>
PHS 171*	General Physics 1 <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B</i>	RTT 460	Operational Issues (1.5 quarter units) <i>Prerequisite: RTT 316 with a minimum grade of C and RTT 416 with a minimum grade of C Corequisite: RTT 420</i>
PHS 182	**Physics for Non-Sci Majors II <i>Prerequisite: PHS 181</i>	RTT 455	Medical Dosimetry <i>Prerequisite: RTT 315 with a minimum grade of C, RTT 316 with a minimum grade of C, RTT 317 with a minimum grade of C, RTT 410 with a minimum grade of C, and RTT 411 with a minimum grade of C</i>
or		RTT 440	Research in Radiation Therapy (2.25 quarter units) <i>Prerequisite: BST 322 with a minimum grade of C, RTT 315 with a minimum grade of C, RTT 316 with a minimum grade of C, RTT 317 with a minimum grade of C, RTT 410 with a minimum grade of C, RTT 411 with a minimum grade of C, RTT 415 with a minimum grade of C, and RTT 416 with a minimum grade of C Corequisite: RTT 450</i>
PHS 172*	General Physics 2 <i>Prerequisite: PHS 171</i>	RTT 450	Quality Management (2.25 quarter units) <i>Prerequisite: RTT 410 with a minimum grade of C, and RTT 411 with a minimum grade of C, Corequisite: RTT 440</i>
RTT 201	Introduction to Radiation Ther (2.25 quarter units)	RTT 482	Internship III (6 quarter units) <i>Prerequisite: RTT 481 with a minimum grade of C</i>
SOC 350+	*Cultural Diversity <i>Prerequisite: ENG 100, and ENG 101</i>	RTT 490	Advanced Capstone <i>Prerequisite: Completion of major requirements.</i>
or			
SOC 331	*Sociology of Health & Illness <i>Prerequisite: ENG 100, ENG 101, and SOC 100</i>		
* May be used to meet a General Education requirement			
** Courses required for professional accreditation.			
+ Diversity Enriched Offering			
<b>Requirements for the Major</b> (21 courses; 73.5 quarter units)			
RTT 310	Sectional/Topographic Anatomy <i>Prerequisite: BIO 201 with a minimum grade of C and BIO 202 with a minimum grade of C</i>		
RTT 300	Medical Imaging <i>Prerequisite: RTT 200 with a minimum grade of C, Acceptance into the Radiation Therapy Program, or RTT 201</i>		
RTT 305	Patient Care I (3 quarter units) <i>Prerequisite: BIO 201 with a minimum grade of C, BIO 202 with a minimum grade of C, BIO 203 with a minimum grade of C, and RTT 300 with a minimum grade of C Corequisite: RTT 320</i>		
RTT 320	Pro Ethics and Legal Issues (1.5 quarter units) <i>Prerequisite: RTT 300, Corequisite: RTT 305</i>		
RTT 315	Clinical Concepts I <i>Prerequisite: RTT 305 with a minimum grade of C and RTT 306 with a minimum grade of C</i>		
RTT 480	Internship I <i>Prerequisite: RTT 300 with a minimum grade of C, RTT 305 with a minimum grade of C, RTT 306 with a minimum grade of C, RTT 310 with a minimum grade of C, and RTT 320 with a minimum grade of C</i>		
RTT 410	Clinical Radiation Physics I <i>Prerequisite: MTH 215 with a minimum grade of C, PHS 171 with a minimum grade of C, and RTT 300 with a minimum grade of C</i>		

**Recommended Elective Courses**

(4 courses; 18 quarter units)

GER 310	Healthy Aging
HSC 410	Informatics for Health Profs
HSC 310	Issues & Trends in Healthcare
HUB 401	Conflict Resolution <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>

**GRADUATE DEGREES****■ MASTER OF HEALTHCARE ADMINISTRATION (MHA) **

Faculty Advisor: Stephen Bowman; (858) 309-3484; sbowman@nu.edu

The Master of Healthcare Administration (MHA) is a graduate professional degree designed to enhance the practice of healthcare administration/management by preparing students for entry level and middle management roles in healthcare organizations. Healthcare management involves the organization, financing and delivery of services to prevent and treat illness and disease, including programs that serve the public and private sectors at all levels—local, state, and federal.



Faculty members have expertise in diverse fields such as management, economics, law, medicine, public health, planning, sociology, and statistics. They are united by a common commitment to solving problems and developing innovations related to the access, cost, and quality of healthcare.

The MHA program emphasizes the conceptual and analytical skills required to understand and manage today's healthcare organization and prepare for tomorrow's challenges. Special attention is given to the social contributions of the profession and its unique people dependent focus. Also featured are experiential opportunities in project management, teamwork and leadership. Ideal candidates for the MHA program are those students looking for career advancement from middle to upper middle management; those looking for career transition into healthcare administration from other professions; and those looking to advance from clinical/technical roles to management roles. Graduates will enhance their opportunities for professional growth and job placement through carefully planned internships and a capstone experience. The MHA program is an associate member institution of the Association of University Programs in Health Administration (AUPHA).

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Solve complex problems in a healthcare environment by employing analytical skills.
- Establish strategic priorities of a healthcare organization in line with the needs and values of the community it serves.
- Conduct financial analysis, explain financial and accounting information, and make long-term investment decisions for a healthcare organization.
- Apply healthcare management concepts for healthcare organizations.
- Utilize administrative and clinical information technology and decision-support tools in process and performance improvement.
- Incorporate the principles of quality management for improving outcomes in healthcare organizations.
- Synthesize best practices in healthcare leadership.
- Evaluate the ethical, legal, and regulatory requirements of the healthcare industry.

### Degree Requirements

(16 courses; 72 quarter units)

To receive an MHA degree, students must complete at least 72 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Core Requirements

(16 courses; 72 quarter units)

HCA 600	U.S. Healthcare System
HCA 610	Health Policy
COH 602	Biostatistics
HCA 620	Health Organization Management
HCA 626	Healthcare Information Systems
HCA 622	Quality Appraisal & Evaluation
COH 606	Epidemiology <i>Prerequisite: COH 602</i>
HCA 660	Health Economics
HCA 628	HA Human Resources Management
HCA 630	Healthcare Law & Ethics
HCA 663	Healthcare Accounting/Finance
HCA 624	Healthcare Planning & Marketin
COH 611	Public Health Research Methods <i>Prerequisite: COH 602</i>
HCA 670	Healthcare Leadership

HCA 691 Healthcare Internship  
*Prerequisite: HCA 600, COH 602, HCA 610, HCA 620, HCA 622, COH 606, HCA 624, HCA 626, HCA 628, HCA 630, HCA 660, HCA 663, COH 611, HCA 670, and permission by instructor*

HCA 692 Healthcare Capstone  
*Prerequisite: HCA 691 or permission by instructor.*

### Recommended Elective

(1 course; 4.5 quarter units)

HCA 650 Medical Practice Management

### ■ MASTER OF PUBLIC HEALTH

*Faculty Advisor: Gina Piane; (858) 309-3474; gpiane@nu.edu*

The Master of Public Health (MPH) is a graduate professional degree designed to prepare students for leadership positions in health promotion and disease prevention, community mental health or public healthcare administration. Public Health involves multidisciplinary and collaborative strategies for solving health related problems and promoting social justice including programs that serve the public sector at all levels—local, state, federal, and global. Faculty members have expertise and experience in public health applied reserach and in higher education.

The MPH program emphasizes the application of broad-based, state-of-the-art quantitative and qualitative skills needed for problem-solving. Special attention is given to enhancement of communication skills needed to work with diverse populations. Ideal candidates for the MPH program are those students looking for career advancement within the public health sector; and those looking for career transition into public health from other health professions. Graduates will enhance their opportunities for professional growth and job placement through carefully planned internships and a comprehensive capstone experience. The MPH program is accredited by the Council on Education in Public Health (CEPH).

In accordance with the competency guidelines established by the National Commission for Health Education Credentialing (NCHEC) and the Council on Education in Public Health (CEPH), the Master of Public Health program prepares graduates to master the following program learning outcomes.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze and interpret health data.
- Describe the distribution and determinants of disease, disabilities and death in human populations
- Evaluate the environmental factors that affect the health of a community.
- Analyze the planning, organization, administration and policies of health care organizations.
- Apply the concepts and methods of social justice and social and behavioral sciences relevant to the identification and solution of public health problems.

### Degree Requirements

(16 courses; 72 quarter units)

To receive an MPH degree, students must complete at least 72 quarter units of graduate work including the core MPH requirements and one area of specialization. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Core Requirements

(8 courses; 36 quarter units)

HCA 600	U.S. Healthcare System
COH 602	Biostatistics
COH 606	Epidemiology <i>Prerequisite: COH 602</i>
COH 604	Theories of Health Behavior

COH 608	Public Health & the Enviro
COH 611	Public Health Research Methods <i>Prerequisite: COH 602</i>
COH 691	Public Health Internship <i>Prerequisite: HCA 600, COH 602, COH 604, COH 606, COH 608, COH 611</i>
COH 692	Public Health Capstone <i>Prerequisite: COH 691</i>

### ▲ Specialization in Health Promotion

The specialization in Health Promotion will prepare MPH students for leadership positions in health promotion, health education and health enhancement. The program emphasizes the planning, implementation and evaluation of community-wide prevention programs. The pursuit of social justice and global health are overarching concepts throughout the MPH program.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess individual and community needs for health education.
- Plan health education strategies, interventions, and programs.
- Implement health education strategies, interventions, and programs.
- Conduct evaluation related to health education.
- Administer health education strategies and interventions.
- Serve as a health education resource person.
- Communicate and advocate for health and health education.
- Apply appropriate research principles and techniques in health education.

#### Specialization Requirements

(8 courses; 36 quarter units)

COH 601	Global Public Health
COH 603	Public Health Biology
COH 607	Public Health Program Develop
COH 609	PH Program Evaluation <i>Prerequisite: COH 607, or COH 619</i>
COH 605	Public Health Promotion <i>Prerequisite: COH 604</i>
COH 618	Health Promotion Strategies <i>Prerequisite: COH 605</i>
COH 613	Public Health Informatics <i>Prerequisite: COH 606</i>
COH 612	Health Policy and Advocacy

### ▲ Specialization in Healthcare Administration

The Specialization in Healthcare Administration will prepare MPH students for leadership positions in public and private healthcare. Healthcare management involves the organization, financing and delivery of services to prevent and treat illness and disease.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Conduct financial analysis, explain financial and accounting information, and make long-term investment decisions for a healthcare organization.
- Apply healthcare management methods to healthcare organizations.
- Use administrative and health information technology to develop process and performance improvement plans.
- Incorporate the principles of quality management for improving outcomes in healthcare organizations.
- Synthesize best practices in healthcare leadership.

### Specialization Requirements

(8 courses; 36 quarter units)

HCA 610	Health Policy
HCA 620	Health Organization Management
HCA 626	Healthcare Information Systems
HCA 622	Quality Appraisal & Evaluation
HCA 628	HA Human Resources Management
HCA 663	Healthcare Accounting/Finance
HCA 624	Healthcare Planning & Marketin
HCA 670	Healthcare Leadership

### ▲ Specialization in Mental Health

Students in the specialization in Mental Health will be prepared for leadership positions in planning, implementing and evaluating community-wide prevention programs to enhance mental health.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the social, political, and environmental context of mental health in relation to public health practice.
- Plan mental health interventions and programs.
- Conduct evaluations related to mental health.
- Relate fundamental principles of epidemiology to mental and substance abuse disorders.
- Apply appropriate research principles and techniques to mental health.
- Advocate for mental health in communities.

#### Specialization Requirements

(8 courses; 36 quarter units)

COH 601	Global Public Health
COH 621	PH Aspects of Drug Addiction
COH 616	Mental Health Promotion
COH 609	PH Program Evaluation <i>Prerequisite: COH 607, or COH 619</i>
COH 614	Psychosocial Epidemiology <i>Prerequisite: COH 606</i>
COH 617	PH Aspects of Violence <i>Prerequisite: COH 604</i>
COH 612	Health Policy and Advocacy
COH 619	PH Aspects of Human Sexuality <i>Prerequisite: COH 604</i>

### ■ MASTER OF SCIENCE IN CLINICAL AFFAIRS

*Faculty Advisor: Irvin Kluth; (858) 309-3478; ikluth@nu.edu*

The Master of Science in Clinical Affairs provides a comprehensive program of graduate study in the need, design, implementation and management of clinical trials from the biomedical industry perspective. In particular, it focuses on global regulations, standards and statutes which are necessary for designing, developing, obtaining approval, performing, and reporting on clinical trials. The program will be based on lectures, case studies, research and comprehensive texts and articles associated with the global biomedical industry, regulatory agencies, and governmental authorities who are engaged in clinical trial research monitoring, coordination and compliance. This program will prepare the student with a comprehensive academic and practical knowledge of the field; an understanding of the clinical life cycle, data management, and critical role that clinical trial research plays in the development and commercialization of biologic, device and drug products; and the skills needed to develop and implement appropriate protocols and documents.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ the global regulations, standards, and GCPs involved in designing, implementing and managing clinical trials for biologics, medical devices, and drugs.
- Apply knowledge of human rights obligations, the clinical life cycle, and adverse events to the design of a clinical trial.
- Select and utilize standard biomedical clinical affairs operating policies, procedures, forms, templates, reports, and electronic records.
- Design a methodology for a clinical trial with supportive data management and data analysis.
- Write compliance documents for clinical trials.
- Conduct a clinical trial regulatory audit/inspection.
- Design and evaluate clinical trials.

## Degree Requirements

(13 courses; 58.5 quarter units)

To receive a Master of Science in Clinical Affairs, students must successfully complete at least 58.5 quarter units as required and identified in the curriculum. A total of accredited 13.5 quarter units may be transferred and granted for graduate work successfully completed at another accredited institution provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application, transfer and evaluation, and graduation policies, procedures, and requirements.

## Core Requirements

(10 courses; 45 quarter units)

CAF 600	Clinical Research Survey <i>Recommended: Prior completion of: previous or concurrent work experience and/or employment within the biomedical industry specifically within the Clinical, Quality or Regulatory Affairs functions.</i>
CAF 605	Good Clinical Practice (GCP) <i>Recommended: Prior completion of: CAF 600</i>
CAF 615	CAF Data Mgmt & Statistics <i>Recommended: Prior completion of: CAF 600</i>
CAF 621	CAF Ethics & Pharmacovigilance <i>Recommended: Prior completion of: CAF 600</i>
CAF 635	Clinical Trial Design <i>Recommended: Prior completion of: CAF 600</i>
CAF 645	CAF Communications <i>Recommended: Prior completion of: CAF 600</i>
CAF 650	Clinical Operations Part 1 <i>Recommended: Prior completion of: CAF 600</i>
CAF 651	Clinical Operations Part 2 <i>Prerequisite: CAF 650</i>
CAF 660	Clinical Trial Project Mgmt <i>Recommended: Prior completion of: CAF 600</i>

Choose one of the following:

CAF 699A	Capstone Thesis Option <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660</i>
CAF 699B	Capstone Project Option <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660</i>
CAF 699C	Capstone Internship Option <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660</i>
CAF 699D	Capstone Comprehensive Exam <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660</i>

## Program Electives

(3 courses; 13.5 quarter units)

Students must choose three (3) courses, from the following list.

MRA 600	Intro to Regulatory Affairs
MRA 601	Clinical Documentation
MRA 602	Human Subjects in Clinical Tri
MRA 603	Medical Device and Pharmaceuti
MRA 604	Coordinating and Monitoring CI
MRA 605	Analytical Methods for Regulat
MRA 606	FDA Regulations & Submissions

## ■ MASTER OF SCIENCE IN CLINICAL REGULATORY AFFAIRS

*Faculty Advisor: Irvin Kluth; (858) 309-3478; ikluth@nu.edu*

The Master of Science in Clinical Regulatory Affairs provides a comprehensive program of graduate study in the field of clinical trials and the federal regulations associated with developing and performing clinical trials. The program will be based on didactic lectures, case studies, and comprehensive texts and articles associated with federal government regulations and clinical trial research monitoring and coordinating. This program will allow the student to have a comprehensive knowledge of the field, develop and implement appropriate protocols and documents, as well as understand data management and the clinical trial research industry.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Understand the federal regulations in the approval process of a new drug, medical device, or biologic
- Have a fundamental knowledge of human rights obligations, adverse events, clinical trial monitoring, and data collection
- Understand good clinical and manufacturing process
- Develop and implement standard operating procedures, clinical data collection forms, electronic records, clinical trial protocols, and federal regulatory forms
- Develop and implement a methodology for a clinical trial with supportive data management and data analysis
- Design and implement an investigational device exemption
- Design and implement an investigational new drug application
- File for pre-market approval, new drug approval, or biologic license approval
- Develop compliance documents and quality assurance and quality control documentation
- Prepare for an FDA meeting
- Understand evidence based data and data management
- Coordinate and monitor clinical trials
- Understand and comply with FDA audits
- Be proficient in statistical analysis of clinical results

## Background Checks

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

## Degree Requirements

(11 courses; 49.5 quarter units)

To receive a Master of Science in Clinical Regulatory Affairs, students must successfully complete at least 49.5 quarter units as required and identified in the curriculum. A total of nine (9) quarter units may be transferred and granted for graduate work successfully completed at another accredited institution provided the units were not used in earning another advanced degree. Students should refer to the sec-

tion on graduate admission requirements for specific information regarding application, transfer and evaluation, and graduation policies, procedures, and requirements.

### Program Requirements

(11 courses; 49.5 quarter units)

MRA 600	Intro to Regulatory Affairs
MRA 601	Clinical Documentation
MRA 602	Human Subjects in Clinical Tri
HCA 609A	Healthcare Law, Policy, Politi
HTM 605	Healthcare Info Technologies
HCA 605	Evidenced Based Healthcare
MRA 603	Medical Device and Pharmaceuti
MRA 604	Coordinating and Monitoring Cl
MRA 605	Analytical Methods for Regulat
MRA 606	FDA Regulations & Submissions
MRA 610A	Regulatory Affairs Capstone
or	
MRA 610B	Regulatory Affairs Internship

### ■ MASTER OF SCIENCE IN HEALTH INFORMATICS

Faculty Advisor: Linda Travis Macomber; (858) 309-3495; lmacomber@nu.edu

As healthcare makes dramatic strides to adopt new information and communication technologies, there is a growing demand for health informatics professionals. This rapidly-developing field is only beginning to unlock the vast promise of using electronic-based information to advance health care and ultimately improve the health of individuals and populations. The MS in Health Informatics is a graduate professional degree designed to enhance the practice of health informatics by preparing students for career growth to mid-level and leadership positions within healthcare organizations, technology, and consulting firms. This program is intended for students interested in the effective use of information technologies and systems to improve the quality, safety, efficiency, and affordability of healthcare.

The MS Health Informatics program leverages the rich collective strengths, synergies, faculty, and resources of National University Center for Technology and Health Sciences and the Schools of Health and Human Services, Engineering and Technology, and Business and Management. Program study includes coursework related to:

1. Information Systems - leadership and management of healthcare applications; including analysis, design, adoption, and optimization
2. Information Technology - effective use of database and systems administration, computer networks, security, programming, and wireless devices
3. Informatics - the structured language of healthcare, standards, data structures, health information exchange, decision support, care coordination, consumer health, socio-technical aspects of health computing, human-computer interaction, and evidenced-based practice

Along with a broad understanding of health and human services, technology, information systems, leadership, and the culture of healthcare, students apply health informatics knowledge through experiential learning opportunities with case studies, research, simulations, and a capstone project. Graduates are prepared for various roles related to leveraging technology to enhance the collection, communication, exchange, aggregation, analysis, and use of information across the health care ecosystem.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the healthcare delivery system in the US and the impact of social, cultural, political, economic, and environmental factors affecting the management and operation of healthcare organizations.
- Evaluate health data management standards, technologies and methods to improve the quality, efficiency, equity and safety of healthcare practice and organization.
- Develop policies and technologies to protect data integrity and validity, including information privacy and security policies and procedures.

- Develop strategies for improving healthcare delivery and achieving institutional strategic initiatives using information systems and technologies.
- Evaluate leadership principles and practices in health information technology staff development, technology adoption and change management in a healthcare organization.
- Evaluate a healthcare organization's processes and systems to ensure compliance with ethical, legal and regulatory mandates and professional standards of health information technology.
- Apply statistical and research methodologies to implement evidence-based health information technology management practice and healthcare quality improvement.
- Communicate knowledge of health information systems and technology to stakeholders of the healthcare ecosystem.

### Degree Requirements

(12 courses; 54 quarter units)

To receive a MS in Health Informatics degree, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admissions requirements for specific information regarding application and evaluation.

### Core Requirements

(11 courses; 49.5 quarter units)

HCA 600	U.S. Healthcare System
HTM 552	EHR Meaningful Use
CIS 601	Information Systems Strategies
COH 602	Biostatistics
HCA 626	Healthcare Information Systems
HCA 622	Quality Appraisal & Evaluation
COH 611	Public Health Research Methods <i>Prerequisite: COH 602</i>
HTM 660	System Management and Planning
HTM 520	Health Information Exchange
HTM 680	Health Informatics Case Study <i>Prerequisite: HCA 600, and HTM 660, and CIS 601, and HTM 520, HTM 552, COH 611, HCA 622, HCA 626</i>
HTM 692	Health Informatics Capstone <i>Prerequisite: HTM 680, and HCA 600, HTM 520, HTM 660, HCA 622, COH 611, HCA 626, HTM 552, CIS 601</i>

### Program Elective

(1 course; 4.5 quarter units)

LED 604	Leading Change and Adaptation
COH 613	Public Health Informatics <i>Prerequisite: COH 606</i>
HCA 663	Healthcare Accounting/Finance
CIS 604	Management and Security <i>Prerequisite: CIS 601</i>
CIS 606	End User Information Systems <i>Prerequisite: CIS 601</i>

### ■ MASTER OF SCIENCE IN HEALTH & LIFE SCIENCE ANALYTICS

Faculty Advisor: Tyler Smith; (858) 309-3487; tsmith@nu.edu

The Master of Science in Health & Life Science Analytics program is designed to provide students with a practical learning experience through application of statistical methods to solve real-life health and life science analytics problems. The goal of this program is to prepare students for careers in health analytics and the pharmaceutical industry.

To address the spectrum of issues in health and life science analytics, this curriculum has been designed to include specialized courses in analytic topics relative to the health and clinical fields. Topics include analytical and predictive modeling, data acquisition, data mining, health care information management systems, epidemiology, health management, clinical research, clinical trials, health outcomes research, teamwork, and communication. State-of-the-art analytical software, such as SAS, will be used in all courses so that students completing the MS degree will also be well prepared for external certification. Additionally, team projects are conducted using real data from sponsoring organizations or publicly available data.

Previous academic or industrial experience in such areas as statistics, computer programming, engineering, epidemiology, healthcare, clinical trials, or science are helpful prerequisites for this MS program. This degree is appropriate for both experienced professionals as well as recent college graduates.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate components of data analytics to produce knowledge-based solutions for real-world challenges using public and private data sources.
- Evaluate data management methods and technologies used to improve integrated use of data.
- Construct data files using advanced statistical and data programming techniques to solve practical problems in data analytics.
- Design an analytic strategy to frame a potential issue and solution relevant to the community and stakeholders.
- Evaluate health data management technologies through integration and interoperability of health data.
- Synthesize data analytics and data in a health setting to produce actionable information.
- Analyze the distribution and determinants of disease and health outcomes in human populations.
- Analyze the planning, organization, administration and policies of health-care organizations using health analytic methods.
- Integrate data and analytic techniques to establish financial priorities of a healthcare organization in line with the needs and values of the community and stakeholders it serves.
- Develop team skills to design, coordinate, conduct, and disseminate an analytic strategy to frame a relevant healthcare issue and solution.

### Degree Requirements

To obtain the Master of Science in Health & Life Science Analytics, students must complete 58.5 quarter units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used to earn another advanced degree. Please refer to the General Catalog section on graduate admissions requirements for specific information regarding application and evaluation

### Core Requirements

(13 courses; 58.5 quarter units)

ANA 605	Analytic Models & Data Systems
ANA 610	Data Management for Analytics <i>Prerequisite: ANA 605</i>
ANA 615	Data Mining Techniques <i>Prerequisite: ANA 610</i>
ANA 620	Continuous Data Methods, Appl <i>Prerequisite: ANA 615</i>
ANA 625	Categorical Data Methods, Appl <i>Prerequisite: ANA 620</i>
ANA 630	Advanced Analytic Applications <i>Prerequisite: ANA 625</i>
HCA 626	Healthcare Information Systems
COH 606	Epidemiology <i>Prerequisite: COH 602</i>

ANH 601	Health Management Analytics <i>Prerequisite: Completed program core classes in ANA, and HCA 626, and COH 606, and Recognized experience in the healthcare field, or HCA 600</i>
ANH 604	Clinical Research Analytics <i>Prerequisite: ANH 601</i>
ANH 607	Health Outcomes Research <i>Prerequisite: ANH 604</i>
ANH 620	Health Analytics Internship <i>Prerequisite: ANH 607</i>
ANH 625	Health Analytics Capstone <i>Prerequisite: ANH 620</i>

### ■ MASTER OF SCIENCE IN NURSE ANESTHESIA

*Faculty Advisor: Bryan Tune; (559) 256-4946; btune@nu.edu*

The Nurse Anesthesia Program will provide graduate students with a solid foundation in the basic sciences pertinent to anesthesia care delivery. The program will provide education and exposure to all aspects of clinical anesthesia to include, but not be limited to: regional anesthesia, general anesthesia, monitored anesthesia care, local infiltration techniques, and pain management. The curriculum is delivered in a two phase model. Phase I is composed of didactic instruction only, with the majority of course work conducted on campus. Phase I is composed of four quarters and is one year in length. Phase II is dedicated to clinical practicum and follows directly after Phase I. Phase II is fifteen months in length following Phase I. All coursework in the first phase of the program must be completed prior to starting the second phase of the program, and entry into the clinical setting. Clinical practicums provide the opportunity for administration of anesthesia under the direct supervision of a staff CRNA or anesthesiologists. Clinical rotations will be throughout California with supplemental rotations in Arizona, Washington, Oregon, Colorado, and Florida. Respective state nursing licensure for rotations out of California will be required. Housing and travel expense will be the responsibility of the student. The clinical rotations will provide the student with exposure to anesthesia delivery in large academic institutions as well as rural and outpatient settings. Specialty anesthesia rotations in cardiac, obstetrics, neurosurgery, pediatrics, transplant, and pain management will prepare the graduate to practice in a wide range of specialties. The didactic and clinical education that the student receives throughout the Nurse Anesthesia Program will prepare them to take the national board certification exam administered by the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA) to become a Certified Registered Nurse Anesthetist. Application to the Master of Science in Nurse Anesthesia program is initiated by first applying to National University, then applying directly to the Nurse Anesthesia program via the supplemental Nurse Anesthesia application. The supplemental application will be submitted directly to the Nurse Anesthesia Program Office at the address listed on the application. The applications will be thoroughly screened for completeness and to assure all requirements have been met. Applicants who meet the screening criteria will be invited for a personal interview with program staff and local clinicians. Admission offers to the nurse anesthesia program will be given via letter, telephone, or email shortly after all interviews have been completed. All applicants to the program will be notified of their status for acceptance. \*Note: The Nurse Anesthesia Program is fully accredited by the Council on Accreditation for Nurse Anesthesia Educational Programs (COA).

### Admission Requirements

1. Successful admission to National University.
2. Bachelor of Science in Nursing (BSN) from a NLNAC or CCNE accredited college or university or Bachelor of Science in a related physical science with licensure as a registered nurse.
3. Current unrestricted/unencumbered (clear/active) license as a registered nurse in one of the states of the United States, with eligibility for licensure throughout all states in the United States.
4. A cumulative grade point average (GPA) of 3.0 on all undergraduate courses or 3.0 on the last 60 units of undergraduate courses on a 4.0 scale.
5. Science GPA of 2.75 or greater.
6. A minimum of one full year of critical care experience in an intensive care unit within the past three years as a registered nurse. Trauma emergency department and other experiences will be considered on an individual basis. Operating room, OB, and PACU experience is not accepted as

critical care experience.

7. Three favorable evaluations/recommendations from: a. Current clinical supervisor b. CRNA, Anesthesiologist or RN c. Academic faculty member familiar with your academic performance
8. Professional certification in any of the following preferred: CCRN, TNC, or CFRN.
9. Current ACLS and PALS certification.
10. Shadow experience in the OR with a CRNA or Anesthesiologist.
11. Undergraduate Biochemistry course strongly recommended.
12. Successful personal interview.
13. Background check and drug screening test.
14. The successful completion of the following undergraduate prerequisite courses:
  - » Pharmacology 3 semester/4 quarter
  - » Anatomy with Lab 4 semester/6 quarter
  - » Physiology 4 semester/6 quarter
  - » General Chemistry 3 semester/4 quarter
  - » Statistics: 3 semester/4 quarter
  - » Biochemistry is not required but strongly recommended
  - » Basic Research (1 course)
  - » Statistics (1 course)

*Must complete with a grade of B or better.*

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Appraise the integration of scholarship into evidence based clinical anesthesia practice.
- Formulate anesthesia management plans for all complexities of anesthesia care through the entire perioperative phase using all available technologies.
- Appraise policy, issues, and trends in healthcare for their impact on anesthesia care and professional practice.
- Evaluate the broad context or system within which nurse anesthesia is practiced.
- Select, assemble, and maintain proper equipment, anesthetic agents, and accessories in preparation for sedation, general anesthesia, and/or regional anesthetic techniques
- Develop critical thinking to anticipate and solve problems, make decisions, and apply basic science knowledge to nurse anesthesia practice.
- Appraise multi-system anesthesia related problems in terms of pathogenesis, mechanisms of system-to-system interactions and potential complications.
- Develop and sustain relationships and partnerships with patients and other interdisciplinary professionals to facilitate optimal care and patient outcomes.
- Evaluate ethical principles to decision making in nurse anesthesia practice and healthcare systems.
- Evaluate the patient's physical and psychological status identifying abnormalities that will have implications on the anesthesia care plan, including evaluation of all laboratory, radiographic, and other diagnostic test data.
- Select therapeutic interventions based on scientific knowledge and emerging approaches to nurse anesthesia practice and healthcare delivery to promote optimal outcomes.

### Degree Requirements

To receive an MSNA, students must complete 100.5 graduate quarter units. The program is designed in a cohort model and all courses must be taken in the set sequence. Due to the nature of the program no transfer credit is allowed. Further information on graduate admission and evaluation may be found in the Academic Information for Graduate Degrees section of the catalog.

NOTE: All course work must be completed with a grade of B- or higher to avoid academic probation and/or program dismissal.

### Program Requirements

(24 courses; 100.5 quarter units)

#### Phase I

- |                 |  |
|-----------------|--|
| ANE 600         | Nurse Anesthesia Human Anatomy<br><i>Prerequisite: Admission to the Nurse Anesthesia Program or approval from the course lead and Nurse Anesthesia Program Lead</i>                      |
| ANE 600A        | Nurse Anesthesia Anatomy Lab (1.5 quarter units)<br><i>Corequisite: ANE 600</i>  |
| ANE 610         | Nurse Anesthesia Assessment<br><i>Prerequisite: Admission to the Nurse Anesthesia Program or permission from course lead and Nurse Anesthesia Program Lead.</i>                          |
| ANE 620         | Advanced Pharmacology I (2.25 quarter units)<br><i>Prerequisite: ANE 600, ANE 610</i>  |
| ANE 615         | Advanced Physiology/Patho I<br><i>Prerequisite: ANE 600, ANE 610</i>   |
| ANE 630         | Anesthesia Pharmacology I<br><i>Prerequisite: ANE 600, ANE 610, Corequisite: ANE 620, ANE 615</i>  |
| ANE 635         | Principles of Anesthesia I (7 quarter units)<br><i>Prerequisite: ANE 600, ANE 610, Corequisite: ANE 615, ANE 620, ANE 630</i>  |
| ANE 616         | Advanced Physiology/Patho II<br><i>Prerequisite: ANE 600, ANE 615, ANE 610, ANE 620, ANE 630, ANE 635</i>  |
| ANE 621         | Advanced Pharmacology II (2.25 quarter units)<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, Corequisite: ANE 616, ANE 640</i>                                |
| ANE 640         | Principles of Anesthesia II (7 quarter units)<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, Corequisite: ANE 616</i>   |
| ANE 631         | Anesthesia Pharmacology II<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 621, ANE 630, ANE 635, Corequisite: ANE 616, ANE 640</i>  |
| ANE 650         | Nurse Anesthesia EBP/Research<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631, Corequisite: ANE 645</i>                     |
| ANE 645         | Principles of Anesthesia III (7 quarter units)<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631</i>                          |
| ANE 655         | Aspects of CRNA Practice   |
| <b>Phase II</b> |  |
| ANE 660         | Nurse Anesthesia Clinical I<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650, ANE 655</i>                           |
| ANE 661         | Nurse Anesthesia Seminar I (3 quarter units)<br><i>Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650, ANE 655</i> |
| ANE 666         | Nurse Anesthesia Seminar II (3 quarter units)<br><i>Corequisite: ANE 665, Prerequisite: ANE 660, ANE 661</i>   |
| ANE 665         | Nurse Anesthesia Clinical II<br><i>Prerequisite: ANE 660, ANE 661, Corequisite: ANE 666</i>  |
| ANE 671         | Nurse Anesthesia Seminar III (3 quarter units)<br><i>Corequisite: ANE 670, Prerequisite: ANE 665, ANE 666</i>  |
| ANE 670         | Nurse Anesthesia Clinical III<br><i>Prerequisite: ANE 665, ANE 666, Corequisite: ANE 671</i>   |
| ANE 675         | Nurse Anesthesia Clinical IV<br><i>Prerequisite: ANE 670, ANE 671, Corequisite: ANE 676</i>  |
| ANE 676         | Nurse Anesthesia Seminar IV (3 quarter units)<br><i>Corequisite: ANE 675, Prerequisite: ANE 670, ANE 671</i>   |

ANE 680 Nurse Anesthesia Clinical V  
*Prerequisite: ANE 675, ANE 676, Corequisite: ANE 681*

ANE 681 Nurse Anesthesia Seminar V (3 quarter units)  
*Corequisite: ANE 680, Prerequisite: ANE 675, ANE 676*

### ■ MASTER OF SCIENCE IN NURSING

*Faculty Advisor: Mary McHugh; (858) 309-3519; mmchugh@nu.edu*

The Master of Science in Nursing (MSN) degree program is for baccalaureate prepared nurses. In keeping with the standards for graduate education for advanced practice nursing delineated by the American Association of Colleges of Nursing in the Essentials of Master's Education for Advanced Practice Nurses, the purpose of the MSN program is to prepare students to assume leadership roles in their particular specialization. Masters level nursing education is the appropriate level of education for nursing professionals who are seeking roles that require advanced practice skills in order to function as providers and organizers of the health care delivery process.

#### Admission Requirements

To be eligible for admission to the MSN program at National University, candidates must:

- Meet the University requirements for graduate study, listed in the General Catalog under admission requirements
- Hold a BSN degree from a State Board of Nursing approved and accredited school of nursing (State Board of Nursing, and CCNE and/or NLNAC)
- Provide proof of current, active, and unencumbered RN license in the State of residence
- Have completed the following prerequisite courses:
  - » BST 322 or an undergraduate course in biomedical statistics
  - » NSG 422 or an equivalent undergraduate course in nursing research methodology and application
  - » NSG 412, 411, and 410 or equivalent undergraduate coursework in Community Health Nursing
- Have a GPA of at least 3.0 on a 4.0 scale
- Have completed the University Application for Graduate Admissions, including the application fee
- Provide one official transcript from each college or university attended to the Nursing department
- Have completed the MSN online application.
- Have three letters of professional reference
- Provide evidence of current, active professional liability and malpractice insurance coverage throughout the program
- Provide evidence of specified immunizations a report of a recent physical examination, and current BLS-AED certification

#### Additional pre-requisite requirements:

Students should be proficient in operating a personal computer, including: demonstrated competency in standard computer operating systems and electronic filing systems, basic keyboarding skills, organizing and sorting electronic documents; demonstrated knowledge of standard computer applications to include Microsoft Word and Excel; familiarity with using internet browsers and standard email systems such as MS Outlook

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Implement appropriate theories, models, frameworks, and concepts from nursing and non-nursing disciplines when designing interventions that influence healthcare outcomes for diverse populations in a variety of settings.
- Collaborate with interdisciplinary teams, to evaluate fiscally appropriate healthcare delivery systems that integrate research and clinical expertise to provide evidence-based, patient-centered care.
- Evaluate economic, policy, environmental, and social forces that impact nursing practice, health care delivery and quality of health care.
- Participate in the analysis, implementation and evaluation of strategies for

improving nursing practice through the implementation of health information systems and technologies.

- Demonstrate a professional commitment to creating an environment of lifelong learning for patients, families, communities, and other healthcare practitioners.

#### Degree Requirements

(18 courses; 81 quarter units)

The Master of Science in Nursing requires a minimum of 58.5 graduate quarter units, with 45 of those units completed at National University. A total of 13.5 units of graduate credit may be granted for graduate work completed at another institution as it applies to this program and provided the units were not used to earn another advanced degree. Refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

#### Prerequisites

(5 courses; 22.5 quarter units)

BST 322	Intro to Biomedical Statistics
NSG 422	Nursing Research <i>Prerequisite: NSG 322</i>
NSG 412	Community Healthcare Delivery
NSG 411	Community Health Frameworks <i>Prerequisite: NSG 412</i>
NSG 410	Community: Population Focus <i>Prerequisite: NSG 411</i>

#### Core Requirements

(6 courses; 27 quarter units)

Students should take all Core Courses before taking Specialization courses.

NSG 600	Advanced Practice Nursing
NSG 606	Health Policy & Finance
COH 602	Biostatistics
NSG 607	EBP for Advanced NSG Practice
NSG 620	Theory in Advanced Practice
NSG 622	QI & Project Management

All students must complete an area of specialization.

#### ▲ Specialization in Forensic Nursing

The Master of Science in Nursing with a specialization in Forensic Nursing is a professional degree designed for baccalaureate prepared, licensed, Registered Nurses who wish to pursue their Master of Science in Nursing and who have an interest in forensics. This advanced degree will prepare graduates to work in a variety of Forensic areas.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate and collaborate with members of the multidisciplinary forensic team.
- Utilize nursing judgment to manage, prioritize, and delegate patient care in a variety of forensic settings.
- Demonstrate professional identity by incorporating established standards of practice within the legal and ethical framework of forensic nursing.
- Select appropriate evidence into nursing practice to provide safe, quality, and ethical care in a variety of forensic settings.
- Analyze the basic principles and the role of crime scene investigators in forensic and legal procedures.
- Apply the scientific procedures and methods of identification, collection, preservation, chain of custody, analysis, comparison and report preparation of the biological, trace and toxicological evidentiary evidence.
- Evaluate the legal and psychological issues involved in competency to stand trial, diminished capacity, and insanity defenses.
- Analyze the legal, ethical, and constitutional tensions between the interests of society, and the rights of individuals in connection with various criminal

procedures and contexts.

- Integrate scientific research methodology to explore issues in forensic nursing.

### Specialization Requirements

(7 courses; 31.5 quarter units)

FSC 630	Forensic Pathology I
FSC 642	Forensic Pathology II <i>Prerequisite: FSC 630</i>
FSC 643	Forensic Psychology
FSC 647	Crime Scene Investigation
FSC 620	Advanced Criminalistics
FSC 622	Law and Criminal Procedure
FSC 662	Supervised Research Project <i>Prerequisite: Satisfactory completion of 8 FSC core courses.</i>

### ▲ Specialization in Nursing Administration

The Master of Science in Nursing - Nursing Administration specialization prepares nurse managers who will provide leadership and management services to clinical care organizations. Successful decision-making strategies, evidence-based practice, team building and collaboration, fiscal management, quality improvement, creating a learning culture that supports high quality and safe patient care, and a systems approach to management are considered from a variety of theoretical and practical perspectives.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate with members of the multidisciplinary healthcare team in the design and management of health care delivery systems.
- Employ best evidence and nursing judgment to make sound and ethical decisions that advance the quality and safety of nursing care and care delivery systems.
- Create and implement a plan for day-to-day operations for a clinical facility in order to maintain accreditation, to meet organizational goals, achieve quality and safety outcomes, and carry out the mission of the facility.
- Provide effective, caring, culturally sensitive, and fiscally responsible leadership to nurses and other members of the health care team in order to facilitate excellence in patient care services to diverse patient populations.
- Lead in the continuous improvement of quality and safety in patient care organizations.
- Develop an organizational culture that engenders lifelong learning, quality, safety, and competence in a clinical care organization.

### Specialization Requirements

(7 courses; 31.5 quarter units)

Students take the MSN Core courses, then take the Specialization courses. The Practicum course is the final course of the program; all other courses must be taken before the practicum.

NSG 650	Clin Informatics Foundations <i>Recommended: Prior completion of: All MSN Core courses.</i>
NSG 671	Leadership and Management <i>Prerequisite: Must have completed all MSN Core Courses.</i>
NSG 672	Clinical Personnel Admin
NSG 673	Fiscal Mgmt in Clin Operations <i>Prerequisite: NSG 672 with a minimum grade of B-</i>
NSG 674	Clinical Operations Mgmt <i>Prerequisite: NSG 673 with a minimum grade of B-</i>
NSG 693A	Admin Practicum I <i>Prerequisite: All MSN Core courses and Nursing Administration courses with a minimum grade of B-.</i>
NSG 693B	Admin Practicum II <i>Prerequisite: NSG 693A</i>

### ▲ Specialization in Nursing Informatics

The Specialization in Nursing Informatics is designed for nurses who seek advanced education in nursing informatics theory and practice. Nurses play an important leadership role in the implementation of health information technology in health care delivery organizations. Potential students include nurses who participate in, and in some instances, lead the successful deployment of health information technologies to achieve improvement in the quality, safety, outcomes and thus value of health services in the United States. The goal is to equip RNs for leadership roles in nursing informatics that includes the information and knowledge management best practices and effective technology capabilities for nurses identified through the Technology Informatics Guiding Education Reform Initiative (<http://www.tigersummit.com/>).

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Collaborate with practitioners, educators, administrators, and researchers, to conduct a needs assessment, plan, design, transition to and evaluate information systems and innovative technologies.
- Employ evidenced based practice resources and references to support the adoption and use of healthcare technologies for nurses at the point of care.
- Evaluate ongoing quality and process improvement for patient-centered care systems that optimize clinical workflow, care coordination, and patient outcomes.
- Lead nursing and staff development educational and innovation-oriented programs associated with technology adoption in health care settings.
- Evaluate the healthcare technology environment to ensure compliance with ethical, legal and regulatory mandates and professional standards for advanced nursing practice.

### Specialization Requirements

(7 courses, 31.5 quarter units)

NSG 650	Clin Informatics Foundations <i>Recommended: Prior completion of: All MSN Core courses.</i>
NSG 656	Systems Life Cycle
NSG 657	Clinical Database Systems
NSG 658	Clinical Data Standards
NSG 660	Clinical Decision Support
NSG 692A	Informatics Practicum I <i>Prerequisite: All Core courses and Nursing Informatics courses minimum grade of B-</i>
NSG 692B	Informatics Practicum II <i>Prerequisite: NSG 692A with a minimum grade of B-</i>

## DOCTORAL DEGREE

### ■ DOCTOR OF NURSING PRACTICE

*Faculty Advisor: Barbara Piper; (858) 309-3469; bpiper@nu.edu*

The purpose of National University's Doctor of Nursing Practice (DNP) Program of Studies in Nursing Administration or Nursing Informatics is to prepare post-Master's degree nurses for leadership in developing, implementing, and evaluating evidence-based practices designed to improve the quality of healthcare systems and healthcare safety. The DNP is the advanced specialty practice degree for nurses.

The DNP program of studies prepares nurses to advance practice by improving the effectiveness, quality, and safety of patient care and healthcare systems that support care in hospitals and other clinical settings. The DNP graduate accomplishes these improvements by developing, implementing, and evaluating new nursing practices, protocols, systems, and administrative programs, and by teaching these skills to the next generation of nurses in clinical or academic settings. The DNP is the advanced practice degree identified by the American Association of Colleges of Nursing (AACN) as appropriate for teaching advanced specialty practice.

The practice doctorate prepares nurses to function as leaders who have advanced clinical scholarship and practice skills in Nursing Administration (NA) or Nursing Informatics (NI) that enable them to: identify sources of error in systems and



sub-optimally performing systems; and to design and evaluate improvements that reduce the incidence and impact of clinical errors.

### Admission Requirements

To be eligible for admission to the Doctor of Nursing Practice Program of Studies at National University, applicants must:

- Meet the University requirements for doctoral study, listed in the National University General Catalog under admission requirements.
- Meet one of the following:
  - » Hold a Master's Degree in NA or NI, or a post-masters certificate in one of these two specialties from an accredited school of nursing (NLNAC or CCNE), within a regionally accredited University (e.g., WASC, North Central, etc.)
  - » Hold a Master's Degree in a clinical nursing specialty from an accredited school of nursing (NLNAC or CCNE), within a regionally accredited University (e.g., WASC, North Central, etc.), and as part of the DNP program, complete 4 graduate nursing courses in either NI or NA, as determined by the DNP specialty selected
  - » Hold a Master's Degree from a regionally accredited University in a discipline related to the DNP area of study, and complete NSG620 (Theory in Advanced Practice) as part of the DNP program
  - » Hold a Master's Degree from a regionally accredited University in a discipline not related to the DNP area of study, and complete NSG620 and 4 specialty NI or NA courses (as determined by the DNP specialty) as part of the DNP program.
- Submit a detailed current professional curriculum vita.
- Provide proof of a current, active, and unencumbered RN license in the state in which the DNP mentored clinical immersion will be pursued or if in the military, a license accepted by the military.
- Provide proof of the total number of precepted clinical hours in the applicant's chosen DNP specialty (e.g. NI or NA) during their Master's Degree or Post Master's Certificate program.
- Have completed the following prerequisite courses with a grade of "B" or higher, or their equivalent: a) A graduate-level Statistics course within the past 5 years, b) A graduate-level Research Methods course (which included content on quantitative and qualitative methods, and evidence-based practice), c) A graduate-level Informatics course, d) A course in Quality Improvement at either the undergraduate or graduate level.
- Have a minimum GPA of 3.0 on a 4.0 scale at the graduate level.
- Have completed National University's application for DNP/Graduate Admissions, including a sample of scholarly writing and personal goal statement in which the applicant identifies a focus in either NA or NI (instructions located in the admission packet).
- The DNP Specialty chosen must match the focus on the Master's or Post-Master's Certificate.
- Provide one official transcript from each post-secondary school attended.
- Submit two letters of professional reference, including one from a recent employment supervisor, and one from a colleague who can attest to the quality of your professional work and values. References from family members and personal friends are not acceptable.
- Provide evidence of current, active professional liability and malpractice insurance coverage, and maintain coverage throughout the program.
- Admission is competitive and determined by the NU DNP Admissions Committee, which will review all application materials and hold an interview with each eligible candidate (either in person or via telecommunications media).
- Provide evidence of acceptable TOEFL scores, if requested by the University.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify sources of variations in health care outcomes through analysis and integration of research findings, empirical evidence, and/or practitioner reflections on practice.
- Generate innovative practices, systems, and prevention programs at the

patient, family, organization, community, and population levels for the purpose of improving health care outcomes.

- Lead healthcare systems in the delivery of high quality, safe, patient-centered care.
- Establish and lead collaborative, multidisciplinary teams that provide the range of expertise required in healthcare systems delivering care to complex, multi-need patients, families and communities.
- Advocate for culturally sensitive health care systems and policies that meet ethical and legal standards in order to reduce health disparities.
- Base decisions on synthesis of information from meta-analysis and other research reports, benchmark data, best practices reports, and other credible information sources.
- Analyze the impact of national and global health policy on the cost, quality, and accessibility of health care for diverse patient populations.

### Degree Requirements

(13 courses; 54 quarter units)

To receive a Doctor of Nursing Practice, students must complete a minimum of 54 quarter units of doctoral coursework, with 45 of those units completed at National University. A total of 9 graduate theory quarter units may be granted for equivalent graduate work completed at another institution, as it applies to this degree provided the units were not used to earn another advanced degree.

Students must achieve a 3.0 (B) or higher grade in each course. If a student fails a course, the course may be retaken once. If the course is failed a second time, or two different courses are failed, the student will be dismissed from the program. To earn a DNP, students must complete a minimum of 1,000 post-baccalaureate practicum hours in their specialty focus. Hours from the Master's (or post-Master's Certificate) practica courses may be counted in the total. Transferred practicum hours must be in the same specialty. A minimum 400 practicum hours in the specialty must be completed in the NU DNP program.

Each specialty practice courses (DNP 840A and 840B or 842A and 842B) may be repeated for credit only once to meet the 1,000 practice hour requirement in Informatics or Administration.

DNP 801, 803, 805, 807A, and 807B must be completed before enrollment in the specialty practica. DNP 807A and 807B may be taken concurrently or sequentially. After 807B is completed, practica courses (DNP 840A and DNP 840B or DNP 842A and DNP 842B courses) may be taken concurrently with core courses (DNP 813-817) with permission from the student's DNP Faculty Advisor. To advance to Doctoral Candidacy, students must have completed all required theory courses (DNP 801-817), all specialty practica courses (DNP 807B, 840A, 840B, or DNP 807B, 842A, 842B) and must then enroll in DNP 870.

### Core Theory Requirements

(9 courses; 40.5 quarter units)

Each core theory course is 8 weeks in length.

DNP 801	Doctor of Nurs. Practice Role <i>Prerequisite: Doctoral standing</i>
DNP 803	Decision Support Systems <i>Prerequisite: DNP 801</i>
DNP 805	EBP: Theory & Inquiry <i>Prerequisite: DNP 801, DNP 803</i>
DNP 807A	QI & Project Management <i>Corequisite: DNP 807B, Prerequisite: DNP 801, DNP 803, DNP 805</i>
DNP 809	Advanced Data Analytics I <i>Prerequisite: DNP 801, DNP 803, DNP 805</i>
DNP 811	Advanced Data Analytics II <i>Prerequisite: DNP 801, DNP 803, DNP 805, DNP 809</i>
DNP 813	Healthcare Financial Mgmt <i>Prerequisite: DNP 801, DNP 803, DNP 805</i>
DNP 815	Population Health <i>Prerequisite: DNP 801, DNP 803, DNP 805</i>
DNP 817	Policy Analysis, Advocacy <i>Prerequisite: DNP 801, DNP 803, DNP 805</i>

## Core Practica

(3 courses; 9 quarter units)

Each DNP practicum has an advanced practice specialty focus designed to support students as they assimilate knowledge and competencies required for doctoral practice. The Capstone Project is conducted at practica sites. Students must complete a total of 1,000 practice hours in their specialty post-BSN (MSN+DNP) Program of Studies, with minimum of 15 quarter units in the DNP program.

DNP 807B Quality Improvement Practicum (1.5 quarter units)  
*Corequisite: DNP 807A, Prerequisite: DNP 801, DNP 803, DNP 805*

and

DNP 840A Informatics Practicum I (3 quarter units)  
*Prerequisite: DNP 801, DNP 803, DNP 805, DNP 807A, DNP 807B, Corequisite: Can be taken concurrently with all courses\* except the prerequisites or DNP 870.*

and

DNP 840B Informatics Practicum II  
*Prerequisite: DNP 840A with a minimum grade of S, Corequisite: May be taken concurrently with DNP 813, 815 or 817\*.*

or

DNP 842A Administration Practicum I (3 quarter units)  
*Prerequisite: DNP 801, DNP 803, DNP 805, DNP 807A, DNP 807B, Corequisite: Can be taken concurrently with all courses\* except the prerequisites or DNP 870.*

and

DNP 842B Administration Practicum II  
*Prerequisite: DNP 842A with a minimum grade of S, Corequisite: May be taken concurrently with DNP 813, 815 or 817\*.*

\*Students who wish to take this practicum course with a core theory course must submit an Accelerated Study Request. Please see Policies and Procedures section of the National University General Catalog for more information.

## Capstone Course

(1 course; 4.5 quarter units)

DNP 870 Capstone  
*Prerequisite: All required theory and practica courses.*

## UNDERGRADUATE CERTIFICATES

### ● LVN “30 UNIT” OPTION CERTIFICATE

*Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu*

Licensed vocational nurses (LVNs) who desire to complete the minimum number of units required to take the licensure examination may apply for this option. LVNs who select the “30-Unit Option” method to satisfy the requirements for licensure as a Registered Nurse should consult the Chair of the Department of Nursing for an individual program consultation to discuss the advantages and disadvantages of this option.

### Departmental Admission Requirements

To be eligible for admission to the “30 Unit” certificate, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Hold a current, active license to practice as a licensed vocational nurse
- Have successfully completed the required preparation courses
- Submit the appropriate nursing program application
- For advising purposes only, complete the ACCUPLACER math and English tests

After completing the interview process, successful candidates will be enrolled in classes as spaces become available.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Formulate accurate nursing diagnoses based on multiple sources of collected data.

- Plan, implement, and evaluate strategies with patient-related identified nursing diagnoses.
- Work with families across the lifespan to identify learning needs and implement teaching strategies to achieve mutually defined healthcare goals.
- Manage multiple patients in a variety of settings by prioritizing and appropriately using/incorporating available resources.
- Effectively communicate with both patients/families and other members of the healthcare team.
- Assume professional, ethical, and legal behavior upholding the standards of entry into the profession.
- Practice professional nursing using theory and knowledge as a basis for practice.
- Demonstrate competency by meeting standards of care in providing nursing care to a diverse set of clients in a multicultural community.
- Demonstrate competency and leadership in organizing care for a caseload of clients.
- Analyze and synthesize current findings from nursing research and research in related fields.
- Evaluate current findings from relevant research for utilization in practice.
- Develop a critical stance on professional issues related to nursing practice, education, and knowledge development by analyzing the historical and contemporary environments in nursing.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.

### Certificate Requirements

To receive the “30 Unit Option” certificate, students must complete the 40.5 quarter units as outlined below. The following courses are specific certificate requirements.

### Required Preparation

(4 courses; 12 quarter units)

- BIO 202\* Human Anatomy & Physiol II  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*
- BIO 202A\* Human Anatomy & Physiol Lab II (1.5 quarter units)  
*Prerequisite: BIO 202*
- BIO 203\* Introductory Microbiology  
*Recommended: Prior completion of: BIO 201, and BIO 201A, BIO 202, and BIO 202A, BIO 100, and BIO 100A, CHE 101, and CHE 101A or equivalent courses*
- BIO 203A\* Introductory Microbiology Lab (1.5 quarter units)  
*Prerequisite: BIO 203*

\* May be used to meet a General Education requirement

### Nursing Core Courses

(6 courses; 27 quarter units)

- NSG 310 \*\*Professional Nursing Values  
*Recommended Preparation: Nursing Student Group*
- NSG 320 \*\*Medical-Surgical Nursing II  
*Prerequisite: C” or better in NSG 315 and “S” in NSG 315A, Recommended Preparation: Nursing Student Group*
- NSG 320A \*\*Medical-Surgical II Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: C” or better in NSG 315 and “S” in NSG 315A*
- NSG 325 \*\*Psychosocial Nursing  
*Recommended Preparation: Nursing Student Group, Prerequisite: C” or better in NSG 320 and “S” in NSG 320A*
- NSG 325A \*\*Psychosocial Nursing Clinical  
*Recommended Preparation: Nursing Student Group, Prerequisite: “C” or better in NSG 320 and “S” in NSG 320A or see specific degree*
- NSG 342 \*\*RN-BSN Nursing Management

## GRADUATE CERTIFICATES

### ● GRADUATE CERTIFICATE IN CLINICAL INFORMATICS

Faculty Advisor: Linda Travis Macomber; (858) 309-3495; lmacomber@nu.edu.com

The Graduate Certificate in Clinical Informatics is designed for individuals with advanced healthcare or information technology (IT) knowledge and skills to acquire core competencies that support the collection, management, retrieval, exchange and/or analysis of information in electronic form in healthcare and public health organizations. The program of study includes coursework related to data structures and analysis, health information systems and technologies, planning and project management, staff training, legal and ethical issues including confidentiality, privacy and security and health information technology leadership. This program will be most relevant for health care or IT professionals seeking rapid career advancement or transition to clinical IT.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate health data management technologies and methods to improve the quality, efficiency, equity and safety of healthcare practice and organization.
- Develop and implement policies and technologies to protect data integrity and validity, including information privacy and security policies and procedures.
- Collaborate in the planning, realization and evaluation of strategies for improving healthcare delivery and achieving institutional strategic initiatives using information systems and technologies.
- Evaluate principles and practices in health information technology staff development, technology adoption and change management in a healthcare organization.
- Evaluate a healthcare organization's processes and systems to ensure compliance with ethical, legal and regulatory mandates and professional standards of health information technology.

#### Certificate Requirements

(8 courses; 36 quarter units)

HCA 600	U.S. Healthcare System
HTM 605	Healthcare Info Technologies
CIS 601	Information Systems Strategies
HTM 620	Health Data Management
HTM 652	EHR Meaningful Use
CIS 604	Management and Security <i>Prerequisite: CIS 601</i>
HCA 664	Healthcare Finance
HTM 660	System Management and Planning

### ● GRADUATE CERTIFICATE IN HEALTH COACHING

Faculty Advisor: Patric Schiltz; (858) 309-3476; pschiltz@nu.edu

This certificate is designed for integrative health professionals seeking to extend and improve their ability to coach patients through lifestyle and health changes. Potential students include physicians, nurses, chiropractors, nutritionists, pharmacists, acupuncture practitioners, naturopathy practitioners, physical fitness trainers, weight management coaches, and physical therapists, among others.

For admission to the graduate certificate program, students must meet all requirements for admission to a graduate degree program. For integrative practitioners and other interested individuals who are professionally prepared and licensed, but may not have completed a bachelor's degree, six of the eight courses are offered in partnership with Extended Learning and may be taken for nonacademic credit. Please see Extended Learning section for more information on non-academic coursework.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of coaching the “whole person”.
- Recognize how to use self-awareness tools to facilitate personal development and growth in self and in coaching clients.
- Evaluate health coaching models and methods.
- Demonstrate knowledge of the coaching relationship.
- Be able to discuss the three phases of transition: endings, neutral zone, and new reality; recognize how to use exercises/tools to facilitate transition through coaching.
- Demonstrate an understanding of the core skills of motivational interviewing and when to use it, as well as why it is important for health coaching.
- Demonstrate knowledge of emotional intelligence and social intelligence.
- Demonstrate an understanding of the use of EQ assessment tools and how assessment results are useful in the coaching practice.
- Practice core coaching competencies with clients.
- Write a project focused research paper, which results in the development of a coaching application, tool or training method.
- Describe the key elements of healing environments
- Demonstrate understanding of the elements and implications of holistic stress management
- Differentiate between allopathic and complementary and integrative health care practices.

To receive a Certificate in Health Coaching, students must complete the eight courses listed below. These include the six core courses, a practicum experience that requires students to complete 120 hours of coaching, and an independent study course that required a project-focused research paper.

#### Certificate Requirements

(8 courses; 36 quarter units)

IHC 600	Intro to Complementary Healing
IHC 610	Self as Coach
IHC 615	Fundamentals of Health Coachin
IHC 620	The Coaching Relationship
IHC 635	Multiple Intelligences in Heal
IHC 630	Advanced Health Coaching Semin
IHC 632	Practicum in Health Coaching
IHC 640	Independent Study

### ● GRADUATE CERTIFICATE IN NURSING ADMINISTRATION

Faculty Advisor: Mary Kracun; (858) 309-3486; mkracun@nu.edu

The Graduate Certificate in Nursing Administration is designed for nurses who seek advanced education in nursing administration theory and practice. Areas of discussion include: decision-making strategies, team building and collaboration, fiscal management, quality improvement, and a systems approach to management from a variety of theoretical and practical perspectives.

#### Admission Requirements

To be eligible for admission to the Graduate Certificate Program in Nursing Administration at National University, candidates must:

Meet the University requirements for graduate study, listed in the General Catalog under admission requirements; Hold a MSN degree from an accredited school of nursing (State Board of Nursing, and CCNE and/or NLNAC); Provide proof of current, active, and unencumbered RN license in the state of residence; Have completed the following courses: A graduate course in statistics; A graduate course in research methodology and application; Have a GPA of at least 3.0 on a 4.0 scale; Have completed the University Application for Graduate Admissions, including the application fee; completed the eApplication to Nursing; Provide one official transcript from each college or university attended.

### Additional Prerequisite Requirement

Students should be proficient in operating a personal computer, including: demonstrated competency in standard computer operating systems and electronic filing systems, basic keyboarding skills, organizing and sorting electronic documents; demonstrated knowledge of standard computer applications to include Microsoft Word and; familiarity with using internet browsers and standard email systems such as MS Outlook.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate with members of the multidisciplinary healthcare team in the design and management of health care delivery systems.
- Create and implement a plan for day-to-day operations for a clinical facility in order to maintain accreditation, to meet organizational goals, achieve quality and safety outcomes, and carry out the mission of the facility.
- Provide effective, caring, culturally sensitive, and fiscally responsible leadership to nurses and other members of the health care team in order to facilitate excellent in-patient care services to diverse patient populations.
- Develop an organizational culture that engenders lifelong learning, quality, safety, and competence in a clinical care organization.

### Certificate Requirements

The Graduate Certificate in Nursing Administration requires a minimum of 18 quarter units, with 18 of those units completed in residence at National University. Refer to the General Catalog section on graduate admission requirements for specific information regarding admission and matriculation.

### Requirements for the Certificate

(4 courses; 18 quarter units)

NSG 671	Leadership and Management <i>Prerequisite: Must have completed all MSN Core Courses.</i>
NSG 672	Clinical Personnel Admin
NSG 673	Fiscal Mgmt in Clin Operations <i>Prerequisite: NSG 672 with a minimum grade of B-</i>
NSG 674	Clinical Operations Mgmt <i>Prerequisite: NSG 673 with a minimum grade of B-</i>

### ● GRADUATE CERTIFICATE IN NURSING INFORMATICS

*Faculty Advisor: Mary McHugh; (858) 309-3519; mmchugh@nu.edu*

The Graduate Certificate in Nursing Informatics is designed for nurses who seek advanced education in nursing informatics. Nurses play an important leadership role in the implementation of health information technology in health care delivery organizations. Potential students include nurses who participate and in some instances lead the successful deployment of health information technologies to achieve improvement in the quality, safety, outcomes and thus value of health services in the United States. The goal is to equip RNs for leadership roles in nursing informatics that includes the information and knowledge management best practices and effective technology capabilities for nurses identified through the Technology Informatics Guiding Education Reform Initiative (<http://www.tigersummit.com/>).

### Admission Requirements

To be eligible for admission to the Graduate Certificate Program in Nursing Informatics at National University, candidates must:

Meet the University requirements for graduate study, listed in the General Catalog under admission requirements; Hold a MSN degree from an accredited school of nursing (State Board of Nursing, and CCNE and/or NLNAC); Provide proof of current, active, and unencumbered RN license in the state of residence; Have completed the following courses: A graduate course in statistics; A graduate course in research methodology and application; Have a GPA of at least 3.0 on a 4.0 scale; Have completed the University Application for Graduate Admissions, including the application fee; Completed eApplication to Nursing; Provide one official transcript from each college or university attended.

### Additional Prerequisite Requirement

Students should be proficient in operating a personal computer, including: demonstrated competency in standard computer operating systems and electronic filing systems, basic keyboarding skills, organizing and sorting electronic documents;

demonstrated knowledge of standard computer applications to include Microsoft Word and; familiarity with using internet browsers and standard email systems such as MS Outlook.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Collaborate in the development, realization and evaluation of strategies for improving nursing practice through the implementation of health information systems and technologies.
- Evaluate ongoing quality and process improvement for patient-centered care systems that optimize clinical workflow, care coordination, and patient outcomes.
- Evaluate the healthcare technology environment to ensure compliance with ethical, legal and regulatory mandates and professional standards for advanced nursing practice.
- Lead nursing and staff development educational and innovation-oriented programs associated with technology adoption in health care settings.

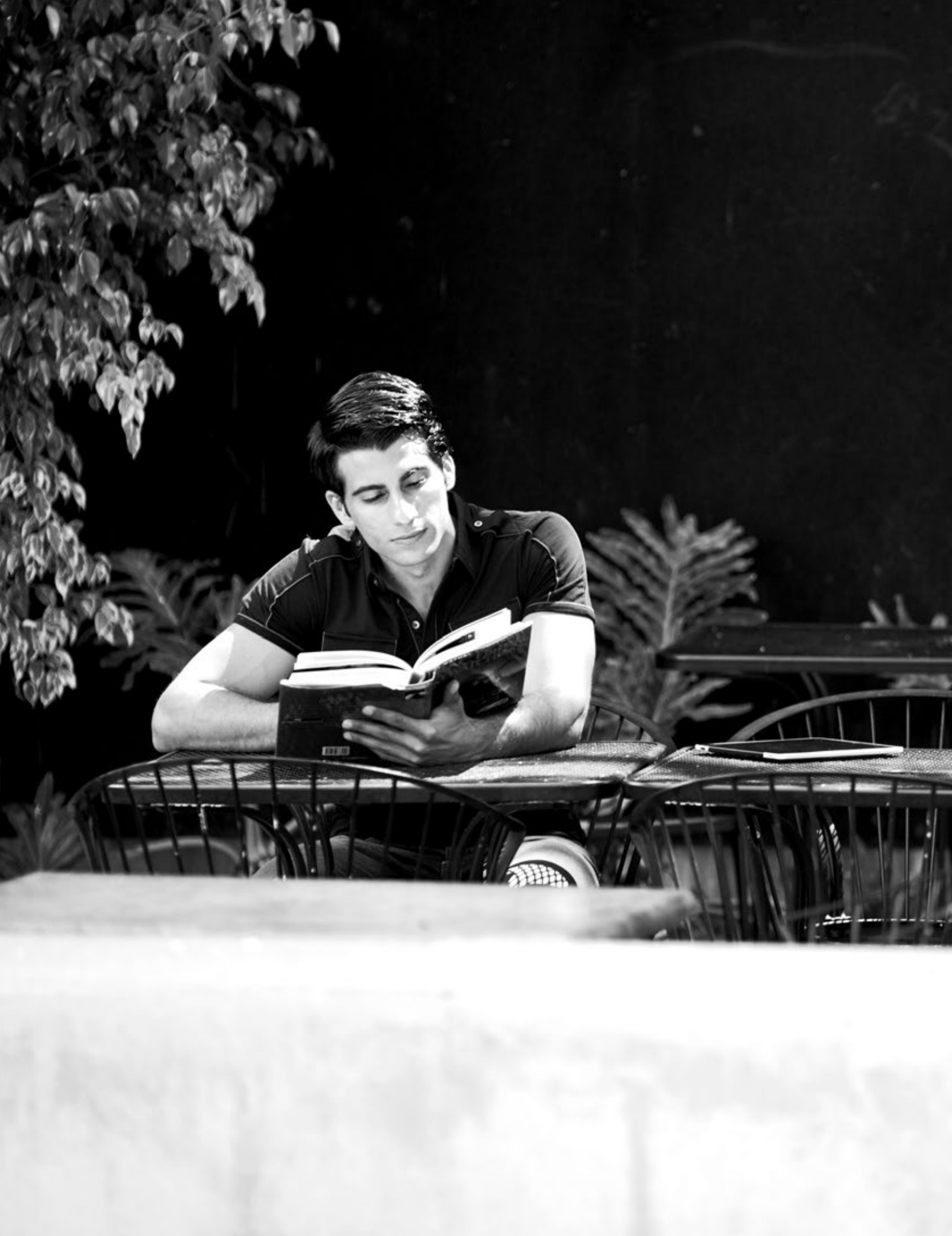
### Certificate Requirements

The Graduate Certificate in Nursing Informatics requires a minimum of 18 quarter units, completed in residence at National University. Refer to the General Catalog section on graduate admission requirements for specific information regarding admission and matriculation.

### Requirement for Certificate

(4 courses; 18 quarter units)

NSG 650	Clin Informatics Foundations <i>Recommended: Prior completion of: All MSN Core courses.</i>
NSG 656	Systems Life Cycle
NSG 657	Clinical Database Systems
NSG 658	Clinical Data Standards



# SCHOOL OF PROFESSIONAL STUDIES

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Dean, Daniel Donaldson  
Ph.D., Geography, Ken State University

**282 Degrees Offered**

**283 Faculty**

**284 Undergraduate Degree Programs**

**290 Minors**

**291 Graduate Degree Programs**

**299 Certificate Programs**




# DEGREE PROGRAMS OFFERED

## UNDERGRADUATE DEGREES

### Associate of Science

*With Majors in:*

- Criminal Justice Administration 
- Paralegal Studies

### Bachelor of Arts



*with a Major in:*

- Digital Journalism 
- Pre-Law Studies 






### Bachelor of Public Administration

### Bachelor of Science

*With Majors in:*

- Criminal Justice Administration 
- Homeland Security and Emergency Management 
- Paralegal Studies

### Minors

- Alternative Dispute Resolution 
- Business Law 
- Criminal Justice Administration 
- Journalism 
- Pre-Law Studies 

## TRANSITION PROGRAMS

- Bachelor of Public Administration to Master of Public Administration
- Bachelor of Science in Criminal Justice Administration to Master of Criminal Justice
- Bachelor of Science in Criminal Justice Administration to Master of Forensic Science
- Bachelor of Science in Criminal Justice Administration to Master of Public Administration
- Bachelor of Science in Criminal Justice Administration to Master of Science in Juvenile Justice
- Bachelor of Science in Homeland Security and Emergency Management to Master of Public Administration
- Bachelor of Science in Homeland Security and Emergency Management to Master of Science in Homeland Security and Emergency Management

## GRADUATE DEGREES

### Master of Arts



*with Fields of Study in:*

- Digital Journalism 

### Master of Criminal Justice




### Master of Fine Arts

*with a Field of Study in:*

- Digital Cinema 
- Professional Screenwriting 

### Master of Public Administration

*with Specializations in:*

- Human Resource Management 
- Organizational Leadership 
- Public Finance 



### Master of Science

*With a Field of Study in:*

- Juvenile Justice


## CERTIFICATE PROGRAMS

### Undergraduate Level

- Alternative Dispute Resolution 
- Criminal Justice Administration 
- Paralegal Studies\*

\*See Extended Learning for information on the Undergraduate Certificates in Paralegal Studies.

 Entire program can be completed online.

 Online program with residency in Los Angeles.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

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# SCHOOL OF PROFESSIONAL STUDIES

## ■ ASSOCIATE OF SCIENCE

### ◆ MAJOR IN CRIMINAL JUSTICE ADMINISTRATION

Faculty Advisor: James Guffey; (209) 475-1475; jguffey@nu.edu

The general field referred to as “Administration of Justice” is directed toward the prevention, discovery, control and treatment of crimes, criminals, and criminality. Students who desire to enter a career concerned with the administration of justice will find that this curriculum has flexibility that allows them to prepare for specific fields included in that broad category. The program also provides a basis for continuation into the Bachelor of Science in Criminal Justice Administration degree at National University. Opportunities for college graduates include positions as federal and state police officers, parole officers, probation officers, and correctional administrators.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critique the ethical philosophy of the American justice system and all participants.
- Analyze crime causation, criminal statutes and elements of particular crimes and criminal procedures.
- Recognize the complexities of punishment, corrections, community and human relations.
- Evaluate the complex legal aspects of criminal investigations, procedures, constitutional law, and case law.
- Apply laws and procedures for the collection and use of evidence.
- Communicate effectively in written and oral formats.
- Trace the progression of a criminal case from pre-trial, to trial, and post-trial adjudication.

#### Degree Requirements

To receive the A.S. in Criminal Justice Administration, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. All students must complete a minimum 34.5 units of the Associate of Science General Education requirements. Refer to the section on undergraduate admission requirements for additional information regarding admission and evaluation.

#### Requirements for the Major

(9 courses; 40.5 quarter units)

SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100, and ENG 101</i>
POL 201	American Politics <i>Prerequisite: ENG 100, and ENG 101</i>
CJA 101	Intro to Criminal Justice
CJA 229	Introduction to Policing
CJA 102	CJ Report Writing
CJA 103	Basic Criminal Investigation
CJA 104	Police-Community Relations
CJA 105	Basic Criminal Law
CJA 106	Basic Criminal Evidence

+ Diversity Enriched Offering

#### Recommended Electives

Students who plan to transition to the BS in Criminal Justice Administration or who desire further knowledge within the Criminal Justice field and who need elective units are encouraged to take any of the following to meet the overall unit requirement for the Associate degree.

CJA 337	The Juvenile Offender
CJA 340	Corrections
CJA 351	Courts & the Judicial Process
CJA 352	Criminal Law and Procedure
CJA 356	Criminal Evidence

### ◆ MAJOR IN PARALEGAL STUDIES

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

This degree is approved by the American Bar Association. The Associate of Science in Paralegal Studies degree is designed to provide students with a solid foundation of professional legal studies leading to a career as a paralegal or legal assistant. The course work and accompanying credits in this program may be transferred to the Bachelor of Science or a professional certificate in Paralegal Studies if all other requirements for admission are met. This degree is offered and ABA-approved at the Los Angeles and Sherman Oaks campuses and housed within the School of Professional Studies.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the role of the paralegal in the American legal system.
- Analyze the basic issues of a legal problem.
- Develop paralegal skills in investigation, legal research, and client and witness interviews.
- Identify common paralegal tasks in substantive areas of the law.
- Develop written and oral communication skills in a legal environment.
- Explain how ethical standards generally apply to paralegals in the practice of law.

#### Degree Requirements

To receive an Associate of Science degree in Paralegal Studies, students must complete at least 90 quarter units, including 49.5 quarter units of legal specialty courses, one 4.5 quarter unit course of English for Professionals, and the required minimum 34.5 units of the Associate of Science General Education as specified in the University catalog. Please note a minimum of 27 quarter units of general education course work (across at least three disciplines such as social science, natural science, mathematics, humanities, foreign language and English) is required by the American Bar Association.

All lower division general education courses must be completed at National University or another regionally-accredited institution. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree.

#### Requirements for the Major

(12 courses; 54 quarter units)

PLA 200	Legal Theory & Ethics
PLX 1000X	Torts
PLA 201	English for Professionals
PLX 1001X	Leg Res Wrtg-Briefing/Analysis
PLX 1002X	Contracts
PLX 1003X	Leg Res Wrtg-Legal Memo
PLA 202	Property
PLA 203	Leg Res Wrtg-Persuasive Wrtg.
PLX 1005X	Computers & the Law
PLA 303	Law Office Administration
PLA 318	Remedies & Dispute Resolution <i>Prerequisite: PLA 202, PLX 1000X, and PLX 1002X</i>
PLA 325	Litigation I

Note: Paralegal may not provide legal services to the public, except as permitted by law.

## ■ BACHELOR OF ARTS

### ◆ MAJOR IN DIGITAL JOURNALISM

Faculty Advisor: Sara Ellen Amster; (714) 429-5311; samster@nu.edu

The Bachelor of Arts in Digital Journalism is a pre-professional program that provides students with a solid foundation in traditional journalistic practices and theories as well as in the new forms of digital journalism that are rapidly reinventing the field. The course of study includes the theory and methods of gathering information and writing for news beats, as well as reporting and writing, investigative and features stories. The program introduces students to the professional responsibilities faced by journalists and news organizations with in-depth study of the ethical and legal ramifications of news gathering and dissemination.

Students become versed in writing for different media outlets ranging from print to broadcast and Web-based formats such as multimedia pages, blogs and podcasts. Students will actively engage in reporting and writing assignments in order to produce a professional portfolio that is tailored to their goals and enables them to compete for employment in the field of 21st century journalism. Graduates of the program will be prepared to embark on varied journalism career paths at newspapers and magazines, broadcast outlets, convergent newsrooms and new media entities.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Work in groups to publish an online or print news product.
- Write in a variety of story forms, including news and feature.
- Write focused news and feature stories for a variety of platforms.
- Identify the elements of style and structure in news and feature stories.
- Apply copyediting rules and techniques for fact-checking.
- Identify what constitutes news.
- Apply ethical principles of journalism during reporting, writing and producing.
- Recognize the legal boundaries of the First Amendment that balance the freedom and responsibility of the press.

#### Degree Requirements

To receive a Bachelor of Arts degree with a Major in Digital Journalism, students must complete at least 180 quarter units as articulated below. Forty-five (45) quarter units must be completed in residence at National University, 76.5 units must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements must be completed. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

#### Prerequisites for the Major

(3 courses; 10.5 quarter units)

ENG 100\* Effective College English I (3 quarter units)  
Prerequisite: Satisfactory performance on Accuplacer

ENG 101\* Effective College English II (3 quarter units)  
Prerequisite: ENG 100

COM 100\* Intro to Mass Communication

or

COM 220\* Media Literacy

\* May be used to meet a General Education requirement

#### Requirements for the Major

(14 courses; 63 quarter units)

JRN 300 Multimedia Journalism Skills  
Prerequisite: ENG 100, and ENG 101

JRN 301 Copy Editing  
Prerequisite: ENG 100, and ENG 101

JRN 305 The Art of the Interview  
Prerequisite: ENG 100, and ENG 101

JRN 310 Convergent Journalism  
Prerequisite: ENG 100, ENG 101, and COM 100, or COM 220

JRN 315 Field Production  
Prerequisite: JRN 310

JRN 330 Investigative Reporting  
Prerequisite: JRN 300, JRN 301, and JRN 305

JRN 335 Beat Reporting  
Prerequisite: JRN 300, JRN 301, and JRN 305, ENG 100, ENG 101

JRN 340 Feature Writing  
Prerequisite: JRN 300, JRN 301, and JRN 305, ENG 100, ENG 101

JRN 350 Youth and the News  
Prerequisite: JRN 300, and JRN 310, ENG 100, ENG 101

JRN 360 Freedom of the Press: A Journ  
Prerequisite: ENG 100, and ENG 101

or

COM 380+ Democracy in the Info. Age  
Prerequisite: ENG 100, and ENG 101

JRN 420 Journalism Ethics  
Prerequisite: ENG 100, and ENG 101

JRN 421 Legal Issues in Journalism  
Prerequisite: ENG 100, and ENG 101

JRN 432 Video Journalism  
Prerequisite: ENG 100, and ENG 101

JRN 495 Capstone Project in Journalism  
Prerequisite: JRN 310, JRN 330, JRN 335, JRN 340, MUL 335, or JRN 430, JRN 431, JRN 315, and BRO 340

#### Upper-Division Electives

(2 courses; 9 quarter units)

To complete the requirements for the major in journalism students must take two elective courses at the 300 or 400 level. Elective courses should be chosen based on student career plans and may be taken in any subject that provides the student with an expertise in a particular area or field of journalism: business, health, economics, ecology, etc. All journalism majors should seek the advice of the faculty advisor before selecting electives.

### ◆ MAJOR IN PRE-LAW STUDIES

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

The Bachelor of Arts in Pre-Law Studies program provides students with the well-rounded education needed for admission to law schools. Emphasis is placed on the verbal, critical thinking, and analytical skills that are considered vital for success as a law student and as a member of the legal profession. This major also allows students interested in a career in business or government to gain an understanding of the complex legal issues they will face in their professions.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop legal and critical thinking skills in judicial issues.
- Describe, analyze, and anticipate legal issues in a business environment.
- Analyze contemporary legal issues in the state, federal, and administrative law forums.
- Analyze issues by application of relevant rules of law, ethical standards, and social mores.
- Develop concise legal arguments.
- Demonstrate written, oral communication, and presentation skills used in pre-law.
- Describe need for effective planning in preparation for the negotiation process.

#### Degree Requirements

To earn a Bachelor of Arts with a Major in Pre-Law Studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are

specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Prerequisites for the Major

(5 courses; 19.5 quarter units)

ENG 100\* Effective College English I (3 quarter units)  
*Prerequisite: Satisfactory performance on Accuplacer*

ENG 101\* Effective College English II (3 quarter units)  
*Prerequisite: ENG 100*

SOC 100+ Principles of Sociology  
*Prerequisite: ENG 100, and ENG 101*

**or**

PSY 100\* Introduction to Psychology

POL 201\* American Politics  
*Prerequisite: ENG 100, and ENG 101*

**or**

PHL 100\* Introduction to Philosophy  
*Prerequisite: ENG 100, and ENG 101*

LAW 200 Intro to Law & Legal Writing

\* May be used to meet a General Education requirement  
+ Diversity Enriched Offering

### Requirements for the Major

(9 courses; 40.5 quarter units)

LAW 400 Current Legal Issues

LAW 304 Legal Aspects of Business I

LAW 305 Legal Aspects of Business II  
*Prerequisite: LAW 304*

LAW 310 Litigation

LAW 402 The Art of Negotiation

**or**

ADR 405 Negotiation Fundamentals

LAW 405 Analytical Reasoning

LAW 408 Legal Writing Research and Ora

### Capstone:

LAW 420 Advocacy

**or**

LAW 470 Pre-Law Senior Project  
*Prerequisite: LAW 310, LAW 400, and LAW 408*

ADR 400 Alternative Dispute Resolution

### Upper-Division Electives

(7 courses; 31.5 units)

Choose seven upper-division degree related electives. The courses noted with an \* below are strongly recommended.

LAW 430 \* Constitutional Law

LAW 440 Comparative International Law

LAW 445 Administrative Law for Business

LAW 455 Public Contracting

LAW 460 \* Law School Portfolio Project

ADR 410 \* Facilitation Fundamentals

ADR 415 \* Mediation Fundamentals

ADR 420 \* Communication & Conflict

ADR 425 \* Issues in Conflict Management

ADR 430 \* Ethics and Neutrality

CJA 464 Constitutional Law for CJ

SOC 445 Contemporary Social Problems  
*Prerequisite: ENG 100, and ENG 101*

PHL 337 Ethics  
*Prerequisite: ENG 100, and ENG 101*

## ■ BACHELOR OF PUBLIC ADMINISTRATION

*Faculty Advisor: Maryam Davodi-Far; (858) 642-8653; mdavodi-far@nu.edu*

The Bachelor of Public Administration (BPA) is designed to meet the educational and professional needs of individuals in the public sector who are interested in professional or career advancement. It also prepares individuals for challenging and dynamic careers in government at the local, state, and federal levels. Individuals completing the program are prepared for mid-level positions, teaching, or training assignments, or research in the government and nonprofit organizations.

### BPA/MPA Transition Program

Students who are currently enrolled in the Bachelor of Public Administration program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BPA/MPA transition program by taking two MPA classes as electives during the BPA program. To be eligible, students must apply for and begin the MPA program within six months of completing their BPA program. Students may choose up to two of the graduate-level public administration courses (with the exception of PAD 631 and PAD 644). For students in the BPA/MPA transition program, the University will waive up to two graduate-level public administration courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MPA. Students must complete graduate level coursework taken as part of the BPA degree with a grade of "B" or better.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Synthesize the theories of public administration.
- Analyze the operations and procedures of public management and nonprofits.
- Develop skills in managing a public sector or nonprofit organization.
- Apply the theories and practices in program and resource management.
- Apply the theories and practices of accounting and budgeting in government and nonprofits.
- Evaluate the role of community groups in local government.
- Analyze ethical situations in the public sector.
- Utilize research process to address a current problem in public administration.
- Collect data, conduct a literature review, analyze data, write and explain findings and present results orally and/or in writing.

### Degree Requirements

To receive a Bachelor of Public Administration, students must complete at least 180 quarter units as described below, 76.5 of which must be completed at the upper-division level and 45 of which must be completed in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

### General Education Program Requirements

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

### Preparation for the Major

(3 courses; 13.5 quarter units)

MNS 205\* Intro to Quantitative Methods  
*Prerequisite: Placement Evaluation*

ECO 203\* Principles of Microeconomics

ACC 201 Financial Accounting Funds.

\* May be used to meet a General Education requirement

**Requirements for the Major**

(12 courses; 54 quarter units)

ODV 420	Intro to Organizational Behavi
PAD 400	Intro to Public Administration
PAD 401	Public Policy Development
PAD 402	Urban Environments
MGT 400	Ethics in Law, Business & Mgmt
PAD 403	Government Relations
MNS 407	Management Science <i>Prerequisite: MNS 205</i>
PAD 404	Nonprofit Management
ACC 434	Government and Nonprofit Acct <i>Prerequisite: ACC 201</i>
MGT 422	Team Bldg, Interpers Dynamics
LED 420	Adaptive Leadership in Change
PAD 405	Senior Research Project <i>Prerequisite: Satisfactory completion of 36qu of BPA major coursework.</i>

**Upper-Division Electives**

(4 courses; 18 quarter units)

Students are encouraged to take any minors or electives in the following prefix areas: CJA, MGT, HRM, ODV, LAW, ACC, FIN, BKM, HUB, LED, and ECO.

**■ BACHELOR OF SCIENCE****◆ MAJOR IN CRIMINAL JUSTICE ADMINISTRATION** 

Faculty Advisor: James Guffey; (209) 475-1475; jguffey@nu.edu

The Bachelor of Science in Criminal Justice Administration degree is designed to meet the educational and professional needs of individuals in law enforcement who are interested in professional development or career advancement. It also prepares individuals for challenging and dynamic careers in the justice system at the local, state, and federal levels. Individuals completing the program are prepared for entry- and advanced-level positions, teaching, or training assignments, private security employment, research, or employment as consultants within the field.

The major consists of upper-division courses that include basic forensic science, research methods, juvenile justice, corrections, criminology, leadership and management, civil and criminal investigations, court systems, criminal law, and a senior research project supervised by full-time, associate, and select core adjunct faculty. Additionally, students select elective courses from psychology, sociology, addictive disorders, behavioral science, legal studies, information technology, and human resource management to provide a broader perspective in human behavior.

**Transition Programs**

There are four transition programs available to students in the Criminal Justice program:

- **BS in Criminal Justice Administration/Master of Criminal Justice (MCJ) Program**
- **BS in Criminal Justice Administration/Master of Forensic Science (MFS) Program**
- **BS in Criminal Justice Administration/Master of Public Administration (MPA) Program**

The transition program allows students who are enrolled in the BS in Criminal Justice Administration with a cumulative grade point average of at least 3.0 and who are within completing their last six courses to register for two courses in the MCJ, MFS, or MPA program as electives for the bachelor's degree. The two graduate courses are restricted to those that do not require a prerequisite. Students must complete all transition program coursework with a grade of B or better. Students pursuing the BSCJ/MPA program can take any two courses (with the exception of PAD 631 and PAD 644). Students pursuing the BSCJ/MCJ or BSCJ/MFS can choose any two classes which do not require prerequisites. The number of courses required to earn an MCJ, MFS or MPA degree for transition program students is

reduced from 12 to as few as 10 courses. Graduate-level course work taken as part of the criminal justice administration program cannot be applied to the Master of Criminal Justice, Master of Forensic Science or the Master of Public Administration program, nor will it transfer as graduate level credit to any other university because it becomes part of the undergraduate degree program.

**BS in Criminal Justice Administration/MS Juvenile Justice Transition Program**

Students currently enrolled in the BS Criminal Justice Administration program who have a cumulative GPA of at least 3.0 and are within six courses of completion of the BS program may register for the BS Criminal Justice Administration/MS Juvenile Justice transition program. They do so by asking their admission advisor to submit a plan change into the transition program, allowing them to take one MS Juvenile Justice class as an elective during the BS Criminal Justice Administration program. Students may choose one 600-level Juvenile Justice course, with the exception of JJS625 or JJS690. For students in the BS Criminal Justice Administration/MS Juvenile Justice transition program, the University will waive one Master of Science in Juvenile Justice course taken as part of the bachelor's degree if the grade earned is a "B" or higher. No graduate units will be awarded. However, these students must still meet the residency requirements and begin the MS Juvenile Justice program within six months of completing the BS Criminal Justice Administration program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this catalog.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Synthesize the contributions of the various forensic science disciplines to the current detection and solving of crimes.
- Develop research designs to address current problems in criminal justice.
- Discuss the causes and patterns of juvenile delinquency.
- Apply biological, psychological, sociological, and economic explanations for criminal behavior from a variety of disciplines.
- Discuss the leadership and management styles in law enforcement.
- Analyze the role of criminal sanctions in relationship to victims and offenders.
- Analyze the problems within the criminal justice system.

**Degree Requirements**

To receive a Bachelor of Science in Criminal Justice Administration, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

**Preparation for the Major**

(1 course; 4.5 quarter units)

CJA 229 \*\* Introduction to Policing

\*\* Students who are currently in law enforcement should contact the Lead Faculty for any potential course waiver.

**Requirements for the Major**

(9 courses; 40.5 quarter units)

CJA 449	Research Methods
CJA 431	Criminology
CJA 337	The Juvenile Offender
CJA 446	CJ Management and Leadership
CJA 460	Principles of Investigation
CJA 351	Courts & the Judicial Process
CJA 352	Criminal Law and Procedure
CJA 340	Corrections
CJA 470*	Supervised CJ Senior Project <i>Prerequisite: CJA 449</i>

Students who do not complete the Senior Project within the two month period are eligible, at the discretion of the instructor, to receive a grade of “IP” with a maximum of a one-time six month extension. Students who do not complete the project at the end of the extension period will need to retake CJA 470. No grade of “I” (Incomplete) can be given for this course.

\* A two-month course that meets once per week for 4.5 quarter units. (Grading is by H, S, and U only.) Accelerated study is not permitted with CJA 470.

### Upper-Division Electives

(7 courses; 31.5 quarter units)

Students must complete a minimum of 7 courses of electives from the list below.

CJA 400	Gangs in America
CJA 401	Criminal Intelligence
CJA 434	Survey of Forensic Sciences
CJA 443	Curr Issues in Law Enforcement
CJA 441	Organized & White Collar Crime
CJA 448	Violence and Society
CJA 356	Criminal Evidence
CJA 457	Minorities/Crime/Soc. Justice
CJA 464	Constitutional Law for CJ
CJA 465	Practicum in Criminal Justice (variable units)
CJA 467	Intl. & Domestic Terrorism
HUB 420	Human Communication <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
HRM 409B	Survey in HRM & OD
HRM 432	Recruit, Selection, Promo, Ret
ODV 420	Intro to Organizational Behavi
HUB 410	Psychology for Managers <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
PSY 437	Theories of Psychotherapy <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
SOC 445	Contemporary Social Problems <i>Prerequisite: ENG 100, and ENG 101</i>
CJA 458	Financial Investigations

## ◆ MAJOR IN HOMELAND SECURITY AND EMERGENCY MANAGEMENT

*Faculty Advisor: Kenneth Goldberg; (619) 563-7217; kgoldberg@nu.edu*

The Bachelor of Science in Homeland Security and Emergency Management (BS-HSEM) program provides graduates with a foundation in the security issues; practices, politics and cultures of terrorism; best practices to cope with a pending emergency; and operations during and recovery from an emergency. The program also focuses on the management aspects of disasters and emergencies. More importantly, the program focuses on developing well rounded decision makers with a background in leadership and ethics. Students will conduct research on various government and private sector entities and report on suggested improvements in preparing for an emergency. The program prepares graduates to work in a variety of homeland security and emergency preparedness capacities such as land borders, seaports and airports, threat assessment, disaster management, and crisis response planning and management. The goal of the program is to develop both the critical acumen and theoretical outcomes before, during, and after emergencies. Graduates will develop the ability to write emergency plans, implement and manage emergency plans, and assist decision makers on recovery issues.

The BS-HSEM program is designed for students who aspire to work in the security, business continuity and disaster management fields in the public sector (city, state or federal governments), nonprofit organizations and private industry. It is also appropriate for military personnel of all ranks, mid-level managers, and managers seeking promotion within the various levels of government and private industry. The BS-HSEM program is composed of 11 core courses and five electives offered in accelerated one-month onsite and online formats. As an introduction, students

are offered a broad overview of security management, current issues in homeland security, and the culture and politics of terrorists. The remaining five courses expose the student to direct management strategies for preparing for emergencies and responding to disasters including related ethical issues. Together these courses provide a theoretical and practical foundation for managing security issues and addressing emergencies.

### Bachelor of Science Homeland Security and Emergency Management / Master of Public Administration (BS-HSEM/MPA) Transition Program

Students who are currently enrolled in the Bachelor of Science in Homeland Security and Emergency Management program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BS-HSEM/MPA transition program by asking their admission advisor to submit a plan change into the transition program and by taking two MPA classes as electives during the BS-HSEM program. To be eligible, students must apply for and begin the MPA program within six months of completing their BS-HSEM program. Students may choose up to two of the graduate-level public administration courses with the exception of PAD 631 and PAD 644.

For students in the BS-HSEM/MPA transition program, the University will waive two graduate-level public administration courses taken as part of the bachelor’s degree, but these students must still meet the residency requirements for the MPA.

### Bachelor of Science Homeland Security and Emergency Management /Master of Science Homeland Security and Emergency Management (BS-HSEM/MS-HSEM) Transition Program

Students who are currently enrolled in the Bachelor of Science in Homeland Security and Emergency Management program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BS-HSEM/MS-HSEM transition program by asking their admission advisor to submit a plan change into the transition program and by taking two MS-HSEM classes as electives during the BS-HSEM program. To be eligible, students must apply for and begin the MS-HSEM program within six months of completing their BS-HSEM program. Students may choose up to two of the graduate-level HSEM courses with the exception of SSE 610A or a course that has an unfulfilled prerequisite.

For students in the BS-HSEM/MS-HSEM transition program, the University will waive two graduate-level HSEM courses taken as part of the bachelor’s degree, but these students must still meet the residency requirements for the MS-HSEM.

### Supervised Senior Project Information

The Supervised Senior Project is designed to be a comprehensive project. Therefore, students should schedule HSE 490 toward the end of their degree program. The minimum requirements are the completion of at least 27 quarter units of the major requirements in the BS-HSEM program.

To complete the project satisfactorily, students apply extensive effort in research and writing over a period of two months. Due to the time and effort required for this project, it is recommended that students dedicate themselves to the completion of this project without academic distraction.

Students who do not complete the Supervised Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of “IP” which allows 12 months from the start date of the class for the student to complete. Students who do not complete the project by the end of the specified time period will need to retake HSE 490. No grade of “I” (Incomplete) can be given for this course.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply relevant criticism in sustained analysis and interpretations of security management thinking.
- Engage in informed critical discussion, both oral and written, pertaining to domestic security management and past breeches of security within the United States.
- Evaluate emergency disaster pre-plans, recovery plans, and after-action reports.
- Apply analytical skills in approaching ethical dilemmas and implications of technology and other areas faced in government and private industry.
- Describe the political and religious implications of the terrorist climate.
- Describe and analyze the role groups and teams have in organizations as they relate to addressing homeland security and emergency management issues.

- Describe the roles local, state and federal government agencies have in addressing homeland security and emergency management issues.
- Develop written, oral communication and critical thinking skills.

### Degree Requirements

To earn a Bachelor of Science with a major in Homeland Security and Emergency Management, students must complete at least 180 quarter units as described below, 76.5 quarter units must be completed at the upper division level, 45 quarter units must be completed in residence at National University and a minimum 70.5 units of the University General Education requirements must be completed. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Requirements for the Major

(11 courses; 49.5 quarter units)

HSE 401	Domestic Security Management
PAD 400	Intro to Public Administration
LED 410	Leading Diverse Groups & Teams
CJA 467	Intl. & Domestic Terrorism
HSE 475	Interviewing and Interrogation
HSE 420	Information Security
HSE 430	Border-Transportation Security
HSE 440	Crisis Management
HSE 470	Legal Issues of Security
HSE 444	Disaster Management
HSE 490	Supervised Senior Project

*Prerequisite: Students must have fulfilled all General Education, Core Courses, and Elective Courses requirements prior to beginning this course.*

### Upper-Division Electives

(5 courses; 22.5 quarter units)

Students can select any five of the courses listed below to complete this requirement:

CJA 434	Survey of Forensic Sciences
CJA 356	Criminal Evidence
CJA 400	Gangs in America
CJA 457	Minorities/Crime/Soc. Justice
CJA 340	Corrections
COM 380*	Democracy in the Info. Age

*Prerequisite: ENG 100, and ENG 101*

MGT 309C	Prin. of Mgmt & Organizations
HUB 420	Human Communication

*Prerequisite: ENG 100, ENG 101, and PSY 100*

CJA 460	Principles of Investigation
CJA 446	CJ Management and Leadership

### ◆ MAJOR IN PARALEGAL STUDIES

*Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu*

This degree is approved by the American Bar Association. The Bachelor of Science in Paralegal Studies program is intended to provide students with the professional skills required to serve the legal community effectively and ethically as a paralegal or legal assistant. The program combines both a comprehensive academic curriculum and practical education in the role of the paralegal in a legal environment. The curriculum is designed to enable students to understand and articulate legal theory and apply it ethically to legal professional practice.

This degree is offered and ABA-approved at the Los Angeles and Woodland Hills campuses and housed within the School of Professional Studies.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the American legal system and major areas of the law, such as Torts, Contracts, Property, and others, and understand the legal terminology in those areas.
- Identify legal issues and apply basic legal analysis in the context of a legal problem.
- Conduct legal research using manual and computer-assisted methods.
- Identify and apply proper legal remedies in the context of a legal problem.
- Use computers and other technology for law office and case management, document preparation, discovery, law and motion, and trial preparation.
- Demonstrate effective communication skills and the ability to convey relevant information to attorneys, clients, witnesses, and other persons.
- Demonstrate the ability to assist with preparing legal documents, and handling pre-trial and trial preparation tasks.
- Perform paralegal tasks competently in a law office, corporate law department, governmental agency, judicial setting, or other comparable legal environment.
- Integrate legal theory with the practical aspects of working as a paralegal in a law practice.
- Articulate applicable ethics laws and codes of ethical conduct.

### Degree Requirements

To receive a Bachelor of Science degree in Paralegal Studies, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper division level, 45 of which must be completed in residence at National University and a minimum 70.5 quarter units of the University General Education requirements. A minimum of 27 quarter units of general education course work is required by the American Bar Association to be completed in at least three disciplines, such as social sciences, natural sciences, mathematics, humanities, foreign language, and English.

The Paralegal coursework comprises 18 legal specialty courses and one English for Professionals course as set forth below. In the absence of transfer credit, additional general electives may be necessary to satisfy the 180 quarter units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

### Preparation for the Major

(9 courses; 40.5 quarter units)

PLA 200	Legal Theory & Ethics
PLX 1000X	Torts
PLA 201	English for Professionals
PLX 1001X	Leg Res Wrtg-Briefing/Analysis
PLX 1002X	Contracts
PLX 1003X	Leg Res Wrtg-Legal Memo
PLA 202	Property
PLA 203	Leg Res Wrtg-Persuasive Wrtg.
PLX 1005X	Computers & the Law

### Requirements for the Major

(10 courses; 45 quarter units)

PLA 303	Law Office Administration
PLA 318	Remedies & Dispute Resolution

*Prerequisite: PLA 202, PLX 1000X, and PLX 1002X*

PLA 325	Litigation I
PLA 329	Corporations I
PLA 333	Criminal Law I
PLA 426	Litigation II

*Prerequisite: PLA 325*

- PLA 430 Corporations II  
*Prerequisite: PLA 329*
- PLA 434 Criminal Law II  
*Prerequisite: PLA 333*
- PLA 495 Objective Writing Capstone  
*Prerequisite: All other courses required for the major (except PLA 496) must be completed prior to enrolling in this course.*
- PLA 496 Persuasive Writing Capstone  
*Prerequisite: All other courses required for the major must be completed prior to enrolling in this course.*

### Upper Division Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units of electives to fulfill the upper-division unit requirements to earn the Bachelor of Science in Paralegal Studies. Students can select from the following recommended electives or choose from any upper-division course in the College of Letters and Sciences or the School of Professional Studies.

- LAW 402 The Art of Negotiation
- LAW 430 Constitutional Law
- LAW 440 Comparative International Law
- ADR 400 Alternative Dispute Resolution
- ADR 405 Negotiation Fundamentals
- ADR 415 Mediation Fundamentals
- ADR 430 Ethics and Neutrality

Note: Paralegals may not provide legal services to the public, except as permitted by law.

## MINORS

### ● MINOR IN ALTERNATIVE DISPUTE RESOLUTION

*Faculty Advisor: Jack Hamlin; (858) 642-8405; jhamlin@nu.edu*

Although designed for those students majoring in business administration who may seek entry into the Alternative Dispute Resolution field, a minor in Alternative Dispute Resolution is available to all students in any bachelor's degree program. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the minor in ADR will provide students with the necessary skills to become effective negotiators, mediators, and facilitators and to promote peace and understanding between diverse cultures.

#### Requirements for the Minor

(6 courses; 27 quarter units)

- ADR 400 Alternative Dispute Resolution
- ADR 405 Negotiation Fundamentals
- ADR 410 Facilitation Fundamentals
- ADR 415 Mediation Fundamentals

Choose any two of the following:

- ADR 420 Communication & Conflict
- or**
- ADR 425 Issues in Conflict Management
- or**
- ADR 430 Ethics and Neutrality

### ● MINOR IN BUSINESS LAW

*Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu*

This minor is designed to provide students who have an interest in a career in law, business, or government, with an understanding of the complex legal issues that exist in today's business environment.

### Requirements for the Minor

(6 courses; 27 quarter units)

- LAW 400 Current Legal Issues
- LAW 304 Legal Aspects of Business I
- LAW 305 Legal Aspects of Business II  
*Prerequisite: LAW 304*
- ADR 400 Alternative Dispute Resolution
- ADR 405 Negotiation Fundamentals
- Choose one from the following:
- LAW 440 Comparative International Law
- or**
- LAW 445 Administrative Law for Business
- or**
- LAW 455 Public Contracting

### ● MINOR IN CRIMINAL JUSTICE ADMINISTRATION

*Faculty Advisor: James Guffey; (209) 475-1475; jguffey@nu.edu*

#### Requirements for the Minor

(6 courses; 27 quarter units)

The Minor in Criminal Justice Administration is designed to provide students with a selective overview of the criminal justice system. To fulfill the requirements for the minor, students can take any six courses listed as upper-division requirements for the major and beginning with CJA prefixes. (Prerequisites may be required depending on courses chosen.)

### ● MINOR IN JOURNALISM

*Faculty Advisor: Sara Ellen Amster; (714) 429-5311; samster@nu.edu*

The minor is designed for those students who seek specialized knowledge of the field, including its most recent innovations. It emphasizes traditional foundations, including ethics, but also touches on convergent journalistic techniques for the 21st Century.

#### Core Requirements

(6 courses; 27 quarter units)

- JRN 300 Multimedia Journalism Skills  
*Prerequisite: ENG 100, and ENG 101*
- JRN 305 The Art of the Interview  
*Prerequisite: ENG 100, and ENG 101*
- JRN 310 Convergent Journalism  
*Prerequisite: ENG 100, ENG 101, and COM 100, or COM 220*
- JRN 340 Feature Writing  
*Prerequisite: JRN 300, JRN 301, and JRN 305, ENG 100, ENG 101*
- JRN 360 Freedom of the Press: A Journal  
*Prerequisite: ENG 100, and ENG 101*
- JRN 420 Journalism Ethics  
*Prerequisite: ENG 100, and ENG 101*

To the extent that specific courses have prerequisites, students will be required to meet them. The faculty advisor must grant approval for students to substitute one other existing JRN course to meet the requirements for the minor in place of another JRN course (e.g., JRN 350, Youth and the News, for those interested in teaching).

### ● MINOR IN PRE-LAW STUDIES

*Faculty Advisor: Bryan Hance; (310) 622-2115; bhance@nu.edu*

#### Requirements for the Minor

(6 courses; 27 quarter units)

A minor in pre-law studies helps prepare business professionals for the increasing legal implications of business in a global environment.

- LAW 304 Legal Aspects of Business I

LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
LAW 408	Legal Writing Research and Ora
LAW 400	Current Legal Issues
ADR 405	Negotiation Fundamentals
MGT 400	Ethics in Law, Business & Mgmt

## GRADUATE PROGRAMS

### ■ MASTER OF ARTS IN DIGITAL JOURNALISM

*Faculty Advisor: Sara Ellen Amster; (714) 429-5311; samster@nu.edu*

The goal of the Master of Arts in Digital Journalism is to prepare learners to become dynamic new media professionals capable of using emerging technologies to generate, create and disseminate news and analysis in a competitive, fast-moving global information environment. The program, to be taught entirely online, will link new media practitioners internationally with each other, and train backpack and video journalist “one-man bands” who are hotly in demand in the new media marketplace. The changing nature of 21st century journalism requires professionals who are ready to answer the call for more highly skilled news and communication practitioners in the 24-hour information-on demand cycle. Increasingly, the question of who is a journalist has been replaced by who does journalism? Students will be armed with theoretical and practical approaches to help them and their news organizations, both traditional and non-traditional, meet the world’s voracious appetite for clear, accessible and relevant knowledge—“news you can use”—to help consumers make better decisions and lead more informed lives. With the program, National University adds its voice to the debate over what journalism is and needs to become. Coursework will marry non-traditional multimedia skills with longtime foundations, legal underpinnings and the ethics of traditional journalistic practice. Near the end of this 13-month program, students will be matched with mentors in the media and communications fields. Along the way, they will create an electronic portfolio designed to help them gain employment and build their career.

The degree requires that students are able to write in English at an advanced level and also be flexible enough to learn the latest technological skills that new media professionals need to survive. Students must already possess a Bachelor of Arts degree. They must prove basic competency in certain digital skills or take a series of tutorials in Essential Digital Competencies, JRN 502, as a satisfactory-unsatisfactory companion to their other studies. If a student’s writing skills need improvement, he or she may be required to enroll in a remedial writing class before continuing in the program. Applicants for whom English is a second language are encouraged to take the Accuplacer English as a second language test.

The opening course, The New News, or JRN 600, will serve as gateway to the program, which also will offer such innovative classes as computer-assisted reporting, the business of journalism, producing online publications, investigative reporting and international reporting. Admitted students must prequalify for Backpack Digital Audio & Video by taking a series of tutorials, but JRN 502 may be waived by the instructor based on sufficient evidence of professional-level work.

Consultation with the advisor is required. Essential Digital Competencies can be taken alongside the program for a grade of Satisfactory/Unsatisfactory as a student pursues the degree but must be taken prior to Backpack Digital Audio & Video, JRN 610. Graduates will acquire a host of intellectual, managerial and journalistic skills including:

- an understanding of emerging media business models
- the ability to create original enterprise projects about public issues, events and individuals
- the knowledge to engage in public journalism by conducting polling, interviewing and interactive audience research
- the training to develop, implement and evaluate appropriate strategies of investigative journalism using the Web for both research and presentation; and
- professional instruction in the foundations of shoe-leather journalism, as well as story-generation and reporting

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop digital informational content (text, graphics, audio, video) for dissemination across multiple media platforms.
- Evaluate the effect of information and knowledge management structures on accuracy and reliability in news media publications.
- Employ emerging media practices within ethical and legal boundaries.
- Create interactive online publications for a global audience.
- Critique business models and evaluate their effectiveness in the emerging media world of contemporary journalism.
- Analyze news and information gathered from computer databases.
- Compare past and present trends in news writing, reporting, and editing.

### Degree Requirements

(14 courses; 60 quarter units)

To receive a Master of Arts in Digital Journalism students must complete at least 58.5 quarter units of graduate work, of which a minimum of 45 quarter units must be taken in residence at National University. Students can transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution provided the units have not been used to satisfy the requirements of an awarded degree and the Faculty Advisor determines the course content is applicable to the program. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section on the graduate admission requirements for additional specific information regarding application and evaluation. The capstone in this program will be developed individually with the advisor and may include an internship in a student’s home community or one arranged through National University’s student publication.

### Program Prerequisites

(1 course; 4.5 quarter units)

JRN 502 Essential Digital Competencies (1.5 quarter units)

Students who feel they have met the competencies of this class should speak to the Faculty Advisor regarding the requirements needed to submit a waiver.

### Core Requirements

(13 courses; 58.5 quarter units)

JRN 600	The New News
JRN 605	Advanced Non-Fiction Writing
JRN 610	Backpack Digital Audio & Video <i>Prerequisite: JRN 502</i>
JRN 615	International Reporting
JRN 620	Online Publishing
JRN 630	Professional Editing
JRN 640	Emerging News Business Models
JRN 650	Computer-Assisted Research
JRN 655	Communication Law
JRN 656	Ethics in the New Media World
JRN 660	Investigative Methods
JRN 670	Producing Enterprise Projects
JRN 680	Capstone Project

### ■ MASTER OF CRIMINAL JUSTICE

*Faculty Advisor: Victor Lewis; (619) 563-7111; vlewis@nu.edu*

The Master of Criminal Justice (MCJ) is designed to provide students with the required knowledge and competence in administration, management and problem solving skills in the challenging and demanding careers of Criminal Justice in the fields of criminal justice administration and criminal justice research and development. Students completing the Master in Criminal Justice are exposed to both theoretical and applied models and concepts in criminal justice administration, as well as qualitative and quantitative research methods. The Master of Criminal Justice program integrates theory with practice to provide graduates with the



skills and knowledge needed to address the complex issues and challenges of criminal justice in the 21st century. Students in this program develop the problem solving and research skills as well as technological expertise necessary to analyze reality-based cases and assignments to develop strategies and solutions that are both practical and effective. Challenging and demanding careers in government at the local, state, and federal level in the administration of justice, law enforcement management, correctional administration, security administration, and criminal justice research as well as teaching and training assignments await graduates with a Master's Degree in Criminal Justice.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the managerial practices that have shaped the criminal justice professions.
- Analyze court decisions involving police or criminal justice agencies in terms of criminal sanctions.
- Analyze issues of police morale, motivation, retention, selection and recruitment.
- Evaluate and determine what should be the consequences of unethical conduct by police officers.
- Evaluate and compare the American criminal justice system with other criminal justice systems.
- Evaluate disciplinary, theoretical, criminological, and philosophical foundations in the management of criminal justice.
- Develop oral, written, and technological communication for criminal justice professionals.
- Utilize critical thinking and problem solving skills to identify quality scholarship and research in the field of criminal justice.

### Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Criminal Justice, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used to satisfy the requirements of an awarded degree. For students in the BS in Criminal Justice Administration/MCJ transition program, the University will waive the criminal justice course(s) taken as part of the bachelor's degree (see BS in Criminal Justice Administration transition program) if the grade earned is a "B" or higher but no graduate units will be awarded.

Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Core Requirements

(8 courses; 36 quarter units)

CJA 600	CJ Theory, Practice & Policy
CJA 610	Critical Issues in CJ
CJA 620	Legal Issues in CJ
CJA 622	Professional Ethics in CJ
CJA 627	Comparative CJ Systems
CJA 650	Advanced Criminological Theory
CJA 655	Advanced Research Methods
CJA 690	Research Project Thesis
	<i>Prerequisite: CJA 600, CJA 610, CJA 620, CJA 622, CJA 627, CJA 650, CJA 655</i>

### Program Electives

(4 courses; 18 quarter units)

Select 4 courses from the following list of courses:

CJA 625	Security Management & Planning
CJA 660	Drugs, Alcohol & Public Policy

CJA 665	Violence and Victimization
FSC 622	Law and Criminal Procedure
FSC 631	Major Case Investigation
FSC 643	Forensic Psychology

### ■ MASTER OF FINE ARTS IN DIGITAL CINEMA 🎬

*Faculty Advisor: Edward Warren; (714) 429-5131; awarren@nu.edu*

The Digital Cinema MFA program provides graduates with an in-depth study of digital motion picture production and postproduction and a foundation in film history. Graduate fellows develop technical skills in digital cinema production, the ability to critically evaluate film and video projects for practical and commercial outcomes, and a critical acumen in the area of film, visual communication and media studies. The curriculum covers screenwriting, digital cinematography, lighting, directing, production management, non-linear editing and post-production workflow, producing and distribution.

The program focuses on developing filmmakers well versed in all aspects of low budget, independent narrative and documentary style filmmaking and prepares graduates to work in a variety of production capacities in the following fields: commercial or industrial film and television, digital entertainment media and communication, educational or instructional media production. At the completion of the Digital Cinema program, students will possess the knowledge and skills needed to produce a professional quality digital motion picture and to participate in the ongoing scholarly and critical discussions of issues in the field of film, film theory and criticism.

The MDC program consists of five core seminars and six workshops with concurrent studio practica. In addition, depending upon their thesis project and professional interests, graduate fellows select one elective in film studies and one specialization workshop in advanced screenwriting or producing documentaries prior to taking the 4- course thesis sequence. Graduate fellows will complete the program with an original professional quality, digital short tailored to their interests, needs and desire for career development and a written thesis containing original research, critical analysis and a complete record of the thesis project.

### Program Delivery Format

The MDC program is offered as a hybrid format with instruction for a majority of courses delivered online, and a required one-month intensive residency at the Los Angeles campus. The program is also offered full-time at the National University Los Angeles campus with a majority of classes conducted onsite.

All Digital Cinema fellows must take the intensive residency consisting of three courses onsite at the National University Los Angeles campus: MDC 683P Directing and Production Management Practicum, MDC 688 Production and MDC 689 Postproduction. The MDC 688 Production workshop lasts the first two weeks of the month and the second, MDC 689 Post-production, runs for two weeks during the second half of the month. MDC 683P runs for the whole month. These three workshops provide students with hands-on production experience in a collaborative environment using professional equipment and must be completed prior to the thesis sequence.

Students who are unable to devote a full month onsite for both MDC 688 and MDC 689 may elect to split the onsite residency by taking MDC 689 first and then later scheduling MDC 683P and MDC 688, which must be taken concurrently. For more information on the residency workshops, contact the program lead faculty advisor.

Production and Course material fees listed below cover the additional costs of the residency including workshop and production, expendables, materials, supplies and related expenses. Expenses for accommodation and transportation are not included in the fees or tuition, and students are responsible for arranging their own accommodations and transportation during the onsite residency. Additional equipment fees may apply to some onsite workshop courses.

For more information on program formats, residency workshops, onsite courses and fees, contact the program lead faculty advisor.

## Fees

Production and course material fees:

MDC 688 Course Fee	\$1,200
MDC 689 Course Fee	\$550

## Thesis Sequence

To qualify for the Digital Cinema thesis sequence the MFA fellow must have successfully completed all core courses by maintaining a “B” average and have completed the Production Sequence with a minimum grade of “B.” Candidates who do not meet these criteria will be required to successfully repeat a course based upon policies for graduate programs published in the National University catalog and consultation with the program lead faculty. Through the thesis project a thesis fellow must demonstrate her/his ability to work under the guidance of a thesis advisor to independently develop, produce and edit a short subject digital motion picture project of between 12 and 30 minutes in length, that presents a coherent storyline and sustains the interest of a discriminating audience. Projects may be documentary or fiction. Specific parameters of the project are developed in consultation with a thesis advisor.

In addition to the digital short motion picture, the MFA Candidate must complete a written thesis that demonstrates the candidate’s ability to communicate coherently, critically, and creatively. It will include the complete production documentation—a treatment or synopsis, a project funding, budget, schedule and distribution plan and a shooting script—as well as a critical analysis of the project, relevant genre influences, and a self-assessment of the candidate’s evolution as a filmmaker during the thesis period.

The thesis sequence consists of four-courses and may last from 12-18 months. The courses are: MDC 692 Thesis Development, MDC 693 Thesis Production, MDC 694 Thesis Post-Production and MDC 695 Thesis Qualification. During Thesis Development, a thesis fellow works with a thesis advisor to develop the story and outline for a short film project and completes a formal thesis proposal that includes a first draft of a fiction screenplay or documentary production outline. Upon qualification of the proposal, the fellow is eligible for the Thesis Production course. During this time the candidate develops a shooting script, conducts pre-production planning and completes the production phase of the project. Upon satisfactory completion of the production phase, the fellow is eligible for post-production, during which s/he edits and submits a series of cuts for review by the editorial thesis advisor. During post-production, the editorial thesis advisor will arrange for the thesis development and production advisors to review the project as a thesis committee based on the progress and completeness of the project. The committee will provide written notes and criteria for successful qualification of the film to the thesis fellow for incorporation into a director’s cut. A thesis film must satisfactorily meet the qualification standards set by the thesis committee in order to pass Thesis Post-production.

Upon satisfactory completion of the post-production course, the fellow is eligible for Thesis Qualification, during which s/he completes the written thesis and submits it for evaluation. The thesis committee then makes the final determination on whether or not the thesis fellow has met or exceeded the qualification requirements for the Digital Cinema Master of Fine Arts.

A fellow must satisfactorily complete each thesis course within the specified term of the course. Thesis Development is four months. Production and Post-production courses are three months each, and the Qualification course is two months. Consideration for Incompletes are considered based on University policy. Any thesis course that receives an unsatisfactory evaluation must be repeated.

## Application Requirements

To be considered for admission, applicants must meet the University graduate admission requirements listed in the catalog under Academic Information for Graduate Degrees as well as the following MDC program criteria. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes. The application will determine applicant proficiency and skill sets in digital technology, editing and photography as well as writing and communication in English at the graduate level.

Students interested in enrolling in this program should contact the MDC program lead faculty advisor for further information regarding the application process and to determine at what point in the sequence they might enter the program. Entrance points may vary depending on applicant experience, skills and proficiencies.

## Program Prerequisites

Students in the Digital Cinema MFA are required to conduct independent research and be able to write at the graduate level. It is recommended that students have had undergraduate courses or experience in some of the following areas: communication, film, literature, media studies, graphic design, multimedia arts, history, philosophy, psychology or sociology. The MDC application and personal interview will determine whether or not an applicant meets the program prerequisites. A successful applicant should have entry-level knowledge of video editing software and be able to create new projects, capture digital video and audio assets, assemble and insert, edit, and export sequences to a variety of QuickTime formats for DVD, Internet and streaming formats.

Students are also required to have the basic technical knowledge and skills needed to operate a digital camera using manual settings and be familiar with photographic principles like exposure, iris, and shutter, as well as such digital concepts as white balance, image resolution, frame rate and screen ratio. Students who do not have such experience or skills should take a basic noncredit video editing and digital photography preparation course. Students may also be asked to submit a short digital video project for consideration. Contact the program lead faculty for details.

Students admitted to the program are expected to possess or have reliable access to a high-speed Internet connection including an email account outside of National University for course projects and assignments and a personal computer that meets the system requirements for professional digital video editing software currently available. (Always check the manufacturer’s web site for system requirements before purchasing software. Students may need to upgrade their computer or components to meet those specifications.) AVID Media Composer or Final Cut Pro editing software are used for the onsite editing and post-production course and students are expected to have a working knowledge of one of those software programs before taking MDC 652 and 689. All students must have access to a DVD rental service for films and television programs, and own an external FireWire 400 or 800 (IEEE 1394) hard drive for media storage. Students in the online/hybrid program must have access to a digital still camera, a digital video camera with manual controls, a tripod, a basic lighting kit, and nonlinear editing software prior to taking MDC 661, 651, and 652.

The following software is required to complete program course work: Microsoft Office (Word, Excel, PowerPoint, Internet Explorer) or comparable software capable of outputting PDF documents, a variety of standard browser plug-ins (i.e. JavaScript, Flash, QuickTime, etc.), an FTP client software (such as Fetch, CoreFTP, FileZilla, etc.), Adobe Photoshop Elements (or equivalent photo image processing program (MDC661 and MDC651), Apple QuickTime Pro and the above mentioned AVID Media or Composer, Final Cut Pro or a comparable digital video editing software package (MDC 662 and MDC 652), project management software like GanttProject or equivalent by Gorilla or EP (MDC 650, 683, 683P), and a script writing program such as CELTX, MovieMagic or Final Draft (MDC 680 and MDC 681). Students should plan to learn how to operate the software before taking related classes. For more information on any of the above requirements, contact the program lead faculty advisor.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critique the creative works of others using relevant critical models and professional vocabulary
- Evaluate professional and theoretical issues and processes pertaining to movies and aspects of digital filmmaking based on recognized industry models and standards
- Incorporate research from primary and secondary sources into sustained analyses and interpretations of screenplays, films and television programs
- Generate an original narrative screenplay that incorporates standard industry format and narrative structural elements
- Create an original screenplay or a documentary production treatment with a coherent structure and compelling storyline that engages and sustains the interest of a discriminating audience
- Generate the standard industry documentation required to effectively communicate and collaborate with a production team during the development, production, editing and distribution of a professional motion picture
- Generate original digital motion picture sequences using current cinematic theory and techniques to support the thematic concepts and story objectives of a script

- Construct digital motion picture sequences using current visual and sound editing techniques and theory that engage and sustain the interest of a discriminating audience
- Implement post-production workflow processes to capture, edit, finish and export digital video assets to appropriate distribution media
- Create an original short motion picture based on an original concept with a coherent storyline that is significant and complex enough to engage and sustain the interest of a discriminating audience and is suitable for distribution or submission to a film festival

### Degree Requirements

(22 courses; 81 quarter units)

To receive a Master of Fine Arts, students in the Digital Cinema program must complete at least 81 quarter units of graduate work, of which a minimum of 63 quarter units must be taken at National University. Students can transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution in the areas of communication, film, media studies, or production, provided the units have not been used to satisfy the requirements of an awarded degree. Program applicants wishing to transfer credits into the program should contact the program lead faculty advisor and arrange for an evaluation in advance. Refer to the section in the graduate admission requirements for additional specific information regarding application and matriculation.

#### First Year

(9 courses; 33.75 quarter units)

MDC 660	Narrative Structure in Film
MDC 680	Screenwriting <i>Corequisite: MDC 680P</i>
MDC 680P	Screenwriting I Practicum (2.25 quarter units) <i>Corequisite: MDC 680</i>
MDC 661	Cinematic Design
MDC 652	Digital Editing <i>Corequisite: MDC 652P</i>
MDC 652P	Digital Editing Practicum (2.25 quarter units) <i>Corequisite: MDC 652</i>
MDC 662	Sound Design <i>Prerequisite: MDC 652</i>
MDC 651	Digital Cinematography <i>Corequisite: MDC 651P, Prerequisite: MDC 661</i>
MDC 651P	Cinematography Practicum (2.25 quarter units) <i>Corequisite: MDC 651</i>

#### Second Year

(6 courses; 24.75 quarter units)

MDC 650	Producing Digital Cinema
MDC 653	Film Directing <i>Prerequisite: MDC 651, MDC 660, and MDC 662</i>
MDC 683	Production Management <i>Prerequisite: MDC 650, MDC 651, MDC 652, MDC 662, and MDC 653, Corequisite: MDC 683P, MDC 688, and MDC 689</i>
MDC 683P	Production Management Practicu (2.25 quarter units) <i>Four-week practicum only offered onsite and must be taken concurrently with MDC 688. Corequisite: MDC 683</i>
MDC 688	Production <i>Two-week workshop is only offered onsite and must be taken concurrently with MDC 683P. Corequisite: MDC 683, Prerequisite: MDC 651, and MDC 653</i>
MDC 689	Digital Cinema Post-Production <i>Two-week workshop is only offered onsite and recommended to be taken after MDC 688 and concurrently with MDC 683P. Corequisite: MDC 683, Prerequisite: MDC 650, and MDC 652</i>

The production sequence courses MDC 653 through MDC 688 must be taken in sequence. MDC 683P and MDC 688 and MDC 689 are only offered in an onsite residency at the National University Los Angeles Learning Center. This production residency is only offered in July of each academic year.

MDC 650 and MDC 688 may be taken separately by splitting the production residency into two visits. However the time to degree may be extended by up to 12 months. Contact the program Lead Faculty for more information.

#### Advanced Study

(2 course; 6.75 quarter units)

MDC 670	Producing Documentaries <i>Corequisite: MDC 670P, Prerequisite: MDC 650, and MDC 683</i>
MDC 670P	Documentary Practicum (2.25 quarter units) <i>Corequisite: MDC 670, Prerequisite: MDC 650, and MDC 683</i>
<b>or</b>	
MDC 681	Screenwriting II <i>Corequisite: MDC 681P, Prerequisite: MDC 680</i>
MDC 681P	Screenwriting II Practicum (2.25 quarter units) <i>Corequisite: MDC 681</i>

#### Program Electives

(1 course; 4.5 quarter units)

To complete the program, students may select one elective from any of the following courses or apply for an equivalency substitution with another graduate level course in media studies, media production, art or literary criticism, narrative or dramatic writing or theory. Contact program lead faculty for more information.

COM 610	Integrated Marketing Comm
ENG 665	Film Theory
ENG 666	Film History: The Silents
ENG 668	Film Genre Studies
ENG 667	Film History: American Film
ENG 669	World Film
ENG 685	Great Directors: American
ENG 686	Great Directors: International
SCR 650	Script Reading and Coverage

#### Thesis Sequence

(4 courses; 11.25 quarter units)

MDC 692	Thesis Development <i>Prerequisite: Satisfactory completion of all MDC core requirements.</i>
MDC 693	Thesis Production (2.25 quarter units) <i>Prerequisite: MDC 692</i>
MDC 694	Thesis Postproduction (2.25 quarter units) <i>Prerequisite: MDC 693</i>
MDC 695	Thesis Qualification (2.25 quarter units) <i>Prerequisite: MDC 694</i>

### ■ MASTER OF FINE ARTS IN PROFESSIONAL SCREENWRITING

Faculty Advisor: Bettina Moss; (323) 337-2016; [bmoss@nu.edu](mailto:bmoss@nu.edu)

The MFA in Professional Screenwriting program provides an in-depth study of the art of film, TV and transmedia writing wherein students learn to create compelling, well-structured stories with memorable characters. Students will also acquire a foundational understanding of how to market themselves and their work in the entertainment industry.

This program is hybrid, with the majority of classes delivered online. There is a two week required on-site residency in Los Angeles. Graduate candidates develop skills in advanced film, television and/or transmedia writing, the ability to critically evaluate film, television and/or transmedia scripts for practical and commercial outcomes and critical acumen in the area of media studies. Students may choose one of three tracks: screenwriting, television writing or transmedia writing. Students may take courses within the three areas and produce thesis proj-

ects in more than one area. Graduate candidates will complete the program with a minimum of two feature length screenplays and/or teleplays and/or transmedia projects, an aesthetic statement reflecting their artistic development and a marketing plan and pitch.

The program prepares graduates to work in a variety of capacities in the following fields: commercial, industrial or independent film, TV and transmedia writing and/or development, digital entertainment media and communication, and educational or instructional media programs. Course work covers screenwriting, television writing, transmedia writing (graphic novels, comics, web narratives, etc.), script analysis, script development, pitching and marketing as well as business aspects of entertainment programming. Internships and special extra-curricular electives are also available.

Upon completion of the Master of Fine Arts in Professional Screenwriting program, students will possess the knowledge and skills needed to write professional level scripts, to participate in the ongoing scholarly and critical discussions of issues in the field of film, TV and transmedia writing and to present their work to the entertainment industry.

### Application Requirements and Program Prerequisites

To be considered for admission, prospective students must meet the University graduate admission requirements listed in the catalog under Academic Information for Graduate Degrees. There is no separate application process for this program.

Students are expected to possess or have reliable access to a high-speed Internet connection including an email account outside of National University for course projects and assignments. Students need to have access to a DVD rental service or other reliable source for obtaining access to films, television shows and transmedia. Students must have personal access to a computer that meets the system requirements for viewing films and film clips online and other relevant media. The following software (at a minimum) is required: Microsoft Office (Word, Excel, PowerPoint, Internet Explorer) or comparable software capable of outputting PDF documents, and a variety of standard browser plug-ins (i.e. JavaScript, Flash, Shockwave, QuickTime, Real player etc.). Students must also have reliable access to a headset and microphone capable of supporting online course technological requirements. Students must also acquire and use approved softwares specific to the creation of film, television and transmedia scripts.

Students enrolling in the program are expected to have written and spoken proficiency in English at the graduate level. If in doubt about your English language skills please contact the faculty advisor for the program.

### Program Prerequisites

The Professional Screenwriting MFA is a rigorous, graduate level program. Prior to entry it is expected that students have acquired the knowledge and skills needed to write, evaluate and engage in critical thought at the graduate level. Students who do not have such experience or skills should take appropriate courses before entering the program. It is recommended (although not absolutely required) that students have had undergraduate courses or experience in one or more of the following areas: communication, film, television, English, literary or media studies, history, philosophy, psychology or sociology or other relevant areas. For more information contact the program lead faculty advisor.

### Faculty and Content Creators

Instructors bring the benefit of professional film and television experience to their teaching. Faculty, content creators and guest speakers include executives, agents, and producers who have worked in affiliation with DreamWorks (The Help, War Horse), Jerry Weintraub Productions (Oceans franchise, Karate Kid), Dan Lin Productions (Sherlock Holmes franchise), Lawrence Bender Productions (Inglorious Basterds, An Inconvenient Truth), Cruise/Wagner Productions (Mission Impossible franchise), Forward Pass (Heat, The Last of the Mohicans, Miami Vice), HBO, Showtime, PBS, Sony Pictures, ABC, CBS, NBC, Miramax, Disney, Warner Bros, Harpo Productions, and Fox Studios, among many others.

Faculty, content creators and guest speakers include Emmy, Humanitas and Nicholls Fellowship award-winning writers who have worked on such diverse projects, as Masters of the Universe, Little Fockers, Ray, Life As We Know It, Red Eye, Disturbia, Wall Street, Source Code, and series such as From Earth To The Moon, Band Of Brothers, Deadwood, The District, Nip/Tuck, Picket Fences, Law And Order, Camarena Drug Wars, among many others, and transmedia projects such as, The Adventures of Kavalier and Clay (graphic novel), and Todd, The Ugliest Kid on Earth.

### Program Delivery

The program is offered as a Hybrid, online/on-site low-residency program. The core courses, the electives and advanced courses with "studio practica" are delivered online. Students select three electives to be completed prior to taking the 2-course thesis sequence.

The low-residency component of the program consists of two advanced courses which are taken concurrently.

- SCR 670P - Development-Production Practicum (online for one month)
- SCR 675 The Business of Screenwriting (on site for two weeks at National University's Los Angeles campus)

The residency courses provide students with the opportunity to learn in a collaborative environment which introduces them to working professionals and to synthesize crucial elements of film, TV and transmedia writing, pitch presentations and how business is conducted in the entertainment community. The two residency courses are educational opportunities to create relationships with professors and industry professionals and learn about the entertainment industry by direct experience. They are not designed to serve as venues for sale of creative material, for obtaining agent or manager representation or to procure employment.

### Program Fees

All fees are financial aid eligible.

### Residency Fees

SCR675:	\$750
SCR670P:	\$250

Additional fees may apply to residency workshops including purchase of film or tour tickets, expendables, supplies and some meals. These can vary and are determined at the time of each on-site residency. Costs for accommodation and transportation are not included in the tuition or fees. Students are responsible for arranging their own accommodations and transportation as well as any meals not provided. For more information contact the program lead faculty advisor.

### Thesis Fees

SCR690:	\$350
SCR691:	\$350

These provide compensation for thesis committee members' time and attention to thesis projects.

### Thesis Sequence

To qualify for the Master of Fine Arts in Professional Screenwriting thesis sequence the successful MFA candidate must demonstrate her/his ability to work under the guidance of a thesis advisor(s), and have successfully completed all prior courses by maintaining a "B" average. Candidates who do not meet these criteria will be required to successfully repeat a course and/or complete an approved guided study or professional internship.

The Professional Screenwriting thesis portfolio is developed during a two-course sequence that may last from 4-12 months and students should anticipate the longer timeline. The courses are SCR 690 Screenwriting Thesis and SCR 691 Thesis Qualification & Review.

During SCR 690, a candidate works with a thesis advisor and/or committee to identify and develop their projects which may have previously been developed in advanced writing classes and/or develop new material. In addition, a rough draft of an aesthetic statement is crafted along with a rough draft of a marketing plan and pitch. After demonstrating successful progress of these components as determined by the thesis advisor and/or committee, the graduate candidate is cleared to take SCR 691.

In SCR691 the candidate continues work on thesis projects and ultimately submits them along with the aesthetic statement and marketing plan for evaluation. Based upon this review the candidate may be required to revise the portfolio and meet the standards for qualification review.

The thesis advisor and/or thesis committee determines whether or not the student has met or exceeded the qualification requirements for the Professional Screenwriting Master of Fine Arts. Both Thesis courses are IP (In Progress) grade eligible. A candidate must satisfactorily complete each thesis course within the maximum specified time period. A candidate who is unable to satisfactorily complete each course during the specified time period must retake the course. Any thesis

course that receives an unsatisfactory evaluation must be repeated.

For thesis portfolio students are expected to:

- a. independently develop, write and revise a minimum of two projects (i.e., screenplays and/or TV scripts and/or transmedia projects and/or critical paper)
- b. independently develop and write an aesthetic statement documenting the artistic choices that resulted in the student's thesis projects
- c. create a marketing plan and audio or video pitch to introduce the student's work to the entertainment community

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate critical points of view in the analyses and interpretation of films, television shows, screenplays and other entertainment content.
- Using films, television programs and transmedia IP's analyze the principles of writing in these varied media.
- Demonstrate critical reflection and viewpoint in evaluating the work of peers and others.
- Generate original and/or adapted narrative screenplays, TV Scripts or transmedia IP's employing the principles of these respective disciplines through various stages from introductory level to mastery.
- Articulate a critical understanding of self in relation to creativity and the influence of cultural and societal issues.
- Analyze and/or design and generate a marketing plan/pitch using the principles of entertainment industry marketing.
- Collaborate with others in achieving writing and/or pitching goals.

### Degree Requirements

(19 courses; 74.25 quarter units)

To receive a Master of Fine Arts, students in the Professional Screenwriting program must complete at least 74.25 quarter units of graduate work, of which a minimum of 60.75 quarter units must be taken at National University. With approval of lead faculty advisor, students may be able to transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution in the areas of screenwriting, communication, film or media studies, or other appropriate areas of study provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program lead faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and evaluation.

### Core Requirements

(7 courses; 27 quarter units)

SCR 650	Script Reading and Coverage
MDC 660	Narrative Structure in Film
MDC 680	Screenwriting <i>Corequisite: MDC 680P</i>
MDC 680P	Screenwriting I Practicum (2.25 quarter units) <i>Corequisite: MDC 680</i>
MDC 681	Screenwriting II <i>Corequisite: MDC 681P, Prerequisite: MDC 680</i>
MDC 681P	Screenwriting II Practicum (2.25 quarter units) <i>Corequisite: MDC 681</i>

Note: Practica are the Studio labs associated with 2 month courses.

Note: Practica are the Studio labs generally associated with writing workshops.

Choose one of the following courses:

ENG 667	Film History: American Film
ENG 668	Film Genre Studies
ENG 685	Great Directors: American
ENG 686	Great Directors: International
ENG 669	World Film

SCR 665*	Introduction to TV Writing
SCR 667	Marketing for Film & TV
SCR 668+	Introduction To Transmedia

\* Prerequisite for TV Writing Track. Option for Screenwriting Track.  
+ Prerequisite for Transmedia Writing Track. Option for Screenwriting Track.

### Advanced Core Requirements

(8 courses; 29.25 quarter units)

SCR 671	Character and Dialog
SCR 682	Adv Screenwriting Workshop <i>Prerequisite: MDC 681, MDC 681P</i>
SCR 682P	Adv Screenwriting Practicum (2.25 quarter units) <i>Prerequisite: MDC 681, MDC 681P, SCR 682</i>
SCR 670	Dev-Prod Writing <i>Prerequisite: MDC 681, MDC 681P</i>
SCR 670P	Development/Production Practic (2.25 quarter units) <i>Prerequisite: MDC 681, and SCR 670, MDC 681P, Corequisite: SCR 675</i>
SCR 675	The Business of Screenwriting <i>Prerequisite: MDC 681, MDC 681P, SCR 670, Corequisite: SCR 670P</i>

Choose one of the following sequences:

#### For Screenwriting:

SCR 683	Adaptation Workshop <i>Prerequisite: MDC 681, MDC 681P</i>
SCR 683P	Adaptation Practicum (2.25 quarter units) <i>Prerequisite: MDC 681, MDC 681P, SCR 683</i>

or

#### For Television Writing:

SCR 684	TV Pilot/Series Writing Worksh <i>Prerequisite: SCR 665 with a minimum grade of B</i>
SCR 684P	TV Writing Practicum (2.25 quarter units) <i>Prerequisite: SCR 665 with a minimum grade of B, SCR 684 with a minimum grade of B</i>

or

#### For Transmedia Writing:

SCR 685	Transmedia Writing Workshop <i>Prerequisite: SCR 668 with a minimum grade of B</i>
SCR 685P	Transmedia Writing Practicum (2.25 quarter units) <i>Prerequisite: SCR 685 with a minimum grade of B, SCR 668 with a minimum grade of B</i>

### Program Electives

(2 courses; 9 quarter units)

Students may not repeat a film studies course taken as a core requirement. In lieu of one elective students may take an internship or another special elective.

ENG 665	Film Theory
ENG 666	Film History: The Silents
ENG 667	Film History: American Film
ENG 668	Film Genre Studies
ENG 669	World Film
ENG 685	Great Directors: American
ENG 686	Great Directors: International
MCW 600	Pedagogy of Creative Writing
MCW 630	Seminar in Fiction
MCW 650	Seminar in Creative Nonfiction
MDC 650	Producing Digital Cinema
MDC 661	Cinematic Design

SCR 692 Graduate Internship  
*Prerequisite: SCR 675 with a minimum grade of B. SCR 670P with a minimum grade of B. For MFA in Professional Screenwriting students an internship can only be taken after onsite residency is completed. Recommended Preparation: MFA Students from other disciplines may be required to fulfill specific prerequisites prior to taking an internship. TBD by lead faculty for program.*

SCR 667 Marketing for Film & TV

SCR 689 Advanced Rewriting  
*Prerequisite: SCR 675*

SCR 693 Guided Study  
*Recommended Preparation: Students must demonstrate advanced skills and talent in order to be considered for participation.*

#### Thesis Sequence

(2 courses; 9 quarter units)

SCR 690 Screenwriting Thesis  
*Prerequisite: All other program courses.*

SCR 691 Thesis Qualification & Review  
*Prerequisite: SCR 690*

#### Special Electives (extra-curricular or substitute for elective)

(2 courses; 6.75 quarter units)

SCR 693 Guided Study  
*Recommended Preparation: Students must demonstrate advanced skills and talent in order to be considered for participation.*

SCR 693P Guided Study Practicum (2.25 quarter units)  
*Prerequisite: SCR 670P with a minimum grade of B, SCR 675 with a minimum grade of B*

### ■ MASTER OF PUBLIC ADMINISTRATION

*Faculty Advisor: Maryam Davodi-Far; (858) 642-8653; mdavodi-far@nu.edu*

The Master of Public Administration (MPA) is designed for students who want to pursue a career in government management at the federal, state, or local level and nonprofit management. The program is delivered and maintained through designed structured learning objectives within each class, all of which are foundational to the culminating research activity. The degree provides a wide range of skills in financial management, budgeting, quantitative methods, urban planning and redevelopment, personnel policies, politics, and grant writing. The focus on continuous improvement of written and oral communication skills through course requirements utilizing case studies, research papers and oral presentations further strengthens the skills developed and mastered. The requirement for the MPA student to complete research in a Capstone Project further bridges theory and practice.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Utilize critical thinking and research methods relevant to public administration in a multi-cultural environment.
- Evaluate the concept of new public management within a historical context.
- Analyze the impact of political influences on the public sector decision-making process.
- Analyze the division of power within American government as established by the U.S. Constitution.
- Describe, analyze, and evaluate the various approaches to managing government employees.
- Evaluate the effectiveness of public administration strategies for dealing with the media, community, and local government agencies.
- Evaluate the impact of public administration decisions on urban planning and redevelopment.
- Synthesize resources and approaches for developing grant proposals for community programs and services.

#### Degree Requirements

(12 courses; 54 quarter units)

To be awarded a Master of Public Administration, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

For students in the Bachelor of Public Administration/BS in Criminal Justice Administration/BS in Homeland Security and Emergency Management/BA Political Science/MPA transition program, the University will waive up to two public administration courses taken as part of the bachelor's degree (see Bachelor of Public Administration/BS in Criminal Justice Administration/BS in Homeland Security and Emergency Management/BA Political Science transition program), but these students must still meet the residency requirements for the MPA. The number of courses waived is dependent on the courses taken and grades earned in the transition program.

#### Core Requirements

(8 courses; 36 quarter units)

PAD 620 Foundations of Public Admin

PAD 622 Seminar in Urban Affairs

PAD 626 Public Personnel Policy

PAD 627 Quantitative Methods

PAD 628 Ethics

PAD 631 Urban Planning & Redevelopment

PAD 632 Finance Mgt & Grant Admin

PAD 644 MPA Project

#### Program Electives

(4 courses; 18 quarter units)

Students must complete four graduate courses from the following subject areas to meet the elective requirement: CJA, HUB, PAD, SCD, HRM, LED. Students who elect to have an area of specialization are not required to take additional elective requirements.

### ▲ Specialization in Human Resource Management

*Faculty Advisor: Bernadette Baun; (619) 563-7287; bbaum@nu.edu*

This area of specialization focuses on managing people, the human resource of the organization. Moving beyond common sense and good interpersonal skills, these courses provide students with the knowledge to recruit, select, train, evaluate and compensate employees. Students learn how changes in the workplace, such as governmental regulations, global competition, developing technologies and organizational transformations, influence the performance and productivity of workers. Technical knowledge and practical skills for dealing with a multicultural workforce offer students new ideas on leadership and effective tools for managing human resource.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Recognize, analyze, and effectively address ethical, legal and safety challenges faced in the workplace, and develop methods designed to prevent employer liability.

### Program Requirements

(4 courses; 18 quarter units)

HRM 660	Theory & Practice of HRM
HRM 630	Legal, Ethical & Safety Issues
HRM 637	Workforce Plan, Dev & Outsourc
HRM 667	Compensation & Benefits

### ▲ Specialization in Organizational Leadership

Faculty Advisor: Julia Buchanan; (619) 563-7289; [jbuchanan@nu.edu](mailto:jbuchanan@nu.edu)

The purpose of the area of Specialization in Organizational Leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, change oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not-for-profit organizations.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches for exercising leadership to promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of innovation, adaptation, and orchestrating conflict.
- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and global environment that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority, power, the practice of leadership, and utilize frameworks that serve organizational purposes.

### Program Requirements

(4 courses; 18 quarter units)

LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics

### ▲ Specialization in Public Finance

Faculty Advisor:

In lieu of general electives, a student can choose a specialization in public finance. This area of specialization provides an opportunity for students to acquire specific knowledge and develop practical skills in public finance. It particularly emphasizes the areas of public/private partnerships and contract bargaining and negotiation – critical areas in public administration today. The population served is that of public employees working in the areas of public finance and/or human resource management or those interested in working in these particular areas.

### Program Requirements

(4 courses; 18 quarter units)

PAD 640	Public Finance
PAD 641	Local Government Budgeting
PAD 642	Public-Private Financing
PAD 643	Contract Negotiations

### ■ MASTER OF SCIENCE IN JUVENILE JUSTICE

Faculty Advisor: Cynthia Sytsma; (619) 563-7255; [csytsma@nu.edu](mailto:csytsma@nu.edu)

The Master of Science in Juvenile Justice is designed to prepare candidates who want to work in education, law enforcement, probation, social work, etc. with the skills necessary to develop specific strategies and solutions that are practical and effective when working with juveniles with disabilities. Candidates will integrate

theory with practice to address the complex issues and challenges of the juvenile justice system to conduct in depth research, write behavior plans, develop a network with cooperating agencies and conduct interviews to better prepare themselves as professionals guiding youth with disabilities who have a delinquent and neglectful background.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop professional level written, verbal communication, and presentation skills.
- Assess critical thinking skills when designing interventions, functional behavioral assessments, and behavior management plans to mitigate youth behavioral problems.
- Create a reference guide of professionals from interacting and coordinating agencies to network with.
- Analyze the Individuals with Disabilities and Education Act, federal, and state law requirements in non-public and residential placements.
- Design interventions and best practices for students in the juvenile justice system that are culturally relevant.
- Design strategies for working with individuals with emotional/behavior problems.

### Degree Requirements

To receive a Master of Science in Juvenile Justice, students must complete at least 46.5 quarter units of graduate work. Students may transfer in up to 6 quarter units of graduate credit that may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience.

For students in the BS in Criminal Justice Administration/MSJJ transition program, the University will waive the graduate level course taken as part of the bachelor's degree (see BS in Criminal Justice Administration transition program) if the grade earned is a "B" or higher but no graduate units will be awarded.

### Core Requirements

(11 courses; 46.5 quarter units)

JJS 601 Field Experience & Orientation (1.5 quarter units)

CJA 665 Violence and Victimization

or

HUB 642 Theories of Behavior Change

EXC 639 Childhood and Adolescence

CJA 660 Drugs, Alcohol & Public Policy

JJS 602 Creating Alliances in Alt. Ed  
*Prerequisite: JJS 601, or concurrent enrollment*

JJS 603 Role of Profess in Alt Ed  
*Prerequisite: JJS 601, or concurrent enrollment*

JJS 604 Mgmt. of Behaviors  
*Prerequisite: JJS 601, or concurrent enrollment*

JJS 605 Prof Ethics in Juv Justice Sys  
*Prerequisite: JJS 601, or concurrent enrollment*

or

CJA 622 Professional Ethics in CJ

JJS 606 Delinquency & Gang Impact  
*Prerequisite: JJS 601, or concurrent enrollment*

JJS 625 Advanced Research Methods

JJS 690 Capstone Project  
*Recommended: Prior completion of: All 7 other core JJS classes.*

## CERTIFICATES

### ● UNDERGRADUATE CERTIFICATE IN ALTERNATIVE DISPUTE RESOLUTION

Faculty Advisor: Jack Hamlin; (858) 642-8405; jhamlin@nu.edu

The successful completion of the ADR certificate program will provide students with the necessary skills to become effective negotiators, mediators, and facilitators. These skills are in high demand in the business community, local, state, and federal governments, and neighborhood communities.

Students who wish to pursue a baccalaureate degree or a second baccalaureate degree can apply some or all the academic credits awarded in the certificate program toward that degree, assuming they meet the GPA and other requirements of that degree program.

Employment and volunteer opportunities exist for mediators in both the private and government sectors such as:

- Ombudsperson for a corporation or university
- Education, teaching and training
- Human Resources Departments
- U.S. Military
- State Mediation and Conciliation Service (SMCS)
- State of California Department of Fair Employment and Housing
- San Diego City Attorney's Office
- Federal Mediation and Conciliation Service
- Equal Employment Opportunity Commission (EEOC)
- Mediation and Arbitration Private Practice
- Small Claims Courts
- Nonprofit Organizations and Community Mediation Programs
- Restorative Justice Program

#### Certificate Requirements

(6 courses; 27 quarter units)

To receive a Certificate in Alternative Dispute Resolution, students must complete four courses for the major and two electives from the courses listed below.

ADR 400 Alternative Dispute Resolution

ADR 405 Negotiation Fundamentals

ADR 410 Facilitation Fundamentals

ADR 415 Mediation Fundamentals

#### Electives

Choose two of the following:

ADR 420 Communication & Conflict

ADR 425 Issues in Conflict Management

ADR 430 Ethics and Neutrality

### ● UNDERGRADUATE CERTIFICATE IN CRIMINAL JUSTICE ADMINISTRATION

Faculty Advisor: James Guffey; (209) 475-1475; jguffey@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission to a degree program are met.

This certificate provides students with an overview of some of the most important pillars of the criminal justice field. Students will gain insight into the principles, problems and solutions of supervision and management of personnel in the criminal justice agencies, the issues and theories surrounding the field of corrections, an understanding of the behavioral, psychological, sociological motivational factors of criminality and finally, a study of the intricacies within the judicial process of criminal justice.

#### Certificate Requirements

(4 courses; 18 quarter units)

CJA 446 CJ Management and Leadership

CJA 340 Corrections

CJA 431 Criminology

CJA 351 Courts & the Judicial Process





# **SCHOOL OF PROFESSIONAL STUDIES EXTENDED LEARNING**

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P 858.642.8600 • F 858.309.3511 • E [extlearning@nu.edu](mailto:extlearning@nu.edu)

Executive Director, Rick Hodge

- 302 Extended Learning**
- 303 Certificate and Course Offerings**
  - 303 Business & Professional**
  - 304 Education**
  - 307 Engineering & Technology**
  - 307 Healthcare**
- 308 National University Polytechnic Institute**
- 311 National University Community Research Institute**
- 312 Course Descriptions**



# EXTENDED LEARNING

Extended Learning meets the needs of National University's diverse community of adult learners through a variety of innovative programs. The courses facilitate professional and organizational development, giving adults the opportunity to meet the ongoing challenges of changing careers. Many certificates, certifications, and certification training programs are directly linked to increased earnings.

Many of these programs are approved for Continuing Education Units (CEUs) for various professional organizations. The CEU is a uniform measure of non-credit continuing education learning experience. One CEU is awarded for every 10 contact hours of participation. Employers and others who routinely examine and evaluate individual accomplishments generally accept this unit of measurement.

Extended Learning is an authorized provider of the Continuing Education Unit (CEU); benchmarked to International Association for Continuing Education and Training (IACET) standards. The IACET CEU is considered the hallmark of quality in continuing education and training. IACET CEUs enhance the credibility of professional development and training in disciplines, such as: education, engineering, accounting, legal, medical, real estate and others. Extended Learning, in collaboration with the School of Health and Human Services, is also approved as a continuing education provider (CEP) by the California Board of Registered Nursing. National University provides many administrative services to support professional development events and conferences. These may be held at National University's campuses throughout California, client locations, online, or by real-time web seminars. Extended Learning documents CEUs with a certificate and/or an official National University transcript. For more information regarding professional excellence with National University CEUs, please call (858) 642-8600.

## Extended Learning is a member of the following organizations:

- The International Association for Continuing Education and Training (IACET) as an Authorized Provider of the Continuing Education Unit (CEU)

National University, Extended Learning  
3570 Aero Court, San Diego, CA 92123-1711

Phone: 1 (800) NAT-UNIV, ext. 8600;  
San Diego: (858) 642-8600  
Fax: (858) 309-3511  
E-mail: extlearning@nu.edu  
Web: www.nu.edu/el

## Course Numbering System

### Credit Courses

Academic credit is granted for a limited number of programs. National University operates on a quarter system and all academic credit is awarded in quarter units. Students who plan to apply credits earned through Extended Learning to an academic degree program should consult with the appropriate institution and academic department to ascertain whether academic credits earned will transfer toward their proposed course of study. All courses to which academic credit is applied are 4.5 quarter units, unless otherwise specified. Extended Learning reserves the right to modify tuition and/or program rates at anytime.

### Course Levels and Numbers

The course numbering system described below is effective only for those Extended Learning courses offered after 1991:

1000X-1099X	Course for which lower division credit may be allowed toward degree requirements.
1100X-1199X	Course for which upper division credit may be allowed toward degree requirements.
1200X-1299X	Course for which graduate credit may be allowed toward degree requirements.

### Non-Credit Courses

There are two categories of Extended Learning non-credit courses.

1800X-1899X	These courses offer Continuing Education Units (CEUs), a nationally recognized measurement of a non-credit learning experience. Professional groups, employers, licensing agencies
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and others who routinely evaluate individual accomplishments and training generally accept this unit of measurement. One CEU is awarded for every 10 hours of participation.

1900X-1999X	These courses carry neither academic credit nor CEUs. They are offered in response to the growing need for quality educational opportunities for professional, career, personal growth or general cultural interest and knowledge.
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## Grading System for Academic Courses

Grade	Definition
A	Exceptional
B	Very Good
C	Satisfactory
D	Marginal Achievement, Below Standards
F	Failing
I	Incomplete

Grading System for Satisfactory/Unsatisfactory Continuing Education Unit Courses and Non-Credit Courses.

Students are assessed on their comprehension of course material through class attendance, participation, weekly assignments, and instructor evaluation. In most cases, students will receive a grade of Satisfactory (S)/Unsatisfactory (U).

## Financial Aid

Extended Learning students enrolled in non-academic courses are generally not eligible to receive federal financial aid, although alternative funding options are available. Students planning to enroll in non-credit courses may apply for an IT Skills Loan, Key Career Loan, or Sallie Mae Career Loan. These agencies are not affiliated with Extended Learning or National University. Additionally, Extended Learning provides guidance to students who are utilizing funds through Tuition Assistance, Veterans Assistance, and/or the Workforce Investment Act. Extended Learning does work with students who are seeking financial aid for certificate programs that grant academic credit. Financial aid is available through two methods: National University Tuition Assistance Loan and Federal Financial Aid through Title IV.

## Veterans Information

Students wishing to apply for programs administered by the Department of Veterans Affairs can obtain information on how to apply for their benefits by calling or visiting the National University Veterans Affairs Department located at 9388 Lightwave Avenue, San Diego, (858) 541-7970, or (800) 628-8648, ext. 7970.

## Tuition

Tuition for Extended Learning courses varies per program. Current tuition rates can be found under Course Descriptions.

## Fee Information

Application Fee for Extended Learning courses is \$25.

## Refund Policy

For courses that are four weeks long or more; students who drop a course prior to midnight of the ninth (9th) day of the session will receive a 100 percent refund. Students who withdraw from a course on the tenth (10th) calendar day of the session will receive a 50 percent refund. Students who withdraw from a course after the tenth (10th) calendar day will receive no refund. In all cases in which refunds are awarded, the cost of books and materials will be deducted.

For courses that are less than a month long: Students will be eligible for refunds based on the percentage remaining of the course or program. Students must contact Extended Learning to withdrawal from the course and to request a refund.

Refund	Percentage of Session/ Course Remaining
100%	75-100%
50%	67-74%
No Refund	0-66%

## For test preparation courses and courses offered in partnership with educational providers:

CSET and Teacher Development Self-Paced Test Preparation students are not eligible to receive a refund once the course has started and access has been granted.

Vesi Teacher Development Self-Paced Online or CD-ROM Courses are non-refundable.

### Course Drop and Withdrawal

Non-attendance or notifying an instructor does not constitute officially dropping or withdrawing from a course. Students must notify Extended Learning to request withdrawal from a course. The term “drop” means a student has dropped a course prior to midnight (PST) of the ninth (9th) day of the session, and no grade or notation appears on the student’s record.

For courses receiving a grade, the term “withdrawal” signifies that a student has withdrawn from a course after midnight (PST) of the ninth (9th) day of the session, and a “W” will appear on the student’s record. Students who withdraw after midnight (PST) of the twenty-first (21st) day of the session will receive a grade of “F” or “U,” as appropriate for the course. This is a permanent mark with no grade points assigned.

For courses receiving a grade, students may drop a course prior to midnight (PST) of the ninth (9th) day of the session, by contacting 1-866-NU-ACCESS (1-866-682-2237) or [scs@nu.edu](mailto:scs@nu.edu). For non-graded or CEU courses offered by Extended Learning, students must contact Extended Learning directly at 1-800-NAT-UNIV, ext. 8600 or via e-mail at [extlearning@nu.edu](mailto:extlearning@nu.edu). The student is responsible for ensuring that the drop or withdraw is reflected in their record appropriately by viewing their schedule on the student web portal.

### Payment Options

Payment can be made by either telephone, fax, or in person. Checks and any one of the following credit cards are accepted for your convenience: American Express, Discover, Visa, or MasterCard. Company invoicing is also available. Payment for Extended Learning courses is required before attending class.

### Attendance for Academic Courses

Please refer to the Attendance Procedures in the General Policies and Procedures section of the catalog.

### Corporate Training

Corporate training is available for businesses or school districts through Extended Learning. Classes can be held at a place of business or at a National University learning center. Each program can be tailored to target an organization’s unique challenges and in-house training programs can be customized to any specifications necessary. Through these courses, National University can provide the services to maximize training budgets.

## CERTIFICATE AND COURSE OFFERINGS

### BUSINESS & PROFESSIONAL

#### ● Certificate in Executive Business Management

*Faculty Advisor: Farhang Mossavar-Rahmani; (858) 642-8402; [fmossava@nu.edu](mailto:fmossava@nu.edu)*

The National University Certificate in Executive Business Management consists of five courses. Students can take all or any number of courses. However, certificates are awarded only after completion of all five courses. Each course is taken online in a period of four weeks. The National University Certificate in Executive Business Management is designed to provide managers and professionals with the latest information in major business disciplines, update their skills, and enable them to improve organizational effectiveness. It will familiarize managers with key concepts, tools and strategies required to be successful in this rapidly changing global business environment and provide an opportunity to ‘sample’ the perspectives and experiences of an MBA program. It is designed for managers and supervisors who wish to update their business skills and learn about important changes and new practices in the business world or technical professionals whose experience is primarily in one area who are looking forward to advancing their careers.

### Case Studies

Using case studies, students learn the underlying concepts and theories of business practice. Through their research, students develop analytical methods and problem-solving techniques while working collaboratively with other students, and refine the skills and knowledge required to be a successful manager.

### Program Learning Outcomes

Upon completion of the Certificate in Executive Business Management graduates should have better understanding of:

- Business principles and theories needed for decision-making in a global business environment;
- The concept of planned, managed organizational change through proven organizational development techniques;
- How the International Financial System functions and the rationale underlying the existing international monetary system;
- The impact of exchange rate fluctuations on global pricing of products and services;
- The long-term impact of strategic and tactical decisions.

### Certificate Requirements

EBX 1902X	Strategic Issues in Global Finance and Trade
EBX 1904X	Leadership in the 21st Century
EBX 1906X	Strategic Management
EBX 1908X	Global Business
EBX 1910X	Trends in Applied Organizational Development

#### ● Paralegal Specialist Certificates

*Director: Bryan Hance; (310) 662-2115; [bhance@nu.edu](mailto:bhance@nu.edu)*

*Faculty Advisor: Nancy Golden; (310) 662-2115; [nancy.golden@natuniv.edu](mailto:nancy.golden@natuniv.edu)*

The Paralegal Specialist certificates require the completion of 90 quarter units of coursework and include 8 legal specialty courses. A minimum of 27 quarter units of general education course work (across at least three disciplines, such as social science, natural science, mathematics, humanities, foreign language, and English) are required by the American Bar Association. All lower division general education courses must be completed at National University or another regionally-accredited institution. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the Certificate.

Note: Paralegals may not provide legal services to the public, except as permitted by law.

#### ▲ Corporations Specialization

The Paralegal specialization in Corporations is intended to introduce students to the legal skills required to serve the community effectively and ethically in a corporate law practice. The Corporations Specialization covers case analysis, legal research, and documents for the formation, management, and dissolution of corporate entities. The certificate is offered at the Los Angeles and Woodland Hills campuses. CEU courses may not be transferred to the Associate of Science or Bachelor of Science in Paralegal Studies degree programs.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss broad legal principles from the primary areas of law, such as Torts, Contracts, Real Property, and others, and explain the definitions of certain basic legal terms and phrases.
- Conduct legal research using manual and computer-assisted methods.
- Demonstrate the basic process of legal reasoning and analysis.
- Describe the paralegal’s role in a corporate law practice.
- Recognize how broad ethical principles apply to paralegals in a corporate law practice.

Students may earn more than one Paralegal Specialist Certificate. Generally, any course completed for any one Paralegal Specialist Certificate need not be repeated and will apply towards other Paralegal Specialist Certificates. Each certificate is tailored to include training in substantive legal analysis, drafting legal documents, and understanding procedural matters.

### Requirements for the Certificate

(8 courses; 22.5 quarter units and 13.5 CEUs)

PLX 1000X	Torts (4.5 quarter units)
PLX 1001X	Leg Res Wrtg-Briefing/Analysis (4.5 quarter units)
PLX 1002X	Contracts (4.5 quarter units)
PLX 1003X	Leg Res Wrtg-Legal Memo (4.5 quarter units)
PLX 1804X	Foundations of Property Law(4.5 CEUs)
PLX 1005X	Computers & the Law (4.5 quarter units)
PLX 1806X	Legal Writing Project (4.5 CEUs) <i>Prerequisite: PLX 1001X and PLX 1003X</i>
PLX 1808X	Essentials of Corporate Law (4.5 CEUs)

### ▲ Criminal Law Specialization

The Paralegal Specialist Certificate in Criminal Law is intended to introduce students to the legal skills required to serve the community effectively and ethically in a criminal law practice. The Criminal Law Specialization covers case analysis, legal research, drafting pleadings, motion and discovery documents, evidence, and preparation of cases for trial. The program provides an academic and practical education of uncompromising quality. The certificate is offered at the Los Angeles and Woodland Hills campuses.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss broad legal principles from the primary areas of law, such as Torts, Contracts, Real Property, and others, and explain the definitions of certain basic legal terms and phrases.
- Conduct legal research using manual and computer-assisted methods.
- Demonstrate the basic process of legal reasoning and analysis.
- Describe the paralegal's role in a criminal law practice.
- Recognize how broad ethical principles apply to paralegals in a criminal law practice.

Students may earn more than one Paralegal Specialist Certificate. Generally, any course completed for any one Paralegal Specialist Certificate need not be repeated and will apply towards other Paralegal Specialist Certificates. Each certificate is tailored to include training in substantive legal analysis, drafting legal documents, and understanding procedural matters.

### Requirements for the Certificate

(8 courses; 22.5 quarter units and 13.5 CEUs)

PLX 1000X	Torts (4.5 quarter units)
PLX 1001X	Leg Res Wrtg-Briefing/Analysis (4.5 quarter units)
PLX 1002X	Contracts (4.5 quarter units)
PLX 1003X	Leg Res Wrtg-Legal Memo (4.5 quarter units)
PLX 1804X	Foundations of Property Law (4.5 CEUs)
PLX 1005X	Computers & the Law (4.5 quarter units)
PLX 1806X	Legal Writing Project (4.5 CEUs) <i>Prerequisite: PLX 1001X and PLX 1003X</i>
PLX 1809X	Essentials of Criminal Law (4.5 CEUs)

### ▲ Litigation Specialization

The Paralegal Specialist Certificate in Litigation is intended to introduce students to the legal skills required to serve the community effectively and ethically in a litigation practice. The Litigation Specialization covers case analysis, legal research, drafting pleadings, motion and discovery documents, evidence, and preparation of cases for trial. The program provides an academic and practical education of uncompromising quality. The certificate is offered at the Los Angeles and Woodland Hills campuses.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss broad legal principles from the primary areas of law, such as Torts, Contracts, Real Property, and others, and explain the definitions of certain basic legal terms and phrases.
- Conduct legal research using manual and computer-assisted methods.
- Demonstrate the basic process of legal reasoning and analysis.
- Explain the litigation process and the paralegal's role in pre-trial, trial, and post-trial proceedings.
- Recognize how broad ethical principles apply to paralegals in a litigation practice.

Students may earn more than one Paralegal Specialist Certificate. Generally, any course completed for any one Paralegal Specialist Certificate need not be repeated and will apply towards other Paralegal Specialist Certificates. Each certificate is tailored to include training in substantive legal analysis, drafting legal documents, and understanding procedural matters.

### Requirements for the Certificate

(8 courses; 22.5 quarter units and 13.5 CEUs)

PLX 1000X	Torts (4.5 quarter units)
PLX 1001X	Leg Res Wrtg-Briefing/Analysis (4.5 quarter units)
PLX 1002X	Contracts (4.5 quarter units)
PLX 1003X	Leg Res Wrtg-Legal Memo (4.5 quarter units)
PLX 1804X	Foundations of Property Law (4.5 CEUs)
PLX 1005X	Computers & the Law (4.5 quarter units)
PLX 1806X	Legal Writing Project (4.5 CEUs) <i>Prerequisite: PLX 1001X and PLX 1003X</i>
PLX 1807X	Litigation Essentials (4.5 CEUs)

## EDUCATION CERTIFICATES

### ● Autism Education Certificate Program

*Faculty Advisor: KayDee Caywood; (310) 662-2145; kcaywood@nu.edu*

Courses are taken for continuing education units (CEUs). CEU courses may not be transferred to the Master of Arts in Teaching with a Specialization in Autism. This program is offered in cohorts only.

This CTC-approved certificate for the Education Specialist - Added Authorization is designed for those interested in finding out more about working with and teaching those that fall within the Autism Spectrum Disorder. The four course sequence is designed to provide the student with an orientation to the terms and the characteristics involved, assessment and behavior management interaction strategies, a variety of teaching strategies, and train necessary skills in collaborating with parents and families of those in the spectrum. It is required that students complete Introduction to Students with Autism Spectrum Disorders first in the sequence. Each course is two months long. A Bachelor's degree is strongly recommended but not required for this program.

The certificate program consists of the following four courses:  
(4 courses; 16 CEUs)

AEX 1801X	Intro Students w/Autism Spect
AEX 1802X	Assess & Behavioral App in Aut. <i>Prerequisite: AEX 1801X</i>
AEX 1803X	Intervention/Instr. w/Aut <i>Prerequisite: AEX 1801X</i>
AEX 1804X	Autism Collab w/Parents & Fam. <i>Prerequisite: AEX 1801X</i>

### Education Courses

#### Academic Courses

HEDX 1101X	Intro to Health Ed: K-12 (4.5 quarter units)
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(This course satisfies the CTC health education requirements for a Professional Clear under the Ryan Credential. This course does not grant graduate credit and cannot be used as an elective in a graduate program. This course may not be used in place of HED 602 in programs under the School of Education.)

EDX 1201X Computer Tech. in Classroom (4.5 quarter units)

IHD 1203X Facilitating Outcomes (4.5 quarter units)

NBCX 1201X NBCT Prep (4.5 quarter units)

### ● Career Technical Education Credential

Faculty Advisor: Jo Birdsell; (858) 642-8365; jbirdsell@nu.edu

The Career Technical Education Credential program prepares students for a technical career path. Qualified teachers are needed who will teach the knowledge, skills and dispositions necessary for obtaining and retaining jobs. These teachers need an understanding of teaching and the pedagogical skills necessary for training workers in technical fields for a market requiring sensitivity to diversity, knowledge of skills and the practical application of those skills in the workplace. In order to train teachers for teaching students, choosing a technical education path, the State of California has developed professional standards for Career Technical Education. This program has been created based upon these standards. As a result, candidates will be prepared to use research-based pedagogical skills in the classroom by using the Career Technical Education standards and frameworks. These curriculum standards bolster California's standards-based education system by incorporating cutting-edge technology about career options, technology and skills required for success in adult life.

### Program Requirements

The National University teacher preparation program for Career Technical Education is a four-month, five-course intensive program with a sequence of courses that includes supervised teaching that spans the entire program. If candidates are already teaching in a technical/vocational classroom, the supervised teaching will take place in their own classroom under the guidance and support of a University Supervisor and Site Mentor. Candidates who do not have their own classroom will need to secure employment in their subject specialty. All candidates will complete four months of supervised teaching with a minimum of 20 hours per week. The University Supervisor will be responsible for guiding and evaluating the candidate. The Site Mentor will guide candidates, answer questions and provide encouragement and feedback.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop the knowledge, skills and dispositions necessary for effective teaching.
- Develop a positive environment conducive to learning.
- Use knowledge of the diversity of language and culture in California to create of learning environment where all students can succeed.
- Use learning theory as the foundation of curriculum development and instructional practice.
- Use assessment to differentiate instruction to meet the needs of all students including, but not limited to English language learners (ELL), special needs, gifted students, the top 1/3 of the class, the middle 1/3 of the class and the bottom 1/3 of the class.
- Demonstrate ethical behaviors in the classroom, in the school and in the community.
- Describe the legal issues that impact the teaching profession including FERPA requirements and mandatory reporting.
- Create a list of school and community resources to meet the needs of students who struggle with issues of chemical dependency, abuse, violence, homelessness, and other issues impacting the quality of life.
- Describe and demonstrate OSHA safety requirements.
- Demonstrate effective application of the California Teacher Performance Expectations.
- Use the CTE California Standards and Frameworks to provide content knowledge to students concerning their chosen career path.
- Use information processing to create lesson plans that meet the unique needs of the individual student.

- Demonstrate written and oral skills in devising and delivering lessons.
- Design lessons and units that show students are engaged in developmentally appropriate learning

### Credential Requirements

#### Requirements for the Three Year Preliminary CTE Credential

Individuals must satisfy all of the following requirements:

1. Three years of work experience directly related to each industry sector to be named on the credential. One year equals a maximum of 1000 clock hours and the experience may be full-time or part-time, paid or unpaid. See Work Experience below for additional information regarding the experience requirement.
2. High school completion by one of the following methods:
  - a. Possess a high school diploma
  - b. Possess a diploma based on passage of the GED Test
  - c. Possess the foreign equivalent of a high school diploma
3. Verification, signed by the Commission-approved program sponsor, that the applicant has been apprised of the requirements for both the preliminary and clear credentials, including the requirements of the program of personalized preparation.
4. Completed application (Form 41-4)
5. Completed Live Scan receipt (41-LS), verifying fingerprints have been taken and fees have been paid, unless fingerprint clearance is already on file at CTC.
6. Application processing fee
7. Recommendation by a Commission-approved CTE program sponsor

### Authorization

The Preliminary CTE Teaching Credential authorizes the holder to teach in the subject or subjects named on the credential in grades 12 and below and in classes organized primarily for adults, in career technical, trade or vocational courses.

The preliminary credential is valid for three years.

Available subjects, also known as industry sectors, are as follows:

- Agriculture and Natural Resources
- Arts, Media, and Entertainment
- Building Trades and Construction
- Education, Child Development, and Family Services
- Energy and Utilities
- Engineering and Design
- Fashion and Interior Design
- Finance and Business
- Health Science and Medical Technology
- Hospitality, Tourism, and Recreation
- Information Technology
- Manufacturing and Product Development
- Marketing, Sales, and Service
- Public Service
- Transportation

### Work Experience

Verification of work experience means written confirmation of the applicant's qualifying experience, signed by the applicant's past or present employer(s) on company letterhead that attests to and/or includes all of the following:

1. Employer's name, address, and telephone number
2. The working relationship of the person signing the verification to the applicant
3. Beginning and ending dates of employment
4. Complete description of duties
5. A statement as to whether or not the employment was full-time (If employment was less than full-time, an accounting of the number of hours the

applicant was employed is required.) If the applicant was self-employed or if the applicant's experience was vocational, verification shall include a statement, signed by the applicant under penalty of perjury, detailing the information described in 1–5 above, and must be further substantiated, in writing, by other person(s) having first-hand knowledge of the applicant's self-employment or avocation, such as the applicant's accountant, major supplier of goods, or major user of goods or services. At least one year of the required work experience must be within the last five years, or two years within the last ten years, immediately preceding the issuance of the preliminary credential.

Teaching experience is not generally accepted as work experience; however, for the purpose of meeting the residency requirement, any of the following, or a combination of the following, may be cumulated to total 1000 clock hours:

- Work experience
- College-level related course work
- Non-college related course work
- Occupational internship
- Vocational teaching experience

Completion of forty-eight (48) semester units of postsecondary vocational training related to the industry sector(s) named on the credential may be substituted for a maximum of two of the three years of required work experience. The course work must be verified by official transcript and may be made on a pro rata basis up to the two-year maximum.

#### Period of Validity

The preliminary credential is valid for three years. The clear credential is valid for five years and must be renewed online every five year renewal cycle. Once issued, there are no additional academic requirements to renew the clear credential.

#### Requirements for the Five-Year Clear Credential

Individuals must satisfy all of the following requirements:

1. Possess a valid California Preliminary CTE Teaching Credential
2. Commission Approved program of personalized preparation program that includes training in Specially Designed Academic Instruction Delivered in English (SDAIE):
3. Completion of all seven requirement courses for the CTE program listed above.
4. U.S. Constitution Requirement
5. Verify two years of successful teaching on the basis of the preliminary CTE Teaching Credential in the industry sector/s listed on the credential
6. Application and Processing Fee

#### Authorization

The Clear CTE Teaching Credential authorizes the holder to teach in the subject or subjects named on the credential in grades 12 and below and in classes organized primarily for adults, including services to English learners in Specially Designed Academic Instruction Delivered in English (SDAIE) in career technical, trade or vocational courses. The clear credential is valid for five years and must be renewed online every five year renewal cycle. Once issued, there are no additional academic requirements to renew the clear credential.

#### Required Courses

(7 courses; 31.5 quarter units)

Designated Subjects Career Technical Education (CTE) Teaching Credentials may be issued to individuals who meet the requirement for the preliminary credentials outlined below.

CTEX 1100X	Orientation to CTE <i>Prerequisite: Certificate of Clearance Application, Verification of a negative TB test, Admission into the CTE Program, Supervised Teaching Placement</i>
CTEX 1111X	Adolescent/Adult Ed Psych <i>Prerequisite: Teacher Credential Certificate of Clearance Application, Verification of a negative TB test, Admission into CTE Program, Supervised Teaching Location</i>

CTEX 1125X	Instruction/Management
CTEX 1126X	Diverse Classroom <i>Prerequisite: CTEX 1100x, CTEX 1111x, CTEX 1125x</i>
CTEX 1199X	Supervised Teaching <i>Corequisite: CTEX 1100x, CTEX 1111x, CTEX 1125x, CTEX 1126x, Recommended Preparation: Please Note: The candidate must obtain a certificate of clearance from the Commission on Teacher Credentialing (CTC) before entering the clinical practice school.</i>
EDX 1201X	Computer Tech in Classroom
HEDX 1101X	Intro Health Ed: K-12

Designated Subjects Career Technical Education (CTE) Teaching Credentials may be issued to individuals who meet the requirement for the preliminary credential as outlined below.

#### CSET Preparation Courses

*Program Information: (858) 642-8600; extlearning@nu.edu*

These courses give a comprehensive overview of all subject matter content needed to pass the California Subject Examinations for Teachers (CSET). All courses have been created and will be facilitated by credentialed, subject-matter experts. CSET Preparation Courses are self-paced and instructor led.

(The following courses do not grant credit)

EDX 1905X	CSET English Prep Course
EDX 1912X	CSET Science Prep Course
EDX 1913X	CSET Social Science Prep Course
EDX 1915X	CSET Math Prep Subtest I: Algebra and Number Theory
EDX 1916X	CSET Math Prep Subtest II: Geometry, Probability and Statistics
EDX 1918X	CSET Math Prep Subtest III: Calculus and History of Math
EDX 1920X	CSET Mult. Subject Prep Course

#### Test Preparation Courses

(The following courses do not grant credit)

EDX 1938X	U.S. Constitution Prep Course
EDX 1940X	RICA Prep Course

#### Teacher Development Self-Paced Online Courses

Self-paced Online Courses are designed to satisfy teacher CEU requirements for career advancement. CD ROM versions of all courses are available for students who do not have access to high-speed internet.

TEDX 1823X	ADD: Info and Interventions (4 CEUs)
TEDX 1824X	Advanced Classroom Mgt (3 CEUs)
TEDX 1825X	Educational Assessment (3 CEUs)
TEDX 1826X	Traumatized Child (3 CEUs)
TEDX 1827X	Teaching Diversity (3 CEUs)
TEDX 1844X	Behavior is Language (4 CEUs)
TEDX 1845X	Violence in Schools (3 CEUs)
TEDX 1846X	Learning Disabilities (4 CEUs)
TEDX 1848X	Drugs & Alcohol in School (3 CEUs)
TEDX 1849X	Autism & Asperger's Disorders (3 CEUs)
TEDX 1868X	Inclusion (3 CEUs)
TEDX 1871X	Understanding Aggression (4 CEUs)
TEDX 1872X	Talented & Gifted (3 CEUs)
TEDX 1879X	Working with Abused and Neglected Children (3 CEUs)
TEDX 1880X	Infant and Toddler Mental Health (3 CEUs)
TEDX 1881X	Reading Fundamentals #1 (3 CEUs)

TEDX 1882X	Reading Fundamentals #2 (3 CEUs)
TEDX 1883X	Reading Fundamentals #3 (4 CEUs)
TEDX 1884X	Early Childhood: Fmly-Centrd Srvc (3 CEUs)
TEDX 1885X	Early Childhood: Observtn & Asmnt (4 CEUs)
TEDX 1886X	Early Childhood Program Planning (4 CEUs)
TEDX 1887X	Early Chldhd: Tpcl & Atypcl Dvlpmnt (4 CEUs)
TEDX 1888X	Hrsmnt, Blyng & Cyber-Intmtdn (3 CEUs)
TEDX 1889X	Teaching Math Conceptually (3 CEUs)
TEDX 1890X	Why DI? Intro to Differentiated Instruction (4 CEUs)

## ENGINEERING & TECHNOLOGY CERTIFICATES

### ● Enterprise Architecture Certificate Program

*Program Advisor: Shekar Viswanathan; (858) 309-3416; sviswana@nu.edu*

The Federal Government requires Enterprise Architecture certifications in Federal Enterprise Architecture Framework (FEAF) and/or Department of Defense Architecture Framework (DoDAF). National University in conjunction with the Federal Enterprise Architecture Certification (FEAC) Institute provides training and education leading to certification in DoDAF and FEAF. National University offers students the opportunity to earn either continuing education units (CEU) or graduate academic credit. Students who take the classes for graduate credit can apply the units to the Master of Science in Engineering Management or Systems Engineering degree offered through the School of Engineering, Technology and Media. For information on degree requirements refer to the School of Engineering, Technology and Media section of this catalog.

The DoDAF program offers experience with the products for the integrated architecture views including:

- Global Information Grid
- Network Centric Warfare
- Levels of Information Systems Interoperability
- Core Architecture Data Model

The FEA(F) program addresses:

- Concepts: regulations, concepts, theories, principles, methodology, and views
- Planning: creating Enterprise Architecture understanding and awareness
- Implementation: internal implementation, marketing, selling, and managing change
- Integration of: business, data, application, and technology
- Practicum: Project Development and Presentation, Program Certification Exam

### ● Department of Defense Architecture Framework (DODAF) Certification Program

Graduate credit: (4 courses; 18 quarter units; 1 course; 4 CEUs)

DFX 1201X	Architecture Framework Basics
DFX 1202X	Core and Supporting Products
DFX 1203X	Architecture Planning
DFX 1204X	Architecture Modeling
DFX 1810X	Architecture Practicum (CEUs only)

### ● Federal Enterprise Architecture (Framework) [FEA(F)] Certification Program

Graduate credit: (4 courses; 18 quarter units; 1 course; 4 CEUs)

EAX 1201X	Architecture Concepts
EAX 1202X	Architecture Planning
EAX 1203X	Architecture Implementation
EAX 1204X	Architecture Integration
EAX 1810X	Architecture Practicum (CEUs only)

## HEALTHCARE

### ● Medical Billing and Coding Certificate

*Program Information: (858) 642-8600; extlearning@nu.edu*

The online Medical Billing and Coding Program teaches students how to navigate the complex world of medical records and health information as a medical insurance billing and coding specialist. The Medical Billing and Coding Program qualifies graduates for an entry-level career in this growing healthcare field.

Students who complete the program will learn human anatomy and physiology, medical terminology, diagnostic and procedural coding, compliance issues with electronic claims, confidentiality with medical records, billing requirements for commercial insurance, and ethical standards for the collection of medical information. Graduates will also gain the knowledge of complex coding technologies such as ICD-9, ICD-10 and CPT, HCPCS, Level II codes, as well as the basic Medicare, Medi-Cal, TRICARE, CHAMPVA, BlueCross/BlueShield, HIPAA, and Worker's Compensation.

Upon program completion, students will be prepared to sit for the American Health Information Management Association (AHIMA) Certified Coding Associate (CCA) exam.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Classify the organ systems of the body and demonstrate a strong knowledge of medical terminology.
- Demonstrate orally and in writing the correct use of diagnostic and procedural coding.
- Differentiate government paid healthcare services and insurance programs.
- Use professional standards in medical billing and coding practice and maintain a commitment to continual learning.
- Demonstrate orally and in writing industry practice and electronic claims with compliance issues.
- Demonstrate the ability to correctly use and understand the concepts and techniques for HCFA-1500 form.
- Apply professional standards in confidentiality of medical records.
- Demonstrate techniques and use complex technologies in an appropriate manner; CPT-4, ICD-9, and ICD 10 coding, HCFA-1500, UB92 and the billing requirements for commercial insurance, Blue Cross/Blue Shield, TRICARE/CHAMPUS, Medic-Cal and Workers' Compensation, fields needed for insurance and various billing requirements for the different programs.
- Perform in ethically sensitive ways regarding regulations collecting from insurance companies.

### Certificate Requirements

The certificate program consists of the following six courses (6 courses)

MEDX 1920X	Intro to Information Technology
MEDX 1930X	Health Prof. Legal/Ethical Issues
MEDX 1940X	Medical Terminology
MEDX 1950X	Medical Coding/Billing I <i>Prerequisite: MEDX 1940X</i>
MEDX 1960X	Medical Coding/Billing II <i>Prerequisite: MEDX 1950X</i>
MEDX 1970X	Medical Coding/Billing III <i>Prerequisite: MEDX 1960X</i>



# NATIONAL UNIVERSITY POLYTECHNIC INSTITUTE

General Manager: Bill Hyder; (858) 309-3501; whyder@nu.edu

National University Polytechnic Institute (NUPI), within National University Extended Learning, offers a certificate program in Marine Technology and Construction Management that enables you to build and strengthen your capabilities. NUPI's four-week long course format offers convenient education and training in the rapidly expanding field of marine technology. NUPI facilities are located in San Diego and accelerated by design; NUPI's programs let you earn your certificate quickly. With classes taught by experienced faculty utilizing state-of-the-art classroom and laboratory equipment, you will continue to build and strengthen the skills you need for professional growth or to begin a new career.

NUPI programs include:

- Professional Certificate in Marine Technology
- Certificate in Construction Management

All students are responsible for following all policies and procedures as outlined in the National University General Catalog including undergraduate admission requirements.

## ● Emergency Medical Technician Certificate of Completion

Program Director: Francisco Martinez; (858) 309-3514; fmartinez@nu.edu

This certificate of completion provides entry-level basic knowledge, essential skills, and an understanding of emergency medical assistance in outpatient and emergency settings. Students will be prepared to respond in various types of emergencies that require urgent medical attention to assess emergency situations, provide care that can save a life, and transport patients to a hospital. Students will learn how to respond quickly to high level emergencies such as motor vehicle accident, heart attack, near drowning, childbirth, poisoning, and life threatening injury. Graduates will have met the national guidelines for all areas of their didactic and clinical requirements. Students will comply with all levels of legal, regulatory, and ethical requirements for EMT's.

This Program meets the requirements of the U.S. Department of Transportation National EMS Education Standards (NEMSES) and California State Regulations, Title 22. On successful completion of this certificate the graduate is eligible to complete the NREMT-B exam. Successful completion will allow the individual to apply for their state Emergency Medical Technician (EMT) card and perform entry-level EMT skills as a member of technical rescue teams/squads or as part of an allied service such as a fire or police department. EMT certificates are issued by county/local Emergency Medical Services (EMS) agencies. Contact your agency for specific requirements.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Conduct trauma and medical assessment and proper treatment of persons afflicted with medical and trauma conditions requiring advanced medical intervention following currently approved EMT practices.

## Admission Requirements

1. Age  
An applicant must be 18 years or older on or before his/her graduation. Some state and federal agencies require that an individual be 18 years of age to be qualified for licensure or certification.
2. High School Diploma / GED  
Applicants must have a high school diploma from a regionally accredited high school with a high school GPA of 2.0 or equivalent GED prior to starting the program.

## Additional Fees

After successfully completing this course, to gain licensure in the state of California, the student is responsible for National Registry test application fees, licensure fees, any additional fees required, and any travel expenses necessary to travel to out of area testing, clinical, or field internships. Based on an assessment by administration in September 2012, these fees are offered in ranges of:

Didactic Uniform	\$75 and up
National Registry Exam	\$70
Student Tuition Recovery Fund (STRF)	\$2.50 per \$1,000
California State Licensure	\$75 and up

(For those registering in Central California, please check with your local agency)

## Prerequisites

Healthcare Provider Level CPR certification is required prior to the first day of class. Students with criminal background issues (any felony and some misdemeanors) should speak with the certifying authority prior to enrollment. State public safety regulations prohibit certification of individuals who have prior criminal convictions.

Clinical and Ambulance companies may require the following immunizations in order to conduct their hospital and ambulance clinical:

- Two-step Mantoux PPD tuberculosis test which, if positive, follow with negative chest x-ray and Health Department's guidelines for treatment.
- Measles (rubella and rubeola) and Mumps: by a positive titer, physician's diagnosis of disease; or two doses of vaccine.
- Immunizations: Tdap given in 2005 or later (tetanus, diphtheria, acellular pertussis).
- Varicella Immunity: by a titer, physician's diagnosis of disease; or two doses of vaccine.
- Hepatitis B vaccination or waiver declining.

## Recommended Preparation

Since this is an accelerated program, students are recommended to complete coursework in advanced first aid or emergency medical responder prior to enrolling. Work experience at the first responder level is helpful.

## Program Requirements

Course Number	Clock Hours
EMTX 1081X	84
EMTX 1082X	84 + 24 hours of clinical ride along
<b>TOTAL:</b>	<b>192</b>

To receive a certificate of completion, students must complete the program with a grade of at least 80 percent and complete 24-hours of clinical ride along. Student account must be paid in full and all program requirements must be met in order to receive the Emergency Medical Technician Certificate of Completion.

## Requirements for Certificate

(2 courses; 6 quarter units)

EMTX 1081X	EMT I Basic (3 quarter units) <i>Prerequisite: BLS HCP (CPR) Cert</i>
EMTX 1082X	EMT II Basic (3 quarter units) <i>Prerequisite: EMTX 1081X with a minimum grade of B</i>

## ● Professional Certificate in Marine Technology

General Manager: Bill Hyder; (858) 309-3501; whyder@nu.edu

The Professional Certificate in Marine Technology is a commercial diving program that provides the student with the technical diving skills needed for entry into the offshore and inland diving industry as marine technicians and commercial divers. The program is a fast paced immersion into surface supply and SCUBA diving, and includes air and helium-oxygen elements, diving safety, professional work habits, underwater work skills, and diving science needed to become a commercial diver. Students will develop problem solving, team building, and communication skills appropriate with this program.

After completion of the core training, students will select one of the following concentrations:

## ▲ Diver Medic Technician

The Diver Medic concentration prepares students in the medical aspects of diving and advanced training in hyperbaric medicine. Diver medics are respected professionals who perform regular work as divers and, when necessary, respond to medical emergencies on the job. Graduate with a Diver Medic concentration and you will be trained as a Diver Medic Technician, qualified for work as a “tender” and diver medic for underwater job sites inland and offshore. This concentration also qualifies you to take the Emergency Medical Technician-Basic (EMT-B) exam.

## ▲ Underwater Inspection Technology Nondestructive Testing

The Nondestructive Testing concentration prepares students to conduct a number of advanced underwater inspection and testing techniques important for insuring the quality of underwater construction. The program is designed to provide students with the knowledge, skills, and abilities to perform a variety of inspections to locate and determine the condition of structures, pipes, and components ranging from steel buildings, subsea pipelines and platforms, to engine parts and components. Students are trained in a variety of Nondestructive Testing Methods (NDT) to inspect metals and welds, in particular, as well as non-metallic materials. Students will be trained to American Society for Nondestructive Testing (ANST) Level I and Level II standards in Ultrasonic Testing (UT), Magnetic Particle Testing (MT), Dye Penetrant Testing (PT), and Visual Testing (VT).

### Admission Program Requirements

#### 1. Age

An applicant must be 18 years or older on or before his/her graduation. Some state and federal agencies require that an individual be 18 years of age to be qualified for licensure or certification.

#### 2. Medical Physical Examination

The applicant must submit a complete dive physical examination to NUPI as part of their admittance package. This physical examination must be performed by a licensed medical practitioner using the Association of Diving Contractors International (ADCI) guidelines and their approved physical examination forms. The applicant must pass all sections of the physical exam and be within body fat standards according to ADCI guidelines. Once enrolled, students must stay within the standards according to ADCI guidelines.

#### 3. Drug Policy

This commercial diving program has a zero tolerance drug policy. Students will be required to pass a drug screening test at a certified lab as part of the physical examination. During the course, students will be subject to random drug testing and may be tested at any time if a student is suspected of being under the influence of a controlled substance.

#### 4. SCUBA Certification

Students do not need a SCUBA certification prior to starting the program but it is strongly recommended that you obtain a certification before starting. If you do not have a SCUBA certification you will be required to enroll in a SCUBA open water course certified by a recognized SCUBA certification agency (NAUI, PADI, etc.) and completed a week prior to you beginning the inland diving and SCUBA course.

#### 5. High School Diploma / GED

Applicants must have a high school diploma from a regionally accredited high school with a high school GPA of 2.0 or equivalent GED prior to starting the program. Applicants who have a GED or do not meet the minimum high school GPA of 2.0 will be required to take the Accuplacer prior to starting the program. Students who do not meet minimum admission requirements may be admitted under Probationary Admission status. Please see the Academic Information for Undergraduate Degree Programs section of the University catalog for additional information.

#### 6. Dress Code / Personal Protective Equipment

The Professional Commercial Diving program requires the use of specific personal protective equipment and garments. Individual courses will have specific requirements.

### Program Information

#### 1. Test of Adult Basic Education (TABE) Examination

Students entering the commercial diving program will be required to take the TABE examination during the orientation two weeks prior to the start of class. The exam will assess basic competencies in reading, mathematics, language, and spelling. Students who do not meet the required minimum

scores may be subject to a remediation plan to improve basic competencies. Students will also be required to take the exit TABE test during the final course of the program.

#### 2. Divers Log Book

It is each student diver's personal responsibility to maintain an approved Diver's Log Book. Your future employer uses these logs to verify experience, dives, and academic training for hiring and promotion within the diving industry. The Diver's Log Book must contain a personal passport-size photo which is embossed to the page. Each student is responsible for keeping the Diver's Log Book current and accurate. Instructors will verify dives and will sign stamp each entry with the official NUPI stamp.

#### 3. International Requirements

Many countries have unique regulations for the training of commercial divers. Additional training after graduation may be required if you plan to work internationally. Please check the qualifications, certifications, work permit regulations, and immigration requirements of the particular country being considered. Be aware that foreign immigration laws may restrict or prevent you from working overseas. It is highly recommended that students apply for a passport prior to completing the program, and ensure you have the needed immunizations.

#### 4. Transportation Workers Identification Credential (TWIC Card)

Students enrolled in the Professional Commercial Diving program should review the information on the Transportation Security Administration (TSA) website regarding TWIC card requirements and eligibility. Most students entering the commercial diving industry will be required to have a TWIC card prior to employment. The TSA has strict requirements on the criteria that must be met for TWIC card eligibility. All students are advised to become familiar with the requirements. For more information, go to [www.tsa.gov/twic](http://www.tsa.gov/twic).

#### 5. A background check must be passed prior to enrolling in any Diver Medic concentration course.

Note: Students are advised that, due to the nature of the program, class start and end times may be set outside normal University schedules. More information will be provided at the time of orientation.

#### 6. Grading Information

The commercial diving program uses the following grading system:

Definition	
A	Exceptional
B	Very Good
C	Satisfactory
D	Marginal Achievement, Below Standards
F	Failing
I	Incomplete

All PMTX courses must be passed with a minimum grade of C.

All EMTX courses must be passed with a minimum grade of B.

#### Program Fees

Tuition: \$336 per quarter unit  
Student fees for materials and supplies: \$2,000

Fees are required to be paid prior to attending the first class of the core training. Non-standard gear will need to be purchased separately by the student, such as wetsuit, fins, scuba mask, etc.

Students fees may be financial aid eligible.

#### Certificates

Specific certificate details are listed below.

Upon successful completion of the Professional Certificate in Marine Technology program students will receive:

- Certificate of Completion as Commercial Diver
- Association of Commercial Diving Educators (ACDE) Card

- Association of Diving Contractors International (ADCI) Card
- Diver Medic Technician (DMT) Card-Only Diving Medic Technician students are eligible to receive DMT card. Students must submit application to the University, which will then be mailed to the National Board of Diving and Hyperbaric Medical Technology (NBDHMT) who will mail the student their DMT card
- Basic Life Support (BLS)/cardiopulmonary resuscitation (CPR) Card
- Forklift Operations Certificate
- KMDSI Helmet and Band Mask Operator/User Training

Student account must be paid in full and all program requirements must be met in order to receive Certificate of Completion for Professional Certificate in Marine Technology.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Dive and tend using surface supply or SCUBA underwater breathing apparatuses in either air or mixed gas modes to perform underwater tasks safely.
- Perform decompression safely under a variety of situations.
- Apply formulas associated with decompression and medical aspects of diving.
- Assess medical needs of divers and provide appropriate first aid and recompression treatment for diving illnesses.
- Work effectively as a dive team member to achieve goals of a planned diving job and underwater tasks.
- Demonstrate safe operation while working as an outside tender, inside tender, communications operator, and/or log keeper.
- Plan a diving job utilizing all available data.
- Cut and weld steel properly.

### Certificate Requirements

(16 courses; 44 quarter units)

Students must complete all core courses as well as one concentration from the following: Diving Medic Technician, Underwater Inspection Technology.

### Physical Fitness Course for Divers

(1 course; 0 quarter units)

All students will be enrolled in the Physical Fitness Course throughout the entire program. The course is designed to teach the student proper life style and a routine of exercise that is needed to be a commercial diver. This course will be offered through Extended Learning for no academic credit.

PMTX 1900X Physical Fitness & Nutrition (0 quarter units)  
*Prerequisite: Admission to Professional Certificate in Marine Technology*

### Certificate Core Requirements

(11 courses; 29 quarter units)

PMTX 1012X Commercial Diving Orientation (3 quarter units)  
*Prerequisite: Diving Physical Examination, Corequisite: PMTX 1014X, PMTX 1900X*

PMTX 1014X Diving Physics & Air Decomp. (3 quarter units)  
*Prerequisite: Diving Physical Exam, Corequisite: PMTX 1012X, PMTX 1900X*

PMTX 1022X Medical Aspects of Diving (3 quarter units)  
*Prerequisite: Diving Physical Examination, PMTX 1012X with a minimum grade of C, and PMTX 1014X with a minimum grade of C, Corequisite: PMTX 1024X, PMTX 1900X*

PMTX 1024X Decomp. Chamber & Forklift Op. (3 quarter units)  
*Prerequisite: Diving Physical Examination, PMTX 1012X with a minimum grade of C, PMTX 1014X with a minimum grade of C, Corequisite: PMTX 1022X, PMTX 1900X*

PMTX 1028X Basic Surface Supply Diving (2 quarter units)  
*Prerequisite: Diving Physical Examination, SCUBA card,*

*First Aid & CPR card, PMTX 1022X with a minimum grade of C, PMTX 1024X with a minimum grade of C, Corequisite: PMTX 1017X, PMTX 1900X*

PMTX 1017X Com. SCUBA & Inland Diving (3 quarter units)  
*Prerequisite: SCUBA card, Basic First Aid & CPR card, PMTX 1022X with a minimum grade of C, PMTX 1024X with a minimum grade of C, Corequisite: PMTX 1028X, PMT 1900X*

PMTX 1031X Diving Operations I (2 quarter units)  
*Prerequisite: PMTX 1028X with a minimum grade of C, PMTX 1017X with a minimum grade of C, Corequisite: PMTX 1060X, or PMTX 1080X, PMTX 1900X*

PMTX 1035X Diving Operations II (2 quarter units)  
*Prerequisite: PMTX 1031X with a minimum grade of C, Corequisite: PMTX 1062X, or EMTX 1081X, PMTX 1900X*

PMTX 1033X Mixed Gas Diving (3 quarter units)  
*Prerequisite: PMTX 1035X with a minimum grade of C, Corequisite: PMTX 1064X, or EMTX 1082X, PMTX 1900X*

PMTX 1015X Diving Administration (3 quarter units)  
*Prerequisite: PMTX 1033X with a minimum grade of C, Corequisite: PMTX 1066X, or PMTX 1085X, PMTX 1900X*

PMTX 1070X Surface Cutting & Welding (2 quarter units)  
*Prerequisite: PMTX 1015X with a minimum grade of C, Corequisite: PMTX 1068X, or PMTX 1086X, PMTX 1900X*

Students must choose one of the following concentrations:

### ▲ Concentration in Diver Medic Technician (DMT)

This concentration provides entry-level basic knowledge, essential skills, and an understanding of emergency medical assistance in outpatient and emergency settings. Students will be prepared to respond to various types of emergencies that require urgent medical attention to assess emergency situations, provide care that can save a life, and transport patients to a hospital. Students will learn how to respond quickly to high level emergencies such as motor vehicle accident, heart attack, near drowning, childbirth, poisoning, and life threatening injury. In addition, students will learn how to evaluate, recognize and perform hyperbaric chamber treatments of diving illness disorders and to perform advanced medical skills in hyperbaric conditions following current hyperbaric clinical and commercial diving practices as a diving medical technician. Graduates will have met the national guidelines for all areas of their didactic and clinical requirements.

Students will comply with all levels of legal, regulatory, and ethical requirements for EMT's and DMT's.

### DMT Certification

On successful completion of this concentration, the graduate is eligible to apply for Diver Medic Technician (DMT) certification through the National Board of Diving & Hyperbaric Medical Technology. For certification the individual must successfully complete the DMT certification examination.

### EMT Certification

On successful completion of this concentration, the graduate is eligible to complete the NREMT-B exam and successful completion will allow the individual to apply for their state EMT card and perform entry-level EMT skills as a member of technical rescue teams/squads or as part of an allied service such as a fire or police department. EMT certificates are issued by county/local Emergency Medical Services (EMS) agencies. Contact your agency for specific requirements.

Clinical and ambulance companies may require the following immunizations in order to conduct their hospital and ambulance clinical:

- Two-step Mantoux PPD tuberculosis test which, if positive, follow with negative chest x-ray and Health Department's guidelines for treatment.
- Measles (rubella and rubeola) and Mumps: by a positive titer, physician's diagnosis of disease; or two doses of vaccine.
- Immunizations: Tdap given in 2005 or later (tetanus, diphtheria, acellular pertussis).
- Varicella Immunity: by a titer, physician's diagnosis of disease; or two doses of vaccine.

- Hepatitis B vaccination or waiver declining.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Conduct trauma and medical assessment and proper handling of persons afflicted with medical trauma conditions requiring advanced medical intervention following currently approved EMT practices.
- Evaluate, recognize, and perform recompression hyperbaric chamber treatments of diving illness disorders and to perform advanced medical skills in hyperbaric conditions following current hyperbaric clinical and commercial diving practices as a Diver Medic Technician (DMT).

### Requirements for the Concentration

(5 courses; 15 quarter units)

PMTX 1060X	Underwater Inspection & Survey (3 quarter units) <i>Prerequisite: PMTX 1017X with a minimum grade of C, PMTX 1028X with a minimum grade of C, Corequisite: PMTX 1031X, PMTX 1900X</i>
EMTX 1081X	EMT I Basic (3 quarter units) <i>Prerequisite: BLS HCP (CPR) Cert</i>
EMTX 1082X	EMT II Basic (3 quarter units) <i>Prerequisite: EMTX 1081X with a minimum grade of B</i>
PMTX 1085X	Advanced Diving Medicine (3 quarter units) <i>Prerequisite: EMTX 1081X with a minimum grade of B, EMTX 1082X with a minimum grade of B, Diving Physical Exam, Corequisite: PMTX 1900X</i>
PMTX 1086X	Advanced Hyperbaric Medicine (3 quarter units)

\*Please note: All required immunizations must be completed before students may complete their ride-along hours.

### ▲ Concentration in Underwater Inspection Technology

In this concentration the student will learn theoretical, practical, and industry-specific knowledge as an inspector-level (ASNT Level II) capability in visual, liquid, penetrant, magnetic particle, and ultrasonic testing in underwater and traditional settings.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Perform visual, liquid penetrant, magnetic particle, and ultrasonic testing.

### Requirements for the Concentration

(5 courses; 15 quarter units)

PMTX 1080X	Emergency Medical Responder (3 quarter units) <i>Prerequisite: PMTX 1028X with a minimum grade of C, PMTX 1017X with a minimum grade of C, Corequisite: PMTX 1031X, PMTX 1900X</i>
PMTX 1062X	MT/PT II (3 quarter units) <i>Prerequisite: PMTX 1031X with a minimum grade of C, PMTX 1080X with a minimum grade of C, Corequisite: PMTX 1035X, PMTX 1900X</i>
PMTX 1064X	Ultrasonic Testing I (3 quarter units) <i>Prerequisite: PMTX 1062X with a minimum grade of C, Corequisite: PMTX 1033X, PMTX 1900X</i>
PMTX 1066X	Ultrasonic Testing II (3 quarter units) <i>Prerequisite: PMTX 1064X with a minimum grade of C, PMTX 1033X with a minimum grade of C, Corequisite: PMTX 1015X with a minimum grade of C, PMTX 1900X</i>
PMTX 1068X	VT II/Underwater Inspection (3 quarter units) <i>Prerequisite: PMTX 1015X with a minimum grade of C, PMTX 1066X with a minimum grade of C, Diving Physical Exam, Corequisite: PMTX 1070X, PMTX 1900X</i>

## NATIONAL UNIVERSITY COMMUNITY RESEARCH INSTITUTE

Director: Thomas MacCalla; (858) 642-8104; [tmaccalla@nu.edu](mailto:tmaccalla@nu.edu)

The National University Community Research Institute (NUCRI) is an outgrowth of the 1997 President's Commission on Community. A major outcome of the commission was to envision the University's collaborative future as a full community partner. Community became an institutional core value and NUCRI developed into a university wide, point of contact for making the university-community connection across disciplines and facilitating community research and technology applications for smart and creative community building.

The academically-oriented and practitioner-based Institute focuses on community research and technology, knowledge sharing, professional development, educational outreach and service. Through its University Consultant Corps of faculty, students, and community practitioners NUCRI engages in collaborative research and innovative technology transfer initiatives with strategic alliances to pursue its mission. The overarching goal is to enhance community capacity building and involvement for sustainable community development.

NUCRI in collaboration with Extended Learning offers:  
(9 courses; 45 CEUs)

PDX 1800X	Entrepreneurship as a Life Skill (5 CEUs)
PDX 1801X	Animation in the Science Classroom (5 CEUs)
PDX 1802X	Digital Storytelling (5 CEUs)
PDX 1803X	GLOBE Science Education Workshop (5 CEUs)
PDX 1805X	Music and Culture Connection (5 CEUs)
PDX 1806X	What Scientist Actually Do (5 CEUs)
PDX 1807X	Science Literacy (5 CEUs)
PDX 1808X	Introduction to Object Creation in Second Life (5.0 CEUs)
PDX 1860X	Introduction to 3-D Printing (5.0 CEUs)

### Extended Learning Prefix/Subject Area Index

Prefix	Subject Area	Page
AEX	Autism Education . . . . .	312
CTEX	Career Technical Education . . . . .	312
DFX	Department of Defense Architecture Framework . . . . .	312
EAX	Federal Enterprise Architecture Framework . . . . .	312
EBX	Executive Business . . . . .	313
EDX	Education and Instruction Tech. . . . .	313
EMTX	Emergency Medical Technician . . . . .	313
HEDX	Health Education . . . . .	313
IHD	Institute Hard of Hearing . . . . .	313
MEDX	Medical Coding and Billing . . . . .	313
NBCX	National Board Certification . . . . .	314
PDX	Professional Development . . . . .	314
PLX	Paralegal . . . . .	315
PMTX	Professional Marine Technology . . . . .	315
TEDX	Teacher Education . . . . .	316

## COURSE DESCRIPTIONS

### AEX – Autism Education

#### **AEX 1801X: Intro Students w/Autism Spect.** 4.0 CEUs

This course introduces the history and terms that explain the parameters of teaching students with the ASD classification. A review of the law and rights of parents as well as issues regarding service and specialized programs are included. Using clinical and research-based exploration, the student will develop an understanding of what is needed to provide a successful teaching environment for students that fall within the spectrum.

#### **AEX 1802X: Assess & Behavioral App in Aut** 4.0 CEUs

*Prereq:*AEX 1801X

This course focuses on the empirical bases for the assessment and treatment of autism. The research literature supporting the efficacy of behaviorally based (Applied Behavior Analysis, ABA) approaches in the treatment of autism is unequivocal. This course will provide the student with an overview of the ABA approach to treating autism, and how ABA fits within an overall treatment paradigm for autism. The involvement of schools, agencies, and various professionals will be covered.

#### **AEX 1803X: Intervention/Instr. w/Aut** 4.0 CEUs; \$525

*Prereq:*AEX 1801X

The course is designed to provide the student with relevant strategies/instructional methods that are appropriate for young children (Pre-K – 5) with emphasis on development of communication skills, and older children (Grades 6-12) that include strategies on inclusion with general education standards as well as those that include life skills curriculum. All intervention strategies are taught according to their ultimate success in a full-inclusive environment. Assignments will contribute to a multiple portfolio piece (for the Autism Certificate portfolio) that students can refer back to when working with individualized programs for students with ASD.

#### **AEX 1804X: Autism Collab w/ Parents & Fam** 4.0 CEUs; \$525

*Prereq:*AEX 1801X

This course assists educators, therapists and program administrators to build supportive relationships with families as a foundation for designing appropriate learning experiences for their child with autism. Using clinical and research-based feedback from parents of children with autism the student will develop the knowledge and skills for communicating accurately and sensitively, assist in the selecting and evaluating intervention services and helping families manage short-term and long-term issues.

### CTEX – Career Technical Education

#### **CTEX 1100x Orientation to CTE** \$695

*Prerequisites:* Certificate of Clearance Application, Verification of a negative TB test, Admission into the CTE Program, Supervised Teaching Placement

This course provides an immediate foundation for effective teaching as measured by the California Standards for the Teaching Profession (CSTP). This course is designed as an introduction to the knowledge, skills and dispositions taught in other courses in the program.

#### **CTEX 1111x Adolescent/Adult Ed Psych** \$695

*Prerequisites:* Teacher Credential Certificate of Clearance Application, Verification of a negative TB test, Admission into CTE Program, Supervised Teaching Location

CTEX 1111X examines how educational psychology is applied to adolescent and adult learning and teaching. Theories of Development, Learning Theories, Instructional Approaches, Learning Environments, and Student Assessment are studied. Special emphasis will be given to applying theory into practices through the Supervised Teaching experience.

#### **CTEX 1125x Instruction/Management** \$695

The course facilitates candidates' ability demonstrate to select and use instructional models appropriate to meet the learning needs of all students. Classroom management strategies used to create and implement a classroom management plan. Additionally, candidates will demonstrate an understanding of communication skills and strategies for effective parental involvement as well as working with other educators and community representatives.

#### **CTEX 1126x Diverse Classroom** \$695

*Prerequisites:* CTEX 1100x, CTEX 1111x, CTEX 1125x

CTEX 1126X integrates California K-12 academic content standards with effective instructional strategies for adolescent and adult learners. Candidates will access student background information for the purpose of designing and reflecting upon long and short term planning. Candidates will have the opportunity to create lesson plans and unit plans that integrate Career Technical Education Standards with Standards from other content areas. Candidates will create and teach entire units integrating at least two content area standards. Candidates will also be required to integrate the effective use of technology in their lesson plans.

#### **CTEX 1199x Supervised Teaching** \$695

*Corequisites:* CTEX 1100x, CTEX 1111x, CTEX 1125x, CTEX 1126x

Recommended Preparation: Please Note: The candidate must obtain a certificate of clearance from the Commission on Teacher Credentialing (CTC) before entering the clinical practice school. Supervised Teaching is required for all candidates seeking the CTE Preliminary Teaching Credential. Supervised Teaching will consist of a minimum of 16 weeks, 20 hours per week. Supervised teaching will be taken concurrently with the other required program courses. Candidates must successfully complete the following four units: 1) school site classroom orientation and responsibilities, 2) learning environment and classroom management, 3) assessment and evaluation, and 4) lesson design and differentiated instruction. Each component is emphasized throughout the 16 weeks. Grading is S or U

### DFX – Department of Defense Architecture Framework

#### **DFX 1201X: Architecture Framework Basics**

4.5 quarter units; \$2,560

Overview of DoDAF Framework background, history, planned evolution, government regulations, architecture uses, framework philosophy, concepts, definitions, review of the DoDAF six step process, products overview and relationships, government regulations details and reporting requirements, case

studies, comparison with other frameworks and methods, and overview of Universal Reference Resources for DoD Framework.

#### **DFX 1202X: Core and Supporting Products**

4.5 quarter units; \$2,560

Overview of products and relationships from DOD architecture framework views. Learn modeling and integrating them into a viable DOD Architecture Framework for different DoD functions, organizations, programs and operations. All products represent a different type of model. Students learn how to create each product and use EA DoDAF specified tools.

#### **DFX 1203X: Architecture Planning**

4.5 quarter units; \$2,560

Overview of concepts and theories of organizational strategic planning as basis for enterprise architecture. Examine FEA Program Management Office reference models. Define business architecture by utilizing business strategy, goals, objectives, technological environment and external variables. Gain understanding of planning and managing EA project within an enterprise.

#### **DFX 1204X: Architecture Modeling**

4.5 quarter units; \$2,560

Overview of the supporting products and their relationship(s) to the core products and to each other; operational, systems and technical view for supporting products overview, data and activity modeling, LISI, TRM/JTA, security, CADM, XML and DoD Technical Reference Model (TRM) and Joint Technical Architecture (JTA).

#### **DFX 1810X: Architect Practicum**

4.0 CEUs; \$2,135

This practicum project course focuses on the application of architecture principles and processes learned through this program. The students are to select research topic under the guidance of instructor and conduct research and write a detailed report. Working as individuals under the guidance of assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and develop an architectural plan for implementation. In addition, they present their research in both written and oral form to other students and faculty.

### EAX – Federal Enterprise Architecture Framework

#### **EAX 1201X: Architecture Concepts**

4.5 quarter units; \$2,560

Introduces the basic concepts, theories, and documentation frameworks upon which enterprise architecture is based. Enterprise architecture is viewed as a management and documentation process, with approaches from the private, public, defense, and international sectors being presented. Analyze all major enterprise architecture frameworks.

#### **EAX 1202X: Architecture Planning**

4.5 quarter units; \$2,560

Introduces organizational strategic planning as basis for enterprise architecture. Provides examination of the Federal Enterprise Architecture Program Management Office reference models, how to define business architecture, goals and objectives, technological environment and external variables. Provides understanding of how to plan and manage an EA project within an enterprise.

**EAX 1203X: Architecture Implementation**

4.5 quarter units; \$2,560

Analyze and integrate Enterprise Architecture Methodologies & review basic concepts. Activity based costing and cost/benefits analysis, developing performance measures in context of OMB Reference Models, Balanced Scorecard and GPRA, use of visual modeling, managing and incorporation of legacy systems, information assurance and security architecture, stakeholder communication strategies and maintenance.

**EAX 1204X: Architecture Integration**

4.5 quarter units; \$2,560

This course covers the integration of EA components across the matrices of different frameworks (Zachman, FEAF, TEAF, TOGAF, etc) and the OMB Reference Models, the integration of business, technical, data and application architectures, configuration management and standards.

**EAX 1810X: Architecture Practicum**

4.0 CEUs; \$2,135

This practicum project course focuses on the application of architecture principles and processes learned through this program. The students are to select research topic under the guidance of instructor and conduct research and write a detailed report. Working as individuals under the guidance of assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and develop an architectural plan for implementation. In addition, they present their research in both written and oral form to other students and faculty.

**EBX – Executive Business****EBX 1902X: Strategic Issues in Global Finance and Trade**

\$300

This course examines the latest financial problems facing an internationally oriented company. This course includes the structure and operations of the international financial system, foreign exchange rates and foreign exchange risk management.

**EBX 1904X: Leadership in the 21st Century**

\$300

This course analyzes the current and developing theories of leadership, individual and group behavior, and organizational theory within the context of the highly competitive global market place.

**EBX 1906X: Strategic Management**

\$300

This course analyzes today's business environment and the pervasiveness of change. Course topics focus on element of strategic planning. Continuous and discontinuous change, organizational redesign, and essential skills necessary for managers to initiate corporate and organizations transformations, mergers and acquisitions will be covered.

**EBX 1908X: Global Business**

\$300

This course reviews the latest development in global economic, political and cultural patterns affecting international business. The course also reviews the latest theories and practices in the area of strategic management for global business.

**EBX 1910X: Trends in Applied Organizational Development**

\$300

This course provides an introduction to modeling for managerial decision making, emphasizing the formulation, solution, and limitations of linear programs, network models, integer programs, non-linear programs, simulation and queuing models for tactical and strategic business decisions. To facilitate understanding and communication of the various models discussed in class, the course will make extensive use of spreadsheet-based modeling and constrained optimization tools.

**EDX – Education and Instruction Tech****EDX 1201X: Computer Tech. in Classroom**

4.5 quarter units; \$695

Comprehensive overview of computer technology in the educational environment. Course addresses computer terminology, the Internet, and impact of the use of different computer modalities. Includes learning theories and hands-on practice. Satisfies the CTC technology requirement for a professional clear Ryan credential and the preliminary SB2042 credential

**EDX 1905X: CSET English Prep Course**

\$355

This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the Single Subject English CSET. All subtest content will be covered.

**EDX 1912X: CSET Science Prep Course**

\$355

This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the Single Subject Science CSET. All subtest content will be covered.

**EDX 1913X: CSET Social Science Prep Course**

\$355

This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the Single Subject Social Science CSET. All subtest content will be covered.

**EDX 1915X: CSET Math Prep Subtest I:****Algebra and Number Theory**

\$195

The prep course follows the Subject Matter requirements for CSET Single Subject Mathematics and covers all the topics for Algebra and Number Theory. It requires the purchase of one textbook. Additional materials are required.

**EDX 1916X: CSET Math Prep Subtest II:****Geometry, Probability and Statistics**

\$195

Covers all the topics on Calculus and History of Math based on the Subject Matter requirements for CSET Single Subject Mathematics. It requires the purchase of two textbooks. Additional materials are required.

**EDX 1918X: CSET Math Prep Subtest III:****Calculus and History of Math**

\$195

Covers all the topics on Calculus and History of Math based on the Subject Matter requirements for CSET Single Subject Mathematics.

**EDX 1920X: CSET Mult. Subject Prep Course**

\$355

This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the Multiple Subject CSET. All subtest content will be covered.

**EDX 1938X: U.S. Constitution Prep Course**

\$150

This course is designed to help students pass the U.S. Constitution exam, a requirement for the California teaching credential. Prior to taking the exam, students will review essential elements of the U.S. Constitution; analyze the meaning, amendments and judicial interpretation; and examine the Bill of Rights and framers' intents.

**EDX 1940X: RICA Prep Course**

\$195

This intensive online course is specifically designed to help prepare current and future teachers to pass the new RICA Written Examination. It is a test preparation class only and is not a substitute for the required reading and reading instruction classes.

**EMTX – Emergency Medical Technician****EMTX 1081X: EMT I Basic**

3 quarter units; \$733.50

*Prerequisite: BLS HCP (CPR) Cert*

Introduction to the basics of Emergency Medical Technician requirements; including medical and trauma skills, basic anatomy and physiology as related to EMT requirements. Student will learn to properly assess the sick and injured, as related to communicable diseases and trauma. Student will learn practical skills of Basic Life Support (BLS), taking blood pressures, pulses, respiratory rates, lung sounds, and complete body checks, administration of oxygen and the use of various adjuncts to assist in the management of an injured person's airway.

**EMTX 1082X: EMT II Basic**

3 quarter units; \$733.50

*Prerequisite: EMTX 1081X with a minimum grade of B.*

Continuation of Emergency Medical Technician skills, including advanced first aid skills: bandaging, splinting, and spinal immobilization techniques, and proper methods of moving and transporting the injured and ill. Trauma and psychiatric emergencies are also covered, as well as all skills required by California Title 22 state and county scope of practice. Students will be tested on assessment of the sick and injured, blood pressures, pulses, respiratory rates, lung sounds, complete body checks, proper bandaging and wound care, splinting, and spinal immobilization techniques. Students will perform ambulance ride along for clinical observations.

**HEDX – Health Education****HEDX 1101X: Intro Health Ed: K-12**

4.5 quarter units; \$695

This is an introductory study of a coordinated school health program. Health problems and issues are addressed at developmentally appropriate grade levels (K-12) using the Health Framework for California Public Schools in the following areas: mental and emotional health, personal health, consumer and community health, injury prevention and safety, alcohol, tobacco and other drugs, nutrition, environmental health, family living, individual growth and development and communicable and chronic diseases.

## IHD – Institute Hard of Hearing

### IHD 1203X: Facilitating Outcomes

4.5 quarter units; \$695

This course will provide knowledge and resources related to facilitating the acquisition of language, learning, speech, sign language, and/or listening, amplification technologies, and communication facilitation strategies.

## MEDX – Medical Coding and Billing

### MEDX 1920X: Intro to Information Technology

\$300

This foundational course for healthcare professionals introduces students to foundational elements necessary to succeed in the field of medicine. Topics covered include business etiquette, managing and resolving conflict, effective report writing through the use of computer technologies, basic math, comprehension building, and developing study skills. The curriculum delivery system will comprise a combination of power point presentations, lecture, class discussion and role play activities, as well as utilization of evolve learning support tools available through publisher. Hands on lab skills topics and practice will consist of “real life” scenarios and skill performance. Videos will be presented as appropriate.

### MEDX 1930X: Health Prof. Legal/Ethical Issues

\$300

This course focuses on legal and ethical concepts, principles of ethics and law and use in resolving ethical conflicts and dilemmas in health care. In addition the course includes a study on the scope of practice, informed consent, employee and patient rights and responsibilities, patient abuse, and the Court systems. The curriculum delivery system will comprise a combination of power point presentations, lecture, class discussion and role play activities, as well as videos as appropriate.

### MEDX 1940X: Medical Terminology

\$300

This course introduces students to the study of the structure and physiology of the human body. The relationships and organization of the major organ structures are taught and the functions of the organ system in relation to maintaining homeostasis are discussed. The clinical correlation between typical and pathological is briefly discussed in relation to nursing fundamentals.

### MEDX 1950X: Medical Coding/Billing I

\$300

Explain the differences between Commercial, HMO/PPO, Federal and State insurance plans, including eligibility and coverage, preauthorization, certification, and referrals, as well as reimbursement methodologies.

### MEDX 1960X: Medical Coding/Billing II

\$300

Demonstrate an understanding of the difference between national diagnosis and procedure coding, process of completing claims and the competency using the internet to locate or verify ICD -codes.

### MEDX 1970X: Medical Coding/Billing III

\$300

Apply knowledge to various coding rules for the CPT, ICD-10-CM, ICD-9-CM, and Level II (HCPCS) coding systems and then apply the rules to code patient

services. In addition, a variety of payment systems is presented. The medical topics of Medicare fraud/abuse, HMOs, and QIOs are also reviewed.

## NBCX – National Board Certification

### NBCX 1201X: National Board Certification

#### Preparation

4.5 quarter units; \$695

NBC Teacher Preparation provides new and active NBCT candidates with a year-long, comprehensive approach to support and assistance. All aspects of the certification process are explored while candidates develop a strong, fundamental foundation and increased competence in identifying and increasing content and instructional knowledge, application, and articulation of skills and approaches.

## PDX – Professional Development

### PDX 1800X: Entrepreneurship as a Life Skill

5 CEUs; \$395

This self-paced hybrid online course focuses on the concept that entrepreneurship is everywhere and it is a necessary life skill in the global knowledge economy. This course also involves a hands-on, Saturday workshop.

### PDX 1801X: Animation in the Science Classroom

5 CEUs; \$395

The course workshop introduces teachers to the Flash user interface and its various design and animation tools through small activities that will enable students to acquire the basic skills of drawing, creating animations, importing multimedia objects, creating symbols, and exporting the product to a Web page or standalone file.

### PDX 1802X: Digital Storytelling

5 CEUs; \$395

Digital storytelling comes with its own set of rules: ideal length, point-of-view, pace, and a number of other fundamental principles. Students will explore the conventions, expectations, and skills involved in digital storytelling. The course begins with an onsite orientation followed by online instruction.

### PDX 1803X: GLOBE Science Education Workshop

5 CEUs; \$395

GLOBE is a worldwide, primary and secondary school-based education and science program. GLOBE promotes and supports students, teachers and scientists to collaborate on inquiry-based investigations of the environment and the Earth System working in close partnership with NSF and NASA Earth System Science Projects. GLOBE is a K-12 science education program that brings together students, teachers and scientists through the GLOBE Schools Network in support of student learning and research. The hands-on program provides students and teachers with an opportunity to learn by 1) taking scientifically valid measurements in the fields of atmosphere, hydrology, soils, and land cover/phenology - depending upon their local curricula, 2) reporting their data through the Internet, and 3) collaborating with scientists and other GLOBE students around the world. Classroom science kits are available for instructional purposes.

### PDX 1805X: Music and Culture Connection

5 CEUs; \$395

This course deals with an historical and contemporary survey of music and its profound influence on

shaping, morphing, challenging, and defining the social, political, and cultural landscapes throughout the world. This asynchronous online course examines music's role beyond the obvious aesthetics of an art form to that as a catalyst and vehicle for major shifts in cultural mores. It reviews some of the major historical social shifts attributed to or furthered by music's influence. The course also focuses on contemporary culture and deals with the overwhelming permeation of hip hop music on world youth, the economy, language, learning, social mores, fashion, and the media. It is designed to improve methods of communicating, understanding, and educating students and members of the community.

### PDX 1806X: What Scientists Actually Do

5 CEUs; \$395

This course introduces the scientific method and mindset through stories of the daily work of real scientists, engineers, and mathematicians. The course also covers pragmatic guidelines for evaluating science information in the media and considering the scientific aspect of contemporary social topics such as climate change and endangered species protection.

### PDX 1807X: Science Literacy

5 CEUs; \$395

This online course is an introduction to science, its interdisciplinary role and its relevance to life. It is designed for the non-scientist and teachers with little or no previous science background. It is team-taught and the focus is on the wonders of science and will increase one's confidence-level in science.

### PDX 1808X: Introduction to Object Creation in Second Life

5 CEUs; \$395

Introduction to Object Creation is a hands-on skill-building course that teaches Second Life beginners about Virtual Learning Environments and their history, with a focus on the platform of Second Life. Students will gain the necessary knowledge and insight into the required tools and hardware to create virtual objects in Second Life, as well as the open source platform of OpenSim, which is built on the Second Life technology. Lead instructor Del Mackey, NUCRI's Technical Specialist and Second Life Administrator will cover the basic history of Second Life, how SL can be leveraged for educational purposes with simple and complex object creation using open source tools, and how this technology can be applied in the classroom. Upon completion of this course, participants should be able to create a wide variety of objects for use in this immersive virtual world using both 'in-world' and exterior creation tools.

### PDX 1808X Introduction to Object Creation in Second Life

5 CEUs; \$395

Introduction to Object Creation is a hands-on skill-building course that teaches Second Life beginners about Virtual Learning Environments and their history, with a focus on the platform of Second Life. Students will gain the necessary knowledge and insight into the required tools and hardware to create virtual objects in Second Life, as well as the open source platform of OpenSim, which is built on the Second Life technology. Lead instructor Del Mackey, NUCRI's Technical Specialist and Second Life Administrator will cover the basic history of Second Life, how SL can be leveraged for educational purposes with simple and complex object creation using open

source tools, and how this technology can be applied in the classroom. Upon completion of this course, participants should be able to create a wide variety of objects for use in this immersive virtual world using both 'in-world' and exterior creation tools.

### **PDX 1860X Introduction to 3-D Printing** 5 CEUs; \$395

The goal of this course is to introduce the history and practical application of 3-D printers and to enable the student to determine how to apply that knowledge in their workplace. The modules first frame the current state of the art by reviewing the Open Source and Maker communities and then describes the procedures needed to download, install and use the free Open Source software used in the 3D printing community.

Students are then required to install and use those software programs end to end to create a few simple test pieces on a 3-D printer at a remote location. This course assumes that students do not have access to a 3-D printer; a \$100 materials fee is assessed so that the test materials can be printed out at a vendor based on files put in a drop box for the purpose.

## **PLX – Paralegal**

### **PLX 1000X: Torts**

4.5 quarter units; \$595

Examines the fundamental principles of the law of intentional torts (e.g., battery, assault, false imprisonment, intentional infliction of emotional distress); negligence (standard of care, breach of duty, causation, damages); strict liability; the torts of nuisance, defamation, invasion of privacy torts; and the defenses to each of these torts. Also addresses the concepts of products liability and vicarious liability.

### **PLX 1001X: Leg Res Wrtg-Briefing/Analysis**

4.5 quarter units; \$595

Develops legal research skills through focused exercises using print and computerized research. Exposes students to primary and secondary legal authorities, with an emphasis on constitutions and statutes. Develops writing skills by analyzing and briefing court opinions, drafting letters, and examining the purposes and uses of a legal memorandum.

### **PLX 1002X: Contracts**

4.5 quarter units; \$595

Examines basic contract principles, including formation, validity, defenses to formation, rights of third parties, performance, breach, remedies, and damages. Emphasizes case analysis and application of principles, and covers code sections from Article 2 of the Uniform Commercial Code and the Restatement Second of Contracts.

### **PLX 1003X: Leg Res Wrtg-Legal Memo**

4.5 quarter units; \$595

Develops legal research skills through focused exercises using print and computerized research. Exposes students to primary and secondary legal authorities, with an emphasis on legislative history, administrative materials and loose-leaf services. Develops writing skills by examining different parts of the legal memorandum, including questions presented, brief answers, statements of fact, and conclusions.

### **PLX 1005X: Computers & the Law**

4.5 quarter units; \$595

Teaches computer technology as a tool to assist the legal professional in the practice of law. Utilizes lecture, group discussion, and hands-on computer use. Using the latest software for time and billing, case management, docketing control, and litigation support, students complete legal projects with assignments in the computer lab. Students learn how to effectively evaluate vendor products, and design and manage a litigation database project. Also covered are telecommunications and computer-assisted research, and ethical considerations, such as software piracy, misuse of software and databases, security, and protecting client data.

### **PLX 1804X Foundations of Property Law**

4.5 CEUs; \$595

Examines real property law, including interests in land, landlord/tenant, easements, and conveyances. Credit granted as Continuing Education Unit only.

### **PLX 1806X: Legal Writing Project**

4.5 CEUs; \$595

Prerequisites: PLX 1001X, and PLX 1003X

Allows students the opportunity to prepare a legal writing work product using both print and online legal resources. Credit granted as Continuing Education Unit only.

### **PLX 1807X: Litigation Essentials**

4.5 CEUs; \$595

Covers civil procedure in both state and federal courts and civil litigation strategies. Emphasizes the paralegal's role in discovery, pre-trial, and trial proceedings. Includes discussion of various forms of discovery, such as depositions, interrogatories, and demands for production of documents, and introduces judgments and the appellate process. Credit granted as Continuing Education Unit only.

### **PLX 1808X: Essentials of Corporate Law**

4.5 CEUs; \$595

Examines the formation, operation, and dissolution of various types of corporate entities. Introduces students to common corporate documents, securities, and mergers and acquisitions. Credit granted as Continuing Education Unit only.

### **PLX 1809X: Essentials of Criminal Law**

4.5 CEUs; \$595

Covers criminal law and procedure, including crimes and their defenses, constitutional protections, and criminal litigation practice. Credit granted as Continuing Education Unit only.

## **PMTX – Professional Marine Technology**

### **PMTX 1012X Commercial Diving Orientation**

3 quarter units

Prerequisites: *Diving Physical Examination*

Corequisites: *PMTX 1014X, PMTX 1900x*

Introduction to commercial diving and diving science, the various types of commercial diving, the diver's role in the industry, and safety policies, principles and procedures related to safe diving operations.

### **PMTX 1014X Diving Physics & Air Decomp.**

3 quarter units

Prerequisites: *Diving Physical Exam*

Corequisites: *PMTX 1012X, PMTX 1900x*

Covers the physical effects of working underwater

on the diver's body by factors such as air, sound, and light, with detailed emphasis on pressure and temperature and calculation of formulas to solve diving problems related to physics. The effects of gases used in diving, gas laws related to diving and computation of the interactive effects of temperature and pressure, and air decompression theory are included.

### **PMTX 1015X Diving Administration**

3 quarter units

Prerequisites: *PMTX 1033X*

Corequisites: *PMTX 1066X, or PMTX 1085X,*

*PMTX 1900x*

Instruction on dive planning and evaluating hazards for completion of underwater work tasks. Includes hazards and safety involving environmental and working around oil rigs or sunken vessels, and blueprint reading and basics of salvage theory. Additionally students will be introduced to report writing related to commercial diving.

### **PMTX 1017X Com. SCUBA & Inland Diving**

3 quarter units

Prerequisites: *SCUBA card, Basic First Aid & CPR card, PMTX 1022X, PMTX 1024X*

Corequisites: *PMTX 1028X, PMTX 1900x*

Dive using SCUBA in various configurations, tend, supervise, keep log records of dives, operate radios (through water), and operate decompression chambers. Instruction using SCUBA diving to perform commercial diving work underwater by successfully completing a series of in-water projects.

### **PMTX 1022X Medical Aspects of Diving**

3 quarter units

Prerequisites: *Diving physical exam., PMTX 1012X,*

*and PMTX 1014X*

Corequisites: *PMTX 1024X, PMTX 1900x*

Initial instruction on basic anatomy and physiology of the body related to diving, particularly the systems affected by hyperbaric or hydrostatic pressure. Learn to recognize, prevent, and provide care for diving related disorders.

### **PMTX 1024X Decomp. Chamber & Forklift Op.**

3 quarter units

Prerequisites: *Diving Physical Exam, PMTX 1012X,*

*PMTX 1014X*

Corequisites: *PMTX 1022X, PMTX 1900x*

Instructions in operation of a standard off shore deck decompression chamber and performance of duties of outside tender, inside tender, log keeper, communications operator, and the uses, types, construction, safety, and care of hyperbaric chambers and their ancillary equipment. Students are required to demonstrate competency in safe chamber operation and the ability to make schematic drawings of diving systems and chambers and safely operate a forklift/lift truck.

### **PMTX 1028X Basic Surface Supply Diving**

2 quarter units

Prerequisites: *Diving Physical Exam, SCUBA card,*

*First Aid & CPR card, PMTX 1022X, PMTX 1024X*

Corequisites: *PMTX 1017X, PMTX 1900x*

Instruction on basic skills of surface supply light-weight diving, fundamental concepts, terminology, and practical skills of seamanship, line handling, rigging, and underwater work procedures and the fundamentals of line (rope) and wire rope classification, composition, and use. Proper tying and use of knots and their practical application by divers, working load limit (WLL) for rope, wire, and rigging hard-



ware, as well as to calculate the ratio and mechanical advantage of block and tackle are covered.

### **PMTX 1031X Diving Operations I**

2 quarter units

*Prerequisites:* PMTX 1028X, PMTX 1017X

*Corequisites:* PMTX 1060X, or PMTX 1080X, PMTX 1900x

Uses surface supply diving to perform work underwater by completing a series of in-water projects to develop underwater work skills and confidence. Students dive, tend, supervise, keep logs of dives, operate radios, and operate deck decompression chambers. Underwater students solve problems in decompression, rigging, and maintenance and are introduced to the use of tools used by divers. Students refine their knowledge and skills of safe use, pre-dive checks, basic pre and post dive maintenance of dive gear, equipment, and air systems.

### **PMTX 1033X Mixed Gas Diving**

3 quarter units

*Prerequisites:* PMTX 1035X

*Corequisites:* PMTX 1064X, or EMTX 1082X, PMTX 1900x

Theory of helium-oxygen commercial diving, practical applications of mixed gas diving used in various commercial diving operations, surface supply helium-oxygen diving, advanced thermal protection, saturation diving theory, and theory of splitting and mixing of gases.

### **PMTX 1035X Diving Operations II**

2 quarter units

*Prerequisites:* PMTX 1031X

*Corequisites:* PMTX 1062X, or EMTX 1081X, PMTX 1900x

Designed to challenge each student's ingenuity, motivation, and ability to work together. The class must work together as an operational team in a simulated commercial diving evolution utilizing all of the safety, planning, rigging, and other team and industrial skills they have gained in order to accomplish the assigned project tasks.

### **PMTX 1060X Underwater Inspection & Survey**

3 quarter units

*Prerequisites:* PMTX 1017X, PMTX 1028X

*Corequisites:* PMTX 1031X, PMTX 1900x

Introductory instruction in the theory and practice of conventional and underwater survey inspection using visual, magnetic particle and ultrasonic testing techniques. Students learn setup and calibration techniques and testing procedures. Practical experience is gained on a variety of test pieces as well as knowledge in the process of identifying, evaluating, and categorizing discontinuities with respect to their acceptance or rejection in accordance with industry codes and standards.

### **PMTX 1062X MT/PT II**

3 quarter units

*Prerequisites:* PMTX 1031X, PMTX 1080X

*Corequisites:* PMTX 1035X, PMTX 1900x

Extensive instruction in the theory and practice of topside and underwater survey inspections using the magnetic particle process and topside inspection using the liquid penetrate process. Gain knowledge in the process of identifying, evaluating, and categorizing discontinuities with respect to their acceptance or rejection in accordance with industry codes and standards.

### **PMTX 1064X Ultrasonic Testing I**

3 quarter units

*Prerequisites:* PMTX 1062X

*Corequisites:* PMTX 1033X, PMTX 1900x

Covers both theory and practical techniques used in ultrasonic inspections, set-up and calibration techniques of A-Scan presentations and effects of location, size, and shape of discontinuities, and flooded member, corrosion, and erosion inspection.

### **PMTX 1066X Ultrasonic Testing II**

3 quarter units

*Prerequisites:* PMTX 1064X, PMTX 1033X

*Corequisites:* PMTX 1015X, PMTX 1900x

Covers ultrasonic shear wave inspection theory and the set-up and calibration for shear wave inspection using a Distance Amplitude Correction (DAC) curve or 80 percent Full Screen Height (FSH) flaw evaluation technique. Students gain practice inspecting a wide range of plate and pipe welds with known discontinuities. Students also learn to identify, evaluate, and categorize discontinuities as to their acceptance or rejection in accordance with various industry codes and standards.

### **PMTX 1068X VT II/Underwater Inspection**

3 quarter units

*Prerequisites:* PMTX 1015X, PMTX 1066X, Diving Physical Exam

*Corequisites:* PMTX 1070X, PMTX 1900x

Fundamentals of visual testing to include: visual limitations, inspector responsibilities, codes and standards, weld joint geometry, welding terminology, welding/NDT symbols, mechanical and chemical properties of metals, destructive testing, metallurgy, weld processes, and weld / base metal discontinuities. Learn to use and maintain a variety of visual enhancing test equipment to include, but not limited to, assorted measuring tools, cathodic potential meters, still photography cameras, and closed circuit television systems.

### **PMTX 1070X Surface Cutting & Welding**

2 quarter units

*Prerequisites:* PMTX 1015X

*Corequisites:* PMTX 1068X, or PMTX 1086X, PMTX 1900x

Fundamentals of metallurgy including the physical properties, structure, and grain of common metals and their alloys, types and properties of steel and the fundamentals of the SMAW welding process. Fundamental and basic/intermediate practical skills of steel cutting, i.e., cutting, piercing, and gouging. Students are taught the skills necessary to obtain competency in both oxyacetylene and ultra-thermic cutting techniques. Introduced to the fundamentals of welding.

### **PMTX 1080X Emergency Medical Responder**

3 quarter units

*Prerequisites:* PMTX 1028X, PMTX 1017X

*Corequisites:* PMTX 1031X, PMTX 1900x

Basics of a first responder advanced first aid skills needed by commercial divers working in offshore and inland diving remote areas including near drowning, water rescue and extraction, hypothermia incidents, marine animal bites and stings, and methods of transport from vessels. Also includes the basics of Emergency Medical Responder requirements; including medical and trauma skills, basic anatomy and physiology as related to EMR requirements. Student will learn to properly assess and begin treatment of the sick and injured, including cognitive and prac-

tical skills of Healthcare Provider Level CPR, taking blood pressures, pulses, respiratory rates, and the use of simple adjuncts to assist in the management of an injured person's airway. Additional Emergency Medical Responder skills, including advanced first aid skills: bandaging, splinting, and spinal immobilization techniques, and safe methods of moving the injured and ill while awaiting a higher level of medical care. Trauma and psychiatric emergencies are also covered, as well as all basic life-saving skills. Students will be tested on assessment the sick and injured, blood pressures, pulses, respiratory rates, proper bandaging and wound care, splinting, and spinal immobilization techniques.

### **PMTX 1085X Advanced Diving Medicine**

3 quarter units

*Prerequisites:* EMTX 1081X, EMTX 1082X, Diving Physical Exam.

*Corequisites:* PMTX 1900x

Diving medical requirements and the skills necessary to become a commercial diver medic technician. Recognize and manage diving decompression illness; with specific focus on barotrauma, decompression sickness, arterial gas embolism, pulmonary over inflation syndrome conditions, breathing gas disorders, hypothermia, and near drowning are covered. Student will conduct practical chamber treatments to hone necessary skills for recompression treatment and chamber nursing support.

### **PMTX 1086X Advanced Hyperbaric Medicine**

3 quarter units

*Prerequisites:* PMTX 1085X

*Corequisites:* PMTX 1900x

Includes advanced medical skills needed by commercial diving medic technicians. Skills include parenteral administration of medication, aseptic techniques and sterile fields, IV administration, catheterization, advanced wound care and suturing, advanced emergency airway care and endotracheal intubation, and emergency thoracentesis. Students introduced to administration of clinical hyperbaric oxygen therapy, mono-place and multi-place chamber requirements. Students will conduct practical chamber treatments for recompression treatment and chamber nursing support. Student must complete 40 hours of ER clinical observations.

## **TEDX – Teacher Education**

### **TEDX 1809X: Interdisc Vocab Develop**

3 CEUs; \$60

Students will learn the systematic vocabulary method entitled the Rule of 3 or RAP in theory and practice. The Rule of 3 as a systematic method will be taught. Students will learn how the Rule of 3 teaches students all the key elements of 'knowing a word' which include the following: Definitional, Semantics, Structural, Mnemonics, Contextual and Categorical.

### **TEDX 1823X: ADD: Info & Interventions**

4 CEUs; \$450

Covering history of the disorder, accepted methods to assess and identify students with the disorder, and various methods, medications and strategies currently used to treat the disorder, this self-paced online course will help teachers achieve a better understanding of ADD and intervention strategies to facilitate positive student change.

**TEDX 1824X: Advanced Classroom Mgt**

3 CEUs; \$300

This course is geared primarily for professionals serving children and youth presenting behavior problems in the school or community. This course focuses on cognitive and cognitive-behavioral interventions (often lumped together under the rubric “social skills”) with an emphasis on teaching students how to change and manage their own behavior.

**TEDX 1825X: Educational Assessment**

3 CEUs; \$300

This course is designed to further develop the conceptual and technical skills required by teachers to help them identify their educational goals, and implement meaningful instructional strategies for effective learning by students with special needs. The focus of this course will therefore be on assessment for instructional programming addressed.

**TEDX 1826X: Traumatized Children**

3 CEUs; \$300

This course helps teachers, counselors, and educational personnel gain strategies to reach and teach students affected by stress, trauma, and/or violence. Participants learn the signs and symptoms of stress and trauma and explore how stress, violence, and trauma affect a student’s learning, cognitive brain development, and social-emotional development.

**TEDX 1827X: Teaching Diversity**

3 CEUs; \$300

This course is designed to give you the knowledge, tools and dispositions to effectively facilitate a diverse classroom. This course will help you understand and identify differences in approaches to learning and performance, including different learning styles and ways in which students demonstrate learning.

**TEDX 1844X: Behavior is Language**

4 CEUs; \$450

This online course gives teachers a new perspective on student behavior and effective tools to facilitate positive student change. Participants will learn behavioral techniques and intervention strategies that quell disruptive behavior, reduce power struggles while increasing classroom control, reduce workload, and help prevent burnout.

**TEDX 1845X: Violence in Schools**

3 CEUs; \$300

This online course gives teachers a better understanding of school violence, the motivations behind the use of violence and specific strategies to minimize the occurrence of violence in a school and community. The correlation and impact of the media, community and family upon violence will be investigated.

**TEDX 1846X: Learning Disabilities**

4 CEUs; \$450

This online course describes diverse theoretical approaches to handling learning disabilities and lays the foundation for appropriate assessment and evaluation. It covers program planning and implementation, stresses the importance of a close, positive partnership with parents/caregivers, and explores methods for ensuring the home-school axis is effective and meaningful.

**TEDX 1848X: Drugs & Alcohol in School**

3 CEUs; \$300

This online course teaches about alcohol, drugs and their influences in the classroom. Learn what students may be experiencing through their own use or from the use of persons close to them and the biological, psychological and social factors that comprise the disease of addiction.

**TEDX 1849X: Autism & Asperger’s Disorders**

3 CEUs; \$300

This online course provides information on the characteristics of the disorder, learning styles associated with the disorder, communication weaknesses and various intervention strategies that have proven to be successful when working with students with Autism spectrum disorders.

**TEDX 1868X: Inclusion**

3 CEUs; \$300

This interactive online course helps special and general educators to understand inclusion, an educational reform movement that advocates educating students with disabilities in the general education classrooms. This course will also help teachers identify their role in providing special services to students educated in inclusive classrooms.

**TEDX 1871X: Understanding Aggression**

4 CEUs; \$450

This online course includes topics on violence, aggression in the classroom, youth gangs, sports and television, drugs and alcohol, and “hot spots” that tend to breed aggression/violence. School personnel become more aware of causes of aggression and ways to evaluate and intervene before it turns to violence.

**TEDX 1872X: Talented & Gifted Education**

3 CEUs; \$300

This online course provides information on the history of exceptional children in relation to education, current law, and accepted methods for referral, assessment, and identification. It covers major program models and methods of differentiating instruction to meet the rate and level of learning of those students identified.

**TEDX 1879X: Working with Abused and Neglected Children**

3 CEUs; \$300

This online course teaches how to recognize signs of physical abuse, emotional abuse, sexual abuse, physical neglect and emotional neglect in children. Participants explore specific factors that exist in families who abuse or neglect their children. This course meets the child abuse and neglect educational requirements in most states.

**TEDX 1880X: Infant & Toddler Mental Health**

3 CEUs; \$300

This online course gives educators an understanding of infant and toddler mental health, child development, and strategies to promote positive relationships with children and families. It provides information that will help the learner understand and identify their role as a child care provider, educator, and early childhood professional.

**TEDX 1881X: Reading Fundamentals #1**

3 CEUs; \$300

This online course, on effective reading instruction, was designed to give background on Reading First as it applies to the No Child Left Behind federal legisla-

tion. The course discusses the research that supports scientifically-based research as it applies to phonetically-based instruction, assessment, and evaluation.

**TEDX 1882X: Reading Fundamentals #2**

3 CEUs; \$300

This online course is designed to lay the foundation for effective reading instruction and to teach about the elements of effective instruction and the importance of reading instruction.

**TEDX 1883X: Reading Fundamentals #3**

4 CEUs; \$450

This online course will focus on learning to read, reading to learn, and an introduction to reading assessment. As part of these key areas of reading instruction, the five elements of effective reading instruction will be highlighted, including definitions, implications for instruction and future directions.

**TEDX 1884X: Early Childhood: Family-Centered Services**

3 CEUs; \$300

Family-Centered Services covers four chapters. The first chapter takes an in-depth look at the definition and application of family-centered services. The second and third chapters are designed to improve your understanding of the complexity of families. The final chapter emphasizes parent education, interagency collaboration, and building communities of care.

**TEDX 1885X: Early Childhood: Observation & Assessment**

4 CEUs; \$450

This course is designed to help educators, para-professionals and child caregivers observe and assess various aspects of children’s development and programs. Participants will learn the components necessary for strong observation skills and will discover how to apply course learning to each student’s particular environment and needs.

**TEDX 1886X: Early Childhood Program Planning**

4 CEUs; \$450

Program Planning will cover planning and implementing a comprehensive, research-based curriculum for young children. We will discuss what curriculum is, and identify guidelines presented by the National Association for the Education of Young Children (NAEYC). We will review the steps for creating curriculum, planning a schedule, and creating lesson plans.

**TEDX 1887X: Early Childhood: Typical & Atypical Development**

4 CEUs; \$450

This course will present an introduction to the study of child development from conception to age 6 including a study of child development chronologically and a discussion of the newly-delivered infant. The course will also cover the time of early childhood that was called the magic years by Selma Fraiberg.

**TEDX 1888X: Harassment, Bullying & Cyber-Intimidation**

3 CEUs; \$300

Harassment, Bullying and Cyber Intimidation in School will discuss definitions and the personal, social, and legal ramifications associated with sexual harassment, bullying, and cyber-intimidation. We will then explore preventative strategies as well as how school staff can address these issues when they occur.

**TEDX 1889X: Teaching Math Conceptually**

3 CEUs; \$300

The course incorporates strategies for teaching concepts constructively and contextually. The goal is to gain a deeper understanding of the underlying concepts of various math topics and explore the principles of teaching those concepts to learners. This course will focus on the topics of number sense, basic operation, and fractions.

**TEDX 1891X: Why DI? An Intro to Differentiated Instruction**

4 CEUs; \$450

This is an interactive computer-based instruction course, designed to give students an understanding of the framework of and need for creating supportive learning environments for diverse learning populations. It will also provide connections to a variety of concepts, variables, and resources that will assist practitioners in aligning their own professional practices with those found in the differentiated classroom.

## **NEVADA PROGRAMS**

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- 320 Programs Offered**
- 320 Financial Aid**
- 321 Nevada Program Information**
- 322 School of Education**
- 323 Candidate Assistance Process**
- 327 Graduate Degree Programs**
- 329 Nevada Licensing Programs**



National University's Henderson Campus has been authorized by the State of Nevada Commission on Postsecondary Education to offer the following programs onsite. In addition, the State of Nevada's Department of Education has approved all teacher education programs leading to teacher licensing in the State of Nevada. The Master of Arts in Counseling Psychology meets the academic requirements necessary to sit for the Marriage and Family Therapist License examinations mandated by the State Board of Examiners for the State of Nevada.

## NEVADA PROGRAMS

All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Associate of Science in Human Biology

Bachelor of Arts in Early Childhood Education  
Bachelor of Arts in Elementary Education with Nevada Elementary Licensure  
Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure  
Bachelor of Arts in English Education with Nevada Secondary Licensure  
Bachelor of Business Administration  
Bachelor of Public Administration  
Bachelor of Science in Criminal Justice Administration

English Language Program (see National University Language [NULI] section for more information)

Master of Education with Nevada Elementary Licensure  
Master of Education with Nevada Secondary Licensure  
Master of Arts in Teaching  
Master of Arts in Counseling Psychology  
Master of Business Administration  
Master of Forensic Science  
Master of Public Administration  
Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room  
Master of Science in Organizational Leadership

## FINANCIAL AID

In addition to the financial aid outlined in the financial aid section of the catalog, the following programs are available to Nevada residents:

### VA Educational Benefits

On site Nevada students interested in using Military benefits as listed in the Financial Aid and Scholarships section must request transcripts for all/any previous training: college/university, vocational, military, etc.

Please call or visit the Veteran Affairs Office for additional information at:

2850 W. Horizon Ridge Parkway, Suite 301  
Henderson, NV 89052  
(702) 531-7800

### State Grants

Nevada public colleges and universities offer various grant opportunities that are funded by the state. Each college has designed programs that best serve its student population. Some programs are only for Nevada residents, while others are open to nonresidents. Most grants are need-based, but some may not require documented need. Information on two of the grant programs follows. Keep in mind that not all programs are offered at all colleges.

### Access Grant

The Access Grant is for undergraduate and graduate students who have financial need and are Nevada residents. The maximum award is \$3,000 for graduate students and \$2,500 for undergraduates, but the amount can vary depending on cost of attendance, enrollment status, living arrangements and availability of funds.

### Nevada Student Incentive Grant

This grant is for qualified low-income undergraduate and graduate students who are Nevada residents. The award amount varies by type of college, college costs, enrollment status and living arrangements.

### Tribal Scholarships

If you are a Native American, your tribe or nation may offer scholarships. To learn more, contact your tribe or call the regional office of the Bureau of Indian Affairs in Sacramento, California, at (916) 978-6058 or go to [www.oiep.bia.edu](http://www.oiep.bia.edu). Many tribes and the BIA require a "needs analysis" from the college's financial aid office to document eligibility, so be sure to file your FAFSA early. You will also find scholarships for Native Americans at [www.collegefund.org](http://www.collegefund.org).

### Foster Youth Grants

Up to \$5,000 a year for college or vocational training is available for foster youth who have aged out of foster care or who were adopted after age 16. To learn more, talk to your high school counselor, your independent living coordinator, your college's financial aid administrator, go to [www.statevoucher.org](http://www.statevoucher.org) and click on "Nevada," or call (775) 684-4450.

A number of foundations also offer tuition waivers and scholarships for foster youth. The Otto A. Huth Scholarship Trust Fund is available to children who have been in the custody of the Nevada Division of Child and Family Services in a foster or group home. The application deadline is March 15 of each year. For more information, go to [www.dcf.state.nv.us](http://www.dcf.state.nv.us) (click on "Scholarships"). In addition, the CASA Foundation provides up to \$500 per semester for foster youth. For details, call (702) 455-4306.

### Refund Policy – Nevada Onsite Only

Students are accepted and registered for classes with the understanding that they will attend the entire course. Faculty contracts, the commitment of space, and other University resources are made on that assumption, creating financial obligations that students who withdraw must share. National University's refund policy reflects this position. Students may withdraw themselves from class prior to midnight of the ninth (9th) day of the session by contacting their admissions advisor.

To accurately count session days, note that the first day of a session – not the actual day a student attends class – counts as day one of that session. The University counts calendar days rather than business days for determining refunds. As such, if the first day of the session is a Monday, the student would need to withdraw prior to midnight of the following Tuesday, the ninth day of that session.

If a student taking an onsite class in Nevada does not complete a course, a tuition refund is made according to the following schedule, which is based upon a 28-day month.

Students who withdraw from a course prior to midnight of the:

- ninth (9th) day of the session will receive a 100 percent refund
- tenth (10th) day of the session will receive a 64 percent refund
- eleventh (11th) day of the session will receive a 60 percent refund
- twelfth (12th) day of the session will receive a 57 percent refund
- thirteenth (13th) day of the session will receive a 54 percent refund
- fourteenth (14th) day of the session will receive a 50 percent refund
- fifteenth (15th) day of the session will receive a 46 percent refund
- sixteenth (16th) day of the session will receive a 43 percent refund
- seventeenth (17th) day of the session will receive a 40 percent refund.

Students who withdraw from a course after midnight of the seventeenth (17th) day of the session will not receive a refund.

Students must have a credit balance in their account to receive a refund. Refunds, depending on the verification of funds, are processed and mailed within fifteen (15) days from the later of: a) the date from when a student cancels enrollment; b) the date from when the institution terminates a student's enrollment; c) the last day of an authorized leave of absence (if the student fails to return after this period); or d) the last day of attendance of a student. All refunds are mailed to the student's home address. Students must make sure that the address on file is correct.

## NEVADA PROGRAM INFORMATION

### ■ ASSOCIATE OF SCIENCE IN HUMAN BIOLOGY

Faculty Advisor: Huda Makhluf; (858) 642-8488; hmakhluf@nu.edu

See College of Letters and Science Listings

### ■ BACHELOR OF ARTS, MAJOR IN EARLY CHILDHOOD EDUCATION

Lead Faculty: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

See School of Education Listings

### ■ BACHELOR OF BUSINESS ADMINISTRATION

Faculty Advisor: Brian Simpson; (858) 642-8431; bsimpson@nu.edu

See School of Business and Management Listings

### ■ BACHELOR OF PUBLIC ADMINISTRATION

Faculty Advisor: Maryam Davodi-Far; (858) 642-8653; mdavodi-far@nu.edu

See School of Professional Studies Listings

### ■ BACHELOR OF SCIENCE IN CRIMINAL JUSTICE ADMINISTRATION

Faculty Advisor: James Guffey; (916) 855-4109; jguffey@nu.edu

See School of Professional Studies Listings

### ■ ENGLISH LANGUAGE PROGRAM (ELP)

See National University Language Institute section of the catalog for more information.

### ■ MASTER OF ARTS IN TEACHING

Program Faculty Advisor: Ron Germaine; (858) 642-8316; rgermain@nu.edu

See School of Education Listings

Candidates for the Master of Arts in Teaching (MAT) degree must already hold a Nevada teaching license. The MAT program does not meet the standards of quality for licensure or endorsement in teaching in public education in Nevada. Students should speak with the faculty advisor regarding area of specialization selection.

### ■ MASTER OF BUSINESS ADMINISTRATION

Faculty Advisor: Kamlesh Mehta; (619) 563-7288; kmehta@nu.edu

See School of Business and Management Listings

### ■ MASTER OF FORENSIC SCIENCES

Faculty Advisor: Ismail Sebetan; (858) 642-8419; isebetan@nu.edu

See College of Letters and Sciences Listings

### ■ MASTER OF PUBLIC ADMINISTRATION

Faculty Advisor: Maryam Davodi-Far; (619) 563-7218; mdavodi-far@nu.edu

See School of Professional Studies Listings

### ■ MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP

Faculty Advisor: Julia Buchanan; (619) 563-7289; jbuchanan@nu.edu

See School of Business and Management Listings

### ■ MASTER OF ARTS IN COUNSELING PSYCHOLOGY (NEVADA)

Faculty Advisor: Donald Posson; (702) 531-7832; dposson@nu.edu

The Master of Arts in Counseling Psychology degree provides the academic pathway for students who are committed to the practice of professional counseling. The program includes core courses that all students must take and two optional tracks:

- The MA Counseling Psychology – Nevada LCPC is based on the academic requirements to be eligible for licensing as a licensed clinical professional counselor by the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors.
- The MA Counseling Psychology – Nevada MFT Specialization is based on the academic requirements to be eligible for licensure as a marriage

and family therapist by the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors.

The Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors does not approve programs in Professional Counseling or Marriage and Family Therapy. The Board of Examiners reviews each applicant's transcript to determine whether certain substantive subject matter areas have been adequately studied. National University has designed, to the best of its ability, a program that meets the Board of Examiners requirements based on the best available information from the Board. However, because the Board of Examiners does not approve any sequence of courses as meeting its requirements, National University cannot guarantee that any specific course sequence will fully meet Board requirements.

The degree may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about the MFT outside of Nevada. The degree also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology.

### Program Specifications

- Students must complete all coursework with a grade point average (GPA) of 3.0 for all courses in this program. Students who receive a grade of "C+" or lower in two (2) or more courses must repeat all such courses before being allowed to continue in the program. Students who receive a "D" or "F" grade in any course must repeat the course.
- Students must complete a minimum of 10 hours of individual, marital, family, or group psychotherapy before taking the first Counseling Practicum course and another 15 hours before graduation for a total of 25 hours.
- MAC/NV-LCPC and MFT students must obtain a total of 100 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 651A, B, C, and D. During each of these courses, 75 hours must involve face-to-face psychotherapy with clients.
- Independent studies are not allowed in this program without departmental approval.
- Nevada students seeking licensure must register with the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Clinical Professional Counselors after graduation and fulfill all NV licensing requirements.
- Students are also urged to join their respective professional association. Students in the NV-MFT and NV-LCPC specializations must obtain malpractice insurance, which may be obtained through their professional association or another professional organization.
- Students must complete all coursework within seven years. Any courses taken more than seven years ago must be repeated.

### Application Requirements

Students interested in enrolling in this program should contact the Henderson campus for further information regarding the application process.

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information for graduate degrees as well as the Master of Arts in Counseling Psychology program criteria. All applicants are evaluated in terms of the requirements for preparation for the psychotherapy profession, regardless of career goals. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients that provide the necessary conditions for therapeutic change.
- Diagnose and assess categories of mental distress, psychopathology, and problems in living in diverse individuals, couple, families, and systems according to the current diagnostic systems.
- Demonstrate ability to develop strategies and detailed plans for successful and ethical psychotherapeutic interventions with diverse client groups in various clinical contexts, including crisis intervention and case management assessment.

- Demonstrate knowledge of various models of psychotherapy, capacity to critically evaluate and assess their effectiveness, and execute psychotherapeutic interventions within diverse relationships.
- Integrate professional and personal development through self-reflection and introspective awareness.

### Degree Requirements

(with Area of Specialization in Clinical Professional Counseling 18 courses; 75 quarter units)

(with Area of Specialization in Marriage and Family Therapy 19 courses; 79.5 quarter units)

To receive the Master of Arts in Counseling Psychology, students must complete the number of credits listed above for their selected specialization. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

### Prerequisite Recommended Preparation

(1 course; 4.5 quarter units)

Candidates who have not previously completed this course or its equivalent are strongly urged to do so. PSY429 can be taken either online or in a classroom.

PSY 429 Intro to Personality Theory  
*Prerequisite: ENG 100, ENG 101, and PSY 100*

### Program Core Requirements

(12 courses; 54 quarter units)

PSY 635 Childhood and Adolescence  
PSY 629A Adulthood and Aging  
PSY 625 Counseling Techniques and Prac  
PSY 623 Diagnosis and Assessment  
PSY 627A Legal and Ethical Issues  
PSY 636 Child and Adolescence  
PSY 628 Group Therapy  
PSY 637 Culture Competencies  
PSY 642 Therapy with Relational Trauma  
PSY 653 Research: Paradigms & Critique  
CHD 640 Treatment of Addictions  
PSY 626 Human Sexuality in Therapy

Students must choose one of the following specializations:

### ▲ Specialization in Licensed Clinical Professional Counselor

(6 courses; 21 quarter units)

PSY 616 Counseling Theories  
PSY 654 Career & Lifestyle Development  
PSY 651A Counseling Practicum I (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*  
PSY 651B Counseling Practicum II (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*  
PSY 651C Counseling Practicum III (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*  
PSY 651D Counseling Practicum IV (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*

The practicum seminar meets once a week for 1.5 hours during three consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon.

### ▲ Specialization in Marriage and Family Therapy (Nevada)

#### Area of Specialization Requirements

(7 courses; 25.5 quarter units)

Students choosing the MFT Specialization must complete the following seven courses in addition to the MAC core coursework in order to complete their MAC degree.

PSY 632A Couples/Family Therapy A  
PSY 632B Couples/Family Therapy B  
*Prerequisite: PSY 632A*  
PSY 617A Family Systems  
PSY 651A Counseling Practicum I (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*  
PSY 651B Counseling Practicum II (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*  
PSY 651C Counseling Practicum III (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*  
PSY 651D Counseling Practicum IV (3 quarter units)  
*Prerequisite: Regional Lead Faculty Approval*

## SCHOOL OF EDUCATION

### NEVADA LICENSING PROGRAMS

Certain licensing programs may require enrollment into an electronic portfolio. Please see your faculty advisor for further information.

#### Admission Requirements

Students seeking a Nevada Teachers License at the graduate level at National University must possess a conferred or completed bachelor's degree, with a minimum 2.5 GPA from a regionally accredited U.S. university. Students with international degrees who do not hold a U.S. approved bachelor's degree must receive an evaluation from an approved international evaluation agency before being admitted to the University and starting the first course.

#### Admission Process

In addition to the admission requirements listed in the general admission procedures section of this catalog, applicants to all of National University's licensing programs must proceed through the following admissions procedure:

Stage 1: Students meet with an admission advisor and complete an admissions packet. Students who meet the listed criteria are admitted on a "provisional" basis with an estimated program of study.

Graduate students; see "Graduate Admission Standards."

Stage 2: All graduate level licensure students must attend a Faculty Advisement orientation seminar and complete a candidate statement within 30 days of starting their first course or prerequisite course. The candidate statement must be reviewed and signed by the faculty advisor for admission to the School of Education.

Stage 3: Students must complete the licensure packet and return this to the faculty advisor within 30 days to avoid evaluation or scheduling errors. Candidates enrolled in both master's degree and licensure programs are evaluated after the licensure packet is returned to the faculty advisor.

Students are not eligible for financial aid until the evaluation is complete.

Students transferring from a teacher education program at another university must provide a letter of good standing. A maximum of 13.5 quarter units may be accepted for unit credit and/or course content provided the units have not been used to earn another advanced degree.

Students who are absent for a period of 12 months or more must reenroll and reevaluate under a new catalog.

All licensing courses are valid for seven years.

## CANDIDATE ASSISTANCE PROCESS

### National University Policies

National University has Policies and Procedures for Student Discipline, Academic Dishonesty, Civility, Reasons for Probation, Suspension and Dismissal that are described in the Catalog under the Policy and Procedures section. National University also has a process for providing accommodation to students with documented special needs (see Students with Disabilities under the Student Services section of the catalog). Additionally, a Writing Center and Math Tutoring are available to assist students seeking to improve their writing and mathematics skills.

### School of Education Procedures

The School of Education has developed procedures to assist candidates (students in professional preparation programs) in meeting School and program requirements. Candidates must be able to demonstrate the requisite knowledge, skills and dispositions of the School's Conceptual Framework and the values of National University. These knowledge, skills and dispositions provide a foundation for educators in today's schools.

Within the School of Education, each program has identified knowledge, skills and dispositions necessary for specific professional responsibilities. The knowledge, skills and dispositions are based upon the School of Education Conceptual Framework, California Commission on Teacher Credentialing (CTC) preparation standards, National Council on the Accreditation of Teacher Education (NCATE) standards and professional organization standards.

### Candidate Progress Alert

When an instructor becomes aware that a candidate needs assistance to effectively demonstrate the appropriate knowledge, skills and/or dispositions within their program, a Candidate Progress Alert will be initiated by their instructor. This is the first step in the Candidate Assistance Process that is intended to be supportive, based upon each program's standards and individualized to the candidate.

The Candidate Progress Alert is intended to alert the candidate to areas of performance that are deficient or may need remediation. When a Progress Alert is initiated, the candidate and instructor will meet to develop activities to improve areas requiring attention and identify methods of assessment.

### Candidate Assistance Plan

In cases where a candidate has been unable to adequately remediate deficiencies identified in a Progress Alert, the appropriate faculty member will develop a formal Candidate Assistance Plan. The Plan will identify areas of deficiency and prescribe specific activities and/or intervention strategies the candidate will need to complete to successfully meet knowledge, skills and/or dispositions. The faculty member will review the Plan with the candidate to ensure that the information, intervention strategies and assessment measures are clear. A candidate's signature on the Candidate Assistance Plan will acknowledge receipt and review of the Plan and will be maintained by the School of Education.

### Unsatisfactory Completion of Candidate Assistance Plan

When a candidate has not satisfactorily completed a Candidate Assistance Plan, the Plan, and a detailed description of activities or areas not adequately met will be forwarded by the appropriate faculty member with a recommendation to the School of Education and Office of Student Services designees. The candidate will be notified by the Dean of the School of Education regarding the candidate's continuing status within the program and/or the School.

### Requesting Accommodations to a Candidate Assistance Plan

Students with disabilities who wish to apply for accommodations to a Candidate Assistance Plan (Plan) may do so through submitting an application for accommodations to the National University Office of Special Services (Special Services). Applications for accommodations for a disability may be requested from the Office of Special Services, National University, 11255 North Torrey Pines Road, La Jolla, CA 92037-1011, Phone: (858) 642-8185. Students seeking special accommodations due to a disability must submit an application with supporting documentation to Special Services.

The application will be reviewed within 14 days of receipt by the Committee for Students with Disabilities (CSD). The CSD will engage in an interactive process with the student regarding the accommodations request and determine the appropriate accommodations to be administered during the Plan. Once the CSD determines the appropriate accommodations, written notification is sent within seven

(7) days to the student and faculty responsible for the implementation of the Plan.

Following receipt of the CSD notification, the faculty responsible for implementing the Plan will schedule a formal meeting with the student to review the Plan and the approved accommodations. The timeline for completion of a Plan is halted during the accommodations application and review process, and begins following the formal meeting. If the accommodations request is not approved, the timeline for completion of the Plan begins upon receipt of the CSD's notification letter. If a student is denied accommodation(s) or believes that the accommodation afforded is insufficient, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipt of the appeal or prior to the start date of the next course, depending on which occurs first. The decision of the vice president is final. The timeline for completion of a Plan is also halted during the appeals process.

If a student believes that accommodations approved by Special Services have not been implemented in the Plan, they should immediately contact Special Services. The timeline for completion of the Plan is halted during this process. Special Services will contact the instructor to resolve the student's concern and ensure the approved accommodations are properly implemented. Special Services will provide the student with notification of progress, findings, or resolution within fourteen (14) days. If either the student or Special Services feel that a satisfactory resolution is not reached, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipt of the appeal. The decision of the vice president is final. If the complaint is not satisfactorily resolved at the University level, the student may choose to file a complaint with the U.S. Department of Education Office for Civil Rights, 50 Beale Street Suite 7200, SF, CA 94105, Phone: (415) 486-5555, E-mail: ocr.sanfrancisco@ed.gov.

The timeline for completion of a Plan is also halted during the appeals process.

### Elementary and Secondary Student Teaching Placements

Candidates are placed in their student teaching assignment by the University.

Detailed requirements for student teaching are listed in the Student Teaching Handbook for Elementary/Secondary and in the ORI for Teacher Education

Note: Teacher Education Candidates may apply for equivalency (see form in Student Teaching Handbook) of one half of this requirement if they can document appropriate experience and meet other specified criteria.

Candidates will be placed:

- By the University in their student teaching school under the supervision of a University Supervisor and Cooperative Teacher(s).
- For at least one-half of their student teaching, in approved public, charter or private schools that implement state adopted core curriculum content standards within the state of Nevada. Summer school, after-school programs, and outdoor education programs will be reviewed to determine if they meet criteria for a student teaching assignment. Court schools or community alternative schools may be acceptable placements for one-half of the student teaching experience.
- Out-of-state courtesy placements in state-accredited schools outside Nevada may be considered if the candidate moves out of state. Prior approval must be given by the field experience coordinator.
- In a supervised full-time student teaching assignment within the appropriate licensing area for 16 weeks.
- In two different teaching settings.
- In two different grade spans.

Elementary Education Candidates will be placed:

- In classrooms to observe and participate at two or more of the following grade spans: K-2, 3-5, and 6-8. A K-2 class experience is required unless there is documented fieldwork experience with beginning readers.

Secondary Education Candidates will be placed:

- In two or more subject-specific teaching assignments that differ in content and/or grade level.
- In a teaching experience of a minimum of four academic periods a day in two classroom settings.



### Licensure Candidates Teaching Under Contract

National University provides a program whereby actively employed teachers can complete the requirements for their teaching license while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the license sought. Licensure candidates teaching under contract:

- In an approved elementary education assignment can complete the assignment in their own classroom. There must be documented experience with K-2 or beginning readers, otherwise candidates must complete four weeks in an alternate setting with a certified teacher.
- In an approved secondary education assignment (within the license area) can complete the full semester in their own assignment provided that they are teaching four periods in two grade levels, or can document prior experience at other grade levels.
- In a regionally accredited and approved non-public school setting must complete a minimum of 4 weeks student teaching in a public school.
- Teach under the supervision of a University Supervisor and Cooperative Teacher who model effective teaching, implement state-adopted academic core curriculum, mentor the candidate, and work with the University Supervisor.

### Application for a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.
- Passing a portfolio review that covers the objectives of the particular program pursued. Contact your local faculty advisor for deadline and review dates.

Each candidate must have on file:

- A zero account balance
- Official transcripts from all colleges/universities attended
- Passing score in PRAXIS I
- Verification of subject matter competency with score reports or cards from PRAXIS II.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica

All candidates are expected to participate in the evaluation of programs including follow-up studies after being employed in the field.

### ■ BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH NEVADA ELEMENTARY LICENSURE

Faculty Advisor for License: Jean Linell; (702) 799-6800; [jlinell@nu.edu](mailto:jlinell@nu.edu)

Faculty Advisor for G.E.: Jacqueline Caesar; (858) 642 8350; [jcaesar@nu.edu](mailto:jcaesar@nu.edu)

The Bachelor of Arts in Elementary Education provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines and application of knowledge to life beyond the University. This degree program gives candidates an enriched and provocative curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as elementary teachers in a changing cultural and economic environment.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis and synthesis of historical data and new information
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines

- Identify and appreciate the cultural perspectives of world views
- Use information communications technology for knowledge sharing and the interdisciplinary approach
- Demonstrate a deep and flexible understanding of subject matter
- Demonstrate application of educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students
- Demonstrate knowledge of child and adolescent development in order to explain how to support growth in cognitive, social, physical and emotional domains
- Utilize different teaching strategies to accomplish the teaching and learning goals
- Demonstrate a thorough understanding of the learning needs and developmental issues of students to create positive learning environments that ensures healthy human growth
- Demonstrate understanding through use of systematic observations, documentation and other effective assessment strategies in a responsible manner to facilitate and account for learning, and to support positive growth
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas
- Consider students knowledge when designing, implementing, and assessing curriculum to promote developmentally appropriate learning outcomes for all children
- Adhere to professional standards and ethics

### Degree Requirements

To receive a Bachelor of Arts in Elementary Education, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate competency with passing scores on PRAXIS I & II examinations.

### Preparation for the Major

(3 courses; 10.5 quarter units)

LIT 100\* Introduction to Literature  
*Prerequisite: ENG 100, and ENG 101*

HIS 375 Nevada History, Gov't and Cons  
*Prerequisite: ENG 100, ENG 101*

TED 320 Introduction to Teaching (1.5 quarter units)

Passage of PRAXIS I Examination is required before beginning course work in the major.

\* May be used to meet a General Education requirement

### Requirements for the Major

(24 courses; 106.5 quarter units)

ALL Teacher Education courses (TED) have a field experience component. Students must maintain a 3.0 GPA within all TED course work and grades of "D" or "F" are not acceptable in TED courses. All major course work must be completed and PRAXIS II passed prior to student teaching. TED 320 must be satisfactorily passed prior to beginning course work in the major.

### Elementary Education Major Requirements

(19 courses; 85.5 quarter units)

BIS 301 Intro to Interdisc. Studies

COM 380+ Democracy in the Info. Age  
*Prerequisite: ENG 100 and ENG 101*

SOC 350+ Cultural Diversity  
*Prerequisite: ENG 100 and ENG 101*

ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A</i>
BIS 401	Interdisciplinary Practice: In <i>Prerequisite: BIS 301 and four additional courses from the major</i>
TED 300	Fundamentals of Education <i>Prerequisite: TED 305 or TED 320</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320</i>
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 340	Content Area Reading Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 350	Math and Science Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 355	Hist/Social Science Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 380	Arts/PE/Health Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320</i>
TED 440	Leadership and Assessment <i>Prerequisite: TED 305 or TED 320</i>

+ Diversity Enriched Offering

Choose one from the following:

ART 329+	World Art <i>Prerequisite: ENG 100, ENG 101</i>
MUS 327+	World Music <i>Prerequisite: ENG 100, and ENG 101</i>

ART 400 Expressive and Integrative Art

+ Diversity Enriched Offering

Choose one from the following:

SCI 300	Geography
EES 301	Earth & Planetary Sciences
BIO 310	Evolution <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, or BIO 100, and BIO 100A</i>
EES 335	Environmental Science
BIO 411	Biodiversity <i>Prerequisite: BIO 161, BIO 162, BIO 100A, or BIO 100 and BIO 100A or equivalent</i>

#### Capstone Course

BIS 499 Interdisciplinary Studies Proj

+ Diversity Enriched Offering

#### Student Teaching Requirements

(5 courses; 21 quarter units)

Candidates must pass PRAXIS I & II examinations and have 60 hours of field experience documented prior to Student Teaching. TED 470 and 465 A, B, C, and D are field experience or seminar courses receiving a Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

TED 465A	Student Teaching I <i>Prerequisite: Completion of all upper division course requirements, including all TED coursework.</i>
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TED 465B	Student Teaching II <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
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TED 465C	Student Teaching III <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
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TED 465D	Student Teaching IV <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
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TED 470	Student Teach/E-Portfolio (3 quarter units)
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#### ■ BACHELOR OF ARTS IN MATHEMATICS EDUCATION WITH NEVADA SECONDARY LICENSURE

*Faculty Advisor for Mathematics: Igor Subbotin; (310) 662-2150; isubboti@nu.edu*

*Faculty Advisor for License: Jean Linell; (702) 799-6800; jlinell@nu.edu*

The Bachelor of Arts in Mathematics Education provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. Candidates are required to complete all required coursework as well as the PRAXIS I and PRAXIS II to receive a license.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication
- Develop fundamental knowledge in geometry
- Model real world problems with a variety of algebraic and transcendental functions
- Use advanced statistics and probability concepts and methods
- Use educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students
- Explain how to support growth in cognitive, social, physical and emotional domains
- Create positive learning environment that ensures healthy human growth
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas
- Demonstrate professional standards and ethics
- Utilize different teaching strategies to accomplish the teaching and learning goals

#### Degree Requirements

To receive a Bachelor of Art in Mathematics Education, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree.

### Preparation for the Major

(5 courses; 19.5 quarter units)

TED 320	Introduction to Teaching (1.5 quarter units)
HIS 375	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100, ENG 101</i>
MTH 221	Calculus II <i>Prerequisite: MTH 220</i>
MTH 222	Calculus III <i>Prerequisite: MTH 221</i>
MTH 223	Calculus IV <i>Prerequisite: MTH 222</i>

Passage of PRAXIS I Examination is required before beginning coursework for the major.

### Mathematics Major Requirements

(11 courses; 49.5 quarter units)

MTH 311	Topics from Geometry <i>Prerequisite: MTH 215</i>
MTH 325	Discrete Mathematics <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B</i>
or	
CSC 331	Discrete Structures and Logic <i>Prerequisite: CSC 252 and EGR 220</i>
MTH 411	Number Theory <i>Prerequisite: MTH 215, MTH 216A, MTH 216B, or MTH 301</i>
MTH 435	Linear Algebra <i>Prerequisite: MTH 220 and MTH 325</i>
MTH 416	Algebraic Structures <i>Prerequisite: MTH 435 and MTH 325</i>
MTH 417	Foundations of Geometry <i>Prerequisite: MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311</i>
MTH 418	Statistical Analysis <i>Prerequisite: MTH 210 and MTH 220</i>
MTH 412	History of Mathematics <i>Prerequisite: MTH 215, or MTH 301, or MTH 216A, and MTH 216B</i>
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215, or MTH 216A, and MTH 216B, or MTH 301</i>
MTH 460	Problem Solving Strategies <i>Prerequisite: MTH 416, and MTH 417</i>
MTH 461	Methods of Teaching Math <i>Prerequisite: MTH 311, MTH 325, MTH 412, and MTH 460</i>

### Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

All Teacher Education coursework has a field experience component. Students must maintain a 3.0 GPA within all TED coursework. Grades of "D" or "F" are not acceptable in TED courses.

TED 300	Fundamentals of Education <i>Prerequisite: TED 305 or TED 320</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 340	Content Area Reading Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320</i>

TED 440	Leadership and Assessment <i>Prerequisite: TED 305 or TED 320</i>
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### Student Teaching Requirements

(5 courses; 21 quarter units)

Students must pass PRAXIS I & II prior to Student Teaching I. TED 470 and 465 A, B, C, and D are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

TED 465A	Student Teaching I <i>Prerequisite: Completion of all upper division course requirements, including all TED coursework.</i>
TED 465B	Student Teaching II <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 465C	Student Teaching III <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 465D	Student Teaching IV <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 470	Student Teach/E-Portfolio (3 quarter units)

### ■ BACHELOR OF ARTS IN ENGLISH EDUCATION WITH NEVADA SECONDARY LICENSURE

*Faculty Advisor for License: Jean Linell; (702) 799-6800; jlinell@nu.edu*

*Faculty Advisor for English: John Miller; (714) 429-5146; jmiller@nu.edu*

The Bachelor of Arts in English Education provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics and communication studies. This program prepares candidates for professional work as secondary teachers in a changing cultural and economic environment.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate familiarity with major British and American writers and their works.
- Demonstrate knowledge of the major periods and movements of British and American literary history.
- Demonstrate an appreciation of the role of marginalized or oppositional voices in the evolution of the literary tradition and literary history.
- Demonstrate the ability to analyze and interpret literary works within their historical and cultural contexts.
- Demonstrate the ability to analyze and interpret works of literature in the context of generic conventions.
- Demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of literary texts.
- Demonstrate understanding of major critical approaches to the interpretation of literature.
- Demonstrate the ability to compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Demonstrate application of educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.
- Demonstrate knowledge of adolescent development in order to explain how to support growth in cognitive, social, physical and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students to create a positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning

and achievement in content areas.

- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

### Degree Requirements

To receive a Bachelor of Arts in English Education candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must receive passing scores on PRAXIS I & II.

### Preparation for the Major

(4 courses; 15 quarter units)

ENG 310	Grammar <i>Prerequisite: ENG 101, LIT 100, and TED 320</i>
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100, and ENG 101</i>
HIS 375	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100, ENG 101</i>
TED 320	Introduction to Teaching (1.5 quarter units)

Passage of PRAXIS I Examination is required before beginning coursework for the major.

### Requirements for the Major

All Teacher Education courses (TED) have a field experience component. Students must maintain a 3.0 GPA within all TED coursework and grades of "D" or "F" are not acceptable in TED courses. All major coursework must be completed and PRAXIS II passed prior to student teaching.

### English Major Requirements

(10 courses; 45 quarter units)

COM 360+	Representation in the Media <i>Prerequisite: ENG 100 and/or ENG 101</i>
<b>or</b>	
ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>
<b>or</b>	
ART 315	Film as Art <i>Prerequisite: ENG 100 ENG 101</i>
<b>and</b>	
ENG 365	Creative Writing <i>Prerequisite: ENG 100 and ENG 101</i>
LIT 311	British Literature I <i>Prerequisite: LIT 100</i>
LIT 312	British Literature II <i>Prerequisite: LIT 100</i>
LIT 321	American Literature I <i>Prerequisite: LIT 100</i>
LIT 322	American Literature II <i>Prerequisite: LIT 100</i>
LIT 338	Shakespeare <i>Prerequisite: LIT 100</i>
LIT 463	20th Century World Literature <i>Prerequisite: LIT 100</i>
LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>

+ Diversity Enriched Offering  
Choose one from the following:

LIT 345	Mythology <i>Prerequisite: LIT 100</i>
LIT 430	Children's Literature <i>Prerequisite: LIT 100</i>
LIT 460	Gender and Literature <i>Prerequisite: LIT 100</i>

### Education Theory and Methodology Major Requirements

(9 courses; 40.5 quarter units)

TED 300	Fundamentals of Education <i>Prerequisite: TED 305 or TED 320</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 340	Content Area Reading Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320</i>
TED 440	Leadership and Assessment <i>Prerequisite: TED 305 or TED 320</i>
TED 450	Methods of Teaching English <i>Prerequisite: TED 305 or TED 320</i>

### Student Teaching Requirements

(5 courses; 21 quarter units)

Candidates must pass PRAXIS I & II and must have documented 60 hours in field experience prior to student teaching. TED 465 A, B, C, and D are field experiences receiving an honors, satisfactory, or unsatisfactory grade and are not factored into the cumulative GPA

TED 465A	Student Teaching I <i>Prerequisite: Completion of all upper division course requirements, including all TED coursework.</i>
TED 465B	Student Teaching II <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 465C	Student Teaching III <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 465D	Student Teaching IV <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 470*	Student Teach/E-Portfolio (3 quarter units)

\* Must be taken concurrently with TED 465 A-D

## GRADUATE DEGREE PROGRAMS

### ■ MASTER OF EDUCATION WITH NEVADA ELEMENTARY LICENSURE

*Faculty Advisor: Nedra Crow; (858) 642-8004; ncrow@nu.edu*

The Master of Education with Nevada Elementary Licensure is designed for students who are committed to being instructional leaders in the K-8 setting. Courses for this degree meet the Nevada Department of Education requirements for an initial teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice as well as promotes life-long learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time.

The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. Elementary and Secondary Education teacher candidates meet subject matter competence by passing the appropriate PRAXIS II examinations. Candidates must meet all state requirements for the Elementary Education Teaching License to apply to the Nevada Department of Education for licensure.

An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the InTASC Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

For more information, please see Nevada Licensing Program Information for Graduate Degrees.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in designing and implementing developmentally appropriate and challenging learning experiences that respect cognitive, linguistic, social, emotional, and physical differences.
- Integrate knowledge and abilities in establishing and maintaining inclusive learning environments enabling all learners to meet high standards while recognizing individual and cultural differences.
- Integrate knowledge and abilities in establishing and maintaining learning environments that support individual and collaborative learning, and encourage positive social interaction, active engagement in learning, and self-motivation.
- Integrate the discipline(s)' central concepts, tools of inquiry, and structures to create learning experiences accessible and meaningful for learners in mastering the content.
- Integrate concepts and differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Integrate knowledge and abilities in designing and using multiple methods of assessment that learners use to monitor their own growth and decision-making as well as guide the teacher in instructional planning.
- Integrate knowledge of learners and the community context in planning instruction that supports every student in meeting rigorous learning goals of content areas.
- Integrate knowledge and abilities in using a variety of instructional strategies to encourage learners to develop deep understanding of content areas and build skills to apply knowledge in meaningful ways.
- Integrate knowledge and abilities in ongoing professional learning by using evidence to evaluate the influences of professional practices, choices, and actions on learners, families, other professionals, and the community.
- Seek appropriate leadership roles and opportunities by collaborating with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and advancement in the profession.
- Evaluate the application of educational research, evidence-based practices, and academic writing with a focus on elementary education.

### Degree Requirements

To receive a Master of Education with Nevada Elementary Licensure, students must complete at least 70.5 quarter units of graduate work, 52.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, including student teaching.

### Program Requirements for Degree and Nevada licensure

(15 courses; 70.5 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities
EDT 608	Technology in the Classroom

TED 621A	Lang. Dev. Methods: Elem. Sch. <i>Prerequisite: SPD 604, SPD 608, TED 602, TED 606</i>
TED 621B	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
TED 616A	C&I I:History & Social Science
TED 616B	C&I II: Math & Science
TED 616C	C&I III:V & P Arts Health & PE
TED 626	Classroom Management <i>Prerequisite: TED 623, or TED 621A</i>
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)
TED 649	Student Teaching Seminar
TED 690	Capstone <i>Prerequisite: TED 530B with a minimum grade of S, or TED 640B with a minimum grade of S</i>

### Course of Study

National University's Master of Education with Nevada Elementary Licensure is structured in four, intra- and inter-related areas: foundation courses, elementary education method courses, student teaching courses, and research course. This curricular organization is developmental in theoretical knowledge, applied skills, field K-6 classroom experiences, and learning outcomes. As a result, teacher candidates move from the foundation block of courses, to the method courses before applying for student teaching. The research course is last course in the degree. Candidates who successfully complete the Professional Teacher Preparation courses and related requirements will be eligible for a Nevada teaching license; those students who choose to earn a Master in Education degree must complete one additional course.

### Foundation Courses

The five foundation courses are considered the foundation family because all the courses provide fundamental conceptual knowledge and skill, field experiences, and assessments. The foundation family is the theoretical basis for skill development and acquisition in the elementary education method courses.

The courses that comprise this family are:

EDT 608	Technology in the Classroom
TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities

### Elementary Education Methods Courses

TED 621A	Lang. Dev. Methods: Elem. Sch. <i>Prerequisite: SPD 604, SPD 608, TED 602, TED 606</i>
TED 621B	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
TED 616A	C&I I:History & Social Science
TED 616B	C&I II: Math & Science
TED 616C	C&I III:V & P Arts Health & PE
TED 626	Classroom Management <i>Prerequisite: TED 623, or TED 621A</i>

### Student Teaching Courses

TED 649	is taken concurrently with TED 640A and TED 640B.
TED 649	Student Teaching Seminar
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)

### Master of Education

TED 690	Capstone
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Prerequisite: TED 530B with a minimum grade of S, or TED 640B with a minimum grade of S

## NEVADA LICENSING PROGRAMS

Certain licensing programs may require enrollment into an electronic portfolio. Please see your faculty advisor for further information.

### ■ MASTER OF EDUCATION WITH NEVADA SECONDARY LICENSURE

Faculty Advisor: Nedra Crow; (858) 642-8004; ncrow@nu.edu

The Master of Education with Nevada Secondary Licensure is designed for students who are committed to being instructional leaders in grades 7-12 classrooms. Courses for this degree meet the Nevada Department of Education requirements for an initial teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice as well as promotes lifelong learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time. The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. Secondary Education teacher candidates meet subject matter competence by passing the appropriate PRAXIS II examinations. Candidates must meet all state requirements for the Secondary Education Teaching License to apply to the Nevada Department of Education for licensure. An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the InTASC Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

For more information, please see Nevada Licensing Program Information for Graduate Degrees.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in designing and implementing developmentally appropriate and challenging learning experiences that respect cognitive, linguistic, social, emotional, and physical differences.
- Integrate knowledge and abilities in establishing and maintaining inclusive learning environments enabling all learners to meet high standards while recognizing individual and cultural differences.
- Integrate knowledge and abilities in establishing and maintaining learning environments that support individual and collaborative learning, and encourage positive social interaction, active engagement in learning, and self-motivation.
- Integrate the discipline(s)' central concepts, tools of inquiry, and structures to create learning experiences accessible and meaningful for learners in mastering the content.
- Integrate concepts and differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Integrate knowledge and abilities in designing and using multiple methods of assessment that learners use to monitor their own growth and decision-making as well as guide the teacher in instructional planning.
- Integrate knowledge of learners and the community context in planning instruction that supports every student in meeting rigorous learning goals of content areas.
- Integrate knowledge and abilities in using a variety of instructional strategies to encourage learners to develop deep understanding of content areas and build skills to apply knowledge in meaningful ways.
- Integrate knowledge and abilities in ongoing professional learning by using evidence to evaluate the influences of professional practices, choices, and actions on learners, families, other professionals, and the community.
- Seek appropriate leadership roles and opportunities by collaborating with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and advancement in the profession.
- Evaluate the application of educational research, evidence-based practices and academic writing, a focus on secondary education matters.

#### Degree Requirements

To receive a Master of Education with Nevada Secondary Licensure, students must complete at least 70.5 quarter units of graduate work, 43.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, including student teaching.

#### Program Requirements

(14 courses; 66 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities
EDT 608	Technology in the Classroom
TED 623	Lang. Dev. Methods: Secondary Prerequisite: TED 602, SPD 604, TED 606, SPD 608
TED 632	Content Area Curriculum Prerequisite: TED 623
TED 633	Content Area Instruct-Assess Prerequisite: TED 623 with a minimum grade of C
TED 634	Content Area Literacy Prerequisite: TED 623
TED 626	Classroom Management Prerequisite: TED 623, or TED 621A
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)
TED 649	Student Teaching Seminar
TED 690	Capstone Prerequisite: TED 530B with a minimum grade of S, or TED 640B with a minimum grade of S

#### Course of Study

National University's Master of Education with Nevada Secondary Licensure is structured in four, intra- and inter-related areas: foundation courses, secondary education method courses, student teaching courses, and research course. This curricular organization is developmental in theoretical knowledge, applied skills, G7-12 classroom experiences, and learning outcomes. As a result, teacher candidates move from the foundation block of courses, to the method courses before applying for student teaching. The research course is the last course in the degree. Candidates who successfully complete the Professional Teacher Preparation courses and related requirements will be eligible for a Nevada teaching license; those students who choose to earn a Master in Education degree must complete one additional course.

#### Foundation Courses

The five foundation courses build upon conceptual knowledge and skills, field experiences, and assessments. Teacher candidates will complete the five foundation courses prior to beginning the secondary education method courses.

The five foundation courses:

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities
EDT 608	Technology in the Classroom

#### Secondary Education Methods Courses

As with the foundations courses, the five secondary education (methods) pedagogy courses reflect adult learning theory and experiences. The method courses represent integrated coursework and field experiences designed to prepare candidates for the upcoming student teaching experiences in the grades 7-12 classrooms. Teacher candidate will move in a sequenced manner, from one course to another in the secondary education method block.

TED 623	Lang. Dev. Methods: Secondary <i>Prerequisite: TED 602, SPD 604, TED 606, SPD 608</i>
TED 632	Content Area Curriculum <i>Prerequisite: TED 623</i>
TED 633	Content Area Instruct-Assess <i>Prerequisite: TED 623 with a minimum grade of C</i>
TED 634	Content Area Literacy <i>Prerequisite: TED 623</i>
TED 626	Classroom Management <i>Prerequisite: TED 623, or TED 621A</i>

### Student Teaching

TED 649	Student Teaching Seminar
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)

### Master of Education

TED 690	Capstone <i>Prerequisite: TED 530B with a minimum grade of S or TED 640B with a minimum grade of S</i>
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## ■ MASTER OF SCIENCE IN SPECIAL EDUCATION WITH NEVADA LICENSURE AND ENDORSEMENT FOR GENERALIST RESOURCE ROOM

*Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu*

The Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room is designed for students who are committed to being instructional leaders in the K-12 setting. Courses for this degree meet the Nevada Department of Education requirements for a teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice and promotes lifelong learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time.

The purpose of this Special Education endorsement program is to prepare students to instruct learners with disabilities in the K-12 system.

This Special Education endorsement program at National University is based on the premise that meeting the special instructional needs of students in today's schools requires knowledge of a wide array of teaching strategies, as no one strategy can meet the needs of every special needs student. Another major premise is that all prospective teachers must develop an awareness and acceptance of cultural, linguistic, ethnic, economic, gender, lifestyle, and ability differences. The program is designed to present a variety of research validated methods, techniques, and opportunities to develop knowledge and skills to create and implement instructional programs that will positively impact the learning of K-12 students with special needs across developmental domains.

The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

### Application for a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance
- Official transcripts from all colleges/universities attended

- Passing score in PRAXIS I
- Verification of subject matter competency with passing score reports on PRAXIS II
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica

### Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of typical and atypical development and characteristics of students with disabilities and other special needs.
- Integrate fairness, equity, and access in designing the environment, teaching, and learning strategies to meet diverse student learning.
- Integrate best practices, apply learning theories, methodologies, technology tools, and assessments across content areas to manage, monitor, and engage student learning. NVTL: B. V, VIII
- Demonstrate the ability to focus on student learning using technology tools through systematic study and reflection of one's own teaching practices and through shared knowledge gained from purposefully formed professional learning communities. NVTL: B. VIII
- Demonstrate an understanding of effective leadership by advocating for exceptional individuals, including those with diverse needs and by collaborating within the learning community to advance professional practice.
- Demonstrate competence in the application of research methods including critiquing and synthesizing current, evidence-based education literature.

### Degree Requirements

(15 courses; 65.25 quarter units)

To receive a Master of Science in Special Education in with Nevada Licensure and Endorsement for Generalist Resource Room, students must complete at least 65.25 quarter units of graduate work, 54.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, including student teaching.

Candidates in the program must demonstrate mastery of methods and techniques that accommodate the increasing diversity in contemporary Special Education and General Education programs where students with special needs are served.

### Core Requirements

(10 courses; 45 quarter units)

SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
SPD 614	Classroom and Behavior Mgmt
SPD 618	Law, Transition, & Collab
SPD 622	Assessment
SPD 628	Teaching Reading/Lang Arts
SPD 630	Tech for Teaching & Learning
SPD 632	Charac/Instr Stds w/ M/M Disab
SPD 636	Teaching Math/Writing for M/M
SPD 674	Collaborative Partners

*Prerequisite: ECSE Added-Authorization Candidates: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.*

*Autism Added-Authorization Candidates: Candidates completing the Add-on Authorization for Autism through CTC must hold a Special Education credential for this completed sequence to apply.*

*Moderate/Severe Authorization Candidates: Must take this course as the last course in the Moderate/Severe program of study.*

### **Student Teaching**

(3 courses; 11.25 units)

- SPD 681A Nevada Student Teaching M/M  
*Prerequisite: SPD 604, SPD 608, SPD 614, SPD 618, SPD 622, SPD 628, SPD 630, SPD 632, SPD 636, SPD 674, Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681 A, Student teaching candidates must have successfully completed all coursework in the credential program (Corequisite, Core and Advanced Specialization Courses) with an overall GPA of 3.0 or better.*
- SPD 687A Portfolio Clinical Seminar (2.25 quarter units)  
*Prerequisite: Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681A*
- SPD 681B Nevada Student Teaching M/M II  
*Prerequisite: SPD 681A, SPD 687A*

### **Project Courses**

(2 courses; 9 units)

- SPD 695 Understanding Edu. Research
- SPD 696 Capstone Project  
*Prerequisite: SPD 695*





# **NATIONAL UNIVERSITY LANGUAGE INSTITUTE**

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P 858.541.7965 • F 858.541.7791 • E [langinfo@nu.edu](mailto:langinfo@nu.edu)

- 334 About the National University Language Institute**
- 334 Non-Credit Courses**
- 334 Grading System**
- 334 Financial Aid**
- 334 Veterans Information**
- 334 Refund/Withdrawal Requests**
- 334 Payment Options**
- 334 Corporate Training**
- 334 Language and Cultural Seminars**
- 334 English Language Programs (ELP)**
- 334 University Preparation Program**
- 335 Pre-MBA Program**
- 335 English Communication Series**
- 335 Test of English as a Foreign Language (TOEFL)  
Preparation Workshop**
- 335 Accent Reduction Workshop**
- 336 Academic Preparation Course Series**



# NATIONAL UNIVERSITY LANGUAGE INSTITUTE

The National University Language Institute serves the needs of a wide range of local and international students and promotes collaboration for education and community outreach in languages and cultures.

## MEMBERSHIPS AND ACCREDITATIONS

- National Association of Self-Instructional Language Programs (NASILP)
- American Association of Intensive English Programs (AAIEP)
- National Association of International Educators (NAFSA)
- Teachers of English to Speakers of Other Languages (TESOL)
- California Teachers of English to Speakers of Other Languages (CATESOL)
- Professional International Educators Roundtable (PIER) – San Diego region

## NON-CREDIT COURSES

These courses carry neither academic credit nor CEUs. They are offered in response to the growing need for quality language and cultural educational opportunities for professional, career, personal growth, or general cultural interest and knowledge.

## GRADING SYSTEM

S = Satisfactory  
U = Unsatisfactory

## FINANCIAL AID

Language Institute students are generally not eligible to receive federal financial aid, although alternative funding options are available. Students planning to enroll in non-credit courses may apply for an IT Skills Loan, Key Career Loan, or Sallie Mae Career Loan. These agencies are not affiliated with the Language Institute or National University. Additionally, the Language Institute provides guidance to students who are utilizing funds through Tuition Assistance, Veteran's Assistance, and/or the Workforce Investment Act. The Language Institute does work with students who are seeking financial aid for certificate programs that grant academic credit. Financial aid is available through two methods: National University Tuition Assistance Loan and Federal Financial Aid through Title IV.

## VETERANS' INFORMATION

Students wishing to apply for programs administered by the Department of Veterans' Affairs can obtain information on how to apply for their benefits by calling or visiting the Veterans' Affairs Office located at 9388 Lightwave Avenue, San Diego, (858) 541-7970, or (800) 628-8648, ext. 7970. For more information, please call (800) 628-8648, ext. 8600.

## REFUND/WITHDRAWAL REQUESTS

In order to receive a refund you must drop before the first day of class.

## PAYMENT OPTIONS

Payment can be made by telephone, fax, online, or in person. Checks and any one of the following credit cards are accepted for your convenience: American Express, Discover, Visa, or MasterCard. Company invoicing is also available.

## CORPORATE TRAINING

Corporate training is available for businesses or school districts through the Language Institute. Classes can be held at a place of business or at a National University campus. Each program can be tailored to target an organization's unique challenges and in-house training programs can be customized to any specifications necessary.

## AGE REQUIREMENT

In order to be eligible to enroll in courses at the National University Language Institute students must be 18 years of age.

## ENGLISH LANGUAGE PROGRAMS (ELP)

### Teaching English to Speakers of Other Languages (TESOL) Certificate Program

A comprehensive series of five content courses that culminate in a practicum project designed to offer maximum teaching experience. The principal goal of the certificate is to develop knowledge, and teaching skills through hands-on practice to teach English-as-a-second-language (ESL) at any level.

**Tuition:** rates for TESOL courses are \$500 per course  
**Length:** 220 hours/6 courses  
**Cost:** \$3000

<b>Courses:</b>	
TSL 1900X	Foundations in TESOL (36 hours)
TSL 1910X	St Blended Language Learning (BLL) (36 hours)
TSL 1920X	Strategies for Teaching English Learners (36 hours)
TSL 1930X	Classroom Management, Lesson Planning, and Assessment (36 hours)
TSL 1940X	Cross-Cultural Communication & Awareness (36 hours)
TSL 1950X	TESOL Practicum (40 hours)

## UNIVERSITY PREPARATION PROGRAM

Students of any English level can enroll in the English Preparation Program to improve their English skills prior to moving into the University Preparation Program. Students can complete the University's language proficiency requirement through the University Preparation program. Students take a placement exam which determines placement in the appropriate class level. This is an intensive program designed for international high school graduates, university students, or professionals who plan to

attend National University or another U.S. college or university and/or want to improve their academic skills for professional career advancement. Courses range from basic literacy through advanced levels. This program follows a four-week format, and classes are offered every month. Successful completion of Advanced English: Advanced II (UPP 1650X) fulfills the National University English language proficiency requirement; therefore the Test of English as a Foreign Language (TOEFL) examination or the International English Language Testing System (IELTS) examination is not required. English language levels consist of core courses increasing in difficulty and complexity from beginning to advanced levels.

The ten goals for the Academic English Preparation (AEP) courses are:

**Goal 1:** Develop skills and strategies for learning in a higher education academic learning environment, including APA format (6th edition)

**Goal 2:** Apply grammar rules and build vocabulary for Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP)

**Goal 3:** Develop and enhance professional and academic writing skills

**Goal 4:** Demonstrate oral communication skills through formal and informal discourse

**Goal 5:** Develop reading comprehension and critical thinking skills

**Goal 6:** Enhance listening skills for success in a professional and academic environment

**Goal 7:** Apply effective learning strategies adapted to the learning style preferences of the learner and develop the learner's metacognitive skills

**Goal 8:** Increase the student's spectrum of knowledge by exploring a variety of cultural, professional, and academic topics

**Goal 9:** Engage in collaborative projects, interactivities, and performance-based lessons to build communicative competence and confidence, teamwork, and leadership skills

**Goal 10:** Expand the student's ability to integrate and apply technology-based productivity tools, web-enhanced learning, and computer-assisted language learning.

**Length:** Each level is one month long.

**Cost:** Tuition rates for EPP 1300X-1550X are \$750 per course, UPP 1600X-1650X are \$1215 per course

### Onsite Program Levels:

EPP 1300X	Academic English: Foundation I
EPP 1350X	Academic English: Foundation II
EPP 1400X	Academic English: Beginning
EPP 1450X	Academic English: Beginning High
EPP 1500X	Academic English: Intermediate
EPP 1550X	Academic English: Intermediate High
UPP 1600X	Academic English: Advanced I
UPP 1650X	Academic English: Advanced II

### Program Learning Outcomes

Upon completion of the University Preparation program students shall be able to:

- Listen to an academic lecture and apply the Cornell note-taking
- Define, interpret, and apply the denotations and connotations of terminology found in the Academic Word List (AWL).
- Participate effectively in discussions, debate, or study groups.
- Speak and write using indefinite and definite articles, adjective modifiers, compound modifiers, gerunds, infinitives, adverbs, connectors, embedded questions and conditionals appropriately and identify them while listening.
- Demonstrate mastery of English pronunciation, intonation, stress, and tone.
- Demonstrate mastery of formal presentation skills and impromptu speaking skills.
- Read, annotate, paraphrase, and critically analyze.
- Write narrative, descriptive, expository, definition, classification, compare-contrast, cause and effect, position, reflection, persuasive, and argumentative academic essays using appropriate organization, topic development, sentence structure, word usage, grammar, and mechanics, and APA (6th edition) format.
- Paraphrase, quote, summarize, and write an abstract.
- Conduct research, evaluate sources, and write a research paper using APA format.
- Apply communication, collaboration, and metacognitive skills.

## PRE-MBA PROGRAM

National University's Pre-MBA Program is intended for international students looking to advance their career by obtaining a business degree in the United States. The Pre-MBA will benefit students by introducing them to business communication skills, the American classroom environment, and give them a competitive advantage over other students in the MBA program. This program is vital for our students with limited business education or work experience as it focuses on various business concepts and practices. Furthermore, those students who have studied business in their home country will be able to improve their business knowledge while concurrently improving their English Language skills. Successful completion of PRP 1903X waives the National University English language proficiency requirement; therefore the Test of English as a Foreign Language (TOEFL) examination and International English Language Testing System (IELTS) examination are not required.

**Length:** 8 weeks

**Hours:** Total of 186 hours

**Cost:** \$2495

**Course:** PRP 1902X

### Requirements

TOEFL iBT 75 ELP Placement Exam 60

Contact International Admissions with any questions (isa@nu.edu)

### Course:

PRP1903X Pre-MBA

### Who Should Attend

- Students without a business background
- Students with a business background who would like to refresh their fluency in English
- Students who wish to attend the MBA program at National University or another institution
- Students who are interested in basic knowledge in business administration

### Curriculum

#### Management

A survey of the theories, techniques, and concepts of management in organizations and the role of the manager in business. Principles of management will be discussed along with leadership and management in practice.

#### Accounting & Finance

An introduction to accounting and finance for students with no previous exposure to these subjects. Students will learn the importance of both business functions and how they are related. Basic accounting theories and financial statements will be discussed.

#### International Business

An introduction to the concepts in the global business environment and exposure to international trade policy and procedures. Students will learn about different types of organizations that play an important role in international business operations

#### Marketing

An introduction to the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. The course includes principles in marketing and basic knowledge in consumer behaviors.

#### Academic Preparation – Business Communications

For students seeking to develop and practice the essential classroom skills necessary to be successful in academic courses at an American university. The course will help prepare students for their academic research papers and presentations.

## ENGLISH COMMUNICATION SERIES

Designed to help students improve their English communication skills while learning more about American intercultural and workplace communication.

**Hours:** 72 hours per month/course

**Cost:** \$500 per course

### Courses:

- ECS 1900X Basic Personal and Workplace Communication
- ECS 1910X Interpersonal Communication
- ECS 1920X Functional Communication
- ECS 1930X Cross-cultural Communication
- ECS 1940X Cross-cultural Communication
- ECS 1950X Communicative Confidence

ECS 1960X Collaborative Problem-Solving

ECS 1970X Using Data to Communicate

ECS1975X Graphic Organizers to Communicate Ideas

ECS1980X Communication through Fiction

ECS1985X Communication through Non-Fiction

ECS1990X Communication through Storytelling

## TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL) PREPARATION WORKSHOP

Designed for students and professionals with intermediate English proficiency skills seeking to better prepare for the TOEFL exam. The focus of the workshop is on fluency and comprehension.

**Length:** 6 hours per workshop offered two Saturdays per month.

**Cost:** \$100 per workshop

### Workshops:

TFL 1900X Reading, Structure and Writing

TFL 1910X Listening and Speaking

## ACCENT REDUCTION WORKSHOP

Designed to provide tools and practice needed to improve pronunciation of American English. Focus is on correct vowel and consonant formation, word stress, sentence stress, intonation, and rhythm.

**Length:** 6 hour workshop

**Cost:** \$100

### Workshop:

ARW 1900X Accent Reduction Workshop

## ACADEMIC PREPARATION COURSE SERIES

This series of courses is designed for students seeking to develop essential and advanced academic and critical thinking skills applicable in a variety of undergraduate and graduate-level programs such as health, business, accounting, engineering, computer science, communication, education, economics, finance, environmental science, hospitality, public relations, and other related fields. Students develop key vocabulary and terminology, conceptualization and critical analysis skills, and professional communicative competence while working within the framework and content associated with their chosen discipline. The courses are open to students who have placed in Advanced I or II (ELP), have graduated from ELP, or can provide evidence of advanced English proficiency as required by NU. Students apply APA 6th edition format.

**Length:** Each course one month

**Cost:** \$750

### Courses:

- ACA 1900X Foundations of Your Discipline
- ACA 1910X Research in Your Discipline
- ACA 1920X Framework of Your Discipline
- ACA 1930X Changes & Challenges in

## Your Discipline

ACA 1940X Impact of Your Discipline

ACA 1950X Innovations in Your Discipline

### Business English

Designed to provide the perspective of an entrepreneur, students will explore the important components of the business plan and explore the content areas of human resources, business organization, finance, and marketing while developing a working knowledge and application of business English.

**Course:** ESL 1901X

**Length:** 96 hours

**Cost:** \$750

### Conversation and American Culture

Designed to improve English conversation skills and to learn more about American culture. Classroom instruction in conversation is combined with various social and recreational activities, emphasizing the study of American culture and lifestyle.

**Course:** ESL1902X

**Tuition:** rates vary by group.

**Activity fee per course:** \$25

### English Camps

The National University International English Camp is for students who want to improve their English conversation skills and learn more about American Culture. This short term program consists of English Language classes to improve their conversation and writing skills with various social and recreational activities emphasizing the study of American Culture and lifestyle.

English Camp tuition includes:

- English instruction
- Orientation and end-of-camp celebration
- Activity costs/admission tickets
- Transportation
- Homestay housing (two meals per day: breakfast/dinner)

**Course:** ESL 1902X

**Length:** 2 weeks

**Age Requirement:** Students must be 18 years of age and older

**Dates & Cost:** please contact isa@nu.edu for details

Students will experience American culture by participating in a variety of Southern California excursions, such as:

- Visits to museums
- Amusement parks
- Shopping trips
- Beach barbecues
- Major League Baseball games

### Activities

(final schedule will be determined based on each group)

### Locations

Spectrum Business Park Campus

### Customized Group Programs

ELP offers customized programs for special groups in the health and business fields.

## LANGUAGE INSTITUTE COURSE DESCRIPTIONS

### ARW 1900X: Accent Reduction Workshop

Designed to provide tools and practice needed to improve pronunciation of American English. Focus is on correct vowel and consonant formation, word stress, sentence stress, intonation and rhythm.

### ECS 1900X: Basic Personal and Workplace Communication

From first impressions to basic business correspondence (letters, faxes, memos, note-taking, and reports), students develop confidence in personal and workplace English communication skills. Develop foundation skills, improve organization, develop time management skills, and develop all four language modalities in English.

### ECS1910X: Interpersonal Communication

From money matters and international trade to working together with colleagues and dealing with problems, students engage in English communication as they address work-related and interpersonal communication challenges. Students conduct a learning style inventory, and develop all four language modalities in English.

### ECS1920X: Functional Communication

From conferences, interviews, and meetings to travel, marketing, and operations, students apply functional English communication skills, engage in interactivities (discussion, problem-solving and role play), and complete collaborative projects. Students explore multiple intelligences, and develop all four language modalities in English.

### ECS1930X: Cross-Cultural Communication

Students develop useful language skills to ask question or ask for clarification and apply expressions for language activation. Students engage in role play, make contributions in discussion groups, and practice the role of conversation leader. Students develop all four language modalities in English.

### ECS1940X: Communication through Teamwork

Students learn about the roles of team members and engage in teamwork activities to encourage reflection and application of higher-order thinking skills. Students develop all four language modalities in English through teamwork activities.

### ECS1950X: Communicative Confidence

Students identify and practice listening and speaking techniques and increase confidence through interactivities as well as continue to develop all four language modalities in English through performance-based activities.

### ECS1960X: Collaborative Problem-Solving

Students explore different types of problems and discover why problem-solving skills are essential for their studies. Through collaborative projects that require the students to apply all four language modalities in English, students use imagination and creative thinking to find solutions to a variety of relevant problems.

### ECS1970X: Using Data to Communicate

Students create and explain graphs, charts, and diagrams in conjunction with formal presentations and written assignments including the application of all four language modalities.

### ECS1975X: Graphic Organizers to Communicate Ideas

Students use a variety of graphic organizers to take notes, brainstorm, organize ideas, and prepare oral or written assignments, including the application of all four language modalities in English.

### ECS1980X: Communication through Fiction

Students read, analyze, and discuss fiction from cultures around the world applying metacognitive skills and four language modalities in English.

### ECS1985X: Communication through Non-Fiction

Students read, analyze and discuss a variety of non-fiction works applying to metacognitive skills and four English Language modalities.

### ECS1990X: Communication through Storytelling

Students read, analyze and discuss stories passed from generation to generation following the oral traditions of the Native Americans and other indigenous cultures from around the world and the role musical instruments played. Using strategies, such as Flower Power, Story boards, graphic organizers, and journal writing, students will recite and create legends and tales applying the four English language modalities.

### EPP 1300X: Academic English: Foundation I

This course is designed for non-native speakers of English as an introductory English language course focusing on the fundamentals of reading, writing, listening, and speaking in a school and social environment.

### EPP 1350X: Academic English: Foundation II

This course is designed for non-native speakers of English who are in the preproduction phase of language development. Students develop basic conversational English used in school, work, and social settings, engage in listening, speaking, reading, and writing skill development, and explore learning strategies for future academic success.

### EPP 1400X: Academic English: Beginning

This course is designed for non-native speakers of English who are in the early production phase of language development. Students in this course increase their English skills in listening, speaking, reading, and writing. They are introduced to fundamental academic English, the use of learning strategies, and the application of technology tools.

### EPP 1450X: Academic English: Beginning High

This course is designed for non-native speakers of English in the speech emergence phase of language development. Students continue to gain proficiency in listening, speaking, reading, and writing with emphasis on communicative confidence, academic skill and performance development, utilization of learning strategies, and application of technology tools.

### EPP 1500X: Academic English: Intermediate

This course is designed for non-native speakers of English in the intermediate fluency phase of language development. Students increase their communicative competence in English and continue to build their academic English skills. Emphasis is on developing the listening, speaking, reading, and writing skills that prepare students to meet the demands of a higher education learning environment.

**EPP 1550X: Academic English: Intermediate High**

This course is designed for non-native speakers of English who have intermediate English fluency, but need to expand and strengthen their skills in academic English. Continued emphasis is placed on listening, speaking, reading, and writing proficiency, in both the Basic Interpersonal Communication Skills (BICS) and the Cognitive Academic Language Proficiency (CALP) required for successful transition to full academic courses at the university level.

**ESL1901X: Business English**

Designed to provide the perspective of an entrepreneur, students will explore the important components of the business plan and explore the content areas of human resources, business organization, finance, and marketing while developing a working knowledge and application of business English. Topics include:

- Exploring, and analyzing multiculturalism / diversity.
- Assessment and exploration of Business Plans.
- Investigation of the various roles within Finance.
- Exploring, analyzing and differentiating goals, core values, management and leadership.
- Effective Resumes and Interviewing Skills.
- Delivery of effective presentations.
- Effective international marketing analysis models.
- Functions of Human Resources.
- Extensive Business Terminology.

**ACA1900X: Foundations of Your Discipline**

Explore the history, structure, and branches of your discipline, the role of practitioners, and the influence in the global community. Develop an awareness of the interconnectivity of the global community and investigate the benefits and challenges associated with globalization in your discipline. Prepare for a lecture given in your discipline, apply the Cornell note-taking system, and give a presentation about your discipline. Develop fundamental vocabulary and terminology used in your discipline and apply to written and oral work.

**ACA1902X: Conversation and American Culture**

Designed to improve English conversation skills and to learn more about American culture. Classroom instruction in conversation is combined with various social and recreational activities, emphasizing the study of American culture and lifestyle.

**ACA1910X: Research in Your Discipline**

Explore current research and discuss significant issues associated with your discipline. Investigate the role of the individual, in terms of personal identity and community responsibility, and how the role of practitioners in your field impact the local, national, and international community. Prepare a lecture about a pressing issue and write a paper about current research findings associated with the issue. Effectively use databases for research, analyze peer-reviewed articles, and evaluate research findings.

**ACA1920X: Framework of Your Discipline**

Explore the organization, markets, ethical considerations, and impact of your discipline. Determine cultural applications and implications and investi-

gate how personal and cultural experiences influence perceptions and understandings of your discipline. Conduct a case study in your discipline. Recognize signpost language in lectures and make effective contributions to a seminar.

**ACA1930X: Changes & Challenges in Your Discipline**

Examine the characteristics of co-cultures and a pluralistic society. Research changes and challenges in your discipline, make predictions and recommendations, and report on future developments. Collaborate with classmates on a cross-disciplinary quest for answers to problems and sustainability issues associated with your discipline. Give an oral defense of your position, and write an argumentative essay defending your position.

**ACA1940X: Impact of Your Discipline**

Conduct case studies related to your discipline and apply case study format and procedures. Engage in a semiotic investigation of verbal and non-verbal communication and gain a deeper understanding of the diversity of interpreted meanings related to your discipline. Explore a controversial topic in your discipline and analyze and evaluate positions taken by different experts. Compare and contrast views orally and in formal writing (including quotes by experts).

**ACA1950X: Innovations in Your Discipline**

Explore social, cultural, economic, and/or political issues associated with innovations and advancements in your discipline. Engage in a critical analysis of ethical, environmental, and global issues. Discuss cultural assumptions and values, engage in critical reflection about the challenges of implementing innovations, and develop recommendations for implementing change.

**UPP 1600X: Academic English: Advanced I**

Designed to teach how to research and write an APA style paper, the necessary tools are provided for grammatical analysis that are easy to understand and apply to own writing. This course will assist in preparing for presentations in any course or discipline. This course is to prepare for entrance into academic studies in an American university with the necessary tools to research and write an outline, reference pages, and 1 to 2 page APA style paper.

**UPP 1650X: Academic English: Advanced II**

The highest level of the University Preparation Program is designed to prepare students for success in undergraduate and graduate programs. Students develop metacognitive skills through text analysis, discussions and debate, collaborative projects, and critical writing. Emphasis is placed on mastering advanced academic writing requirements, research, and formal academic presentations.

**PRP 1902X: Pre-MBA**

Designed to assist students prepare for their academic studies in the Master's of Business Administration Program. The course covers communication, writing, reading, speaking, team work, business research, and presentation skills as it relates to the field of business.

**TSL 1900X: Foundations in TESOL**

Explore the most prominent learning theories of second-language learning and acquisition. Through reflective writing and discussion develop your philosophy of teaching and lay the foundation to later connect theory to practice. Explore learning styles

and the theory of multiple intelligences from different cultural perspectives.

**TSL 1910X: Blended Language Learning (BLL)**

Students differentiate technology-based language learning approaches, develop the skills to effectively integrate technology. In blended language learning (BLL), and engage in critical evaluation of computer-assisted language learning (CALL) platforms and Web-enhanced language learning (WELL) tools.

**TSL 1920X: Strategies for Teaching English Learners**

Students explore second-language acquisition issues and techniques with attention to the socio-cultural, socio-political, and ethical issues of education. Students analyze standards-based and performance-based learning, and develop learning assessment skills. Through project-based learning and service students explore ways to connect English learners to the local and global community.

**TSL 1930X: Classroom Management, Lesson Planning, and Assessment**

Students create engaging, meaningful, and effective lesson plans for all four language modalities: reading, writing, speaking, and listening by incorporating skills learned in previous TESOL courses in this series, including blended-language learning, teaching strategies for English learners, and performance and assessment techniques. Students use creative skills and appropriate frameworks to align theory to practice, implement a variety of assessments, and practice classroom management.

**TSL 1940X: Cross-Cultural Communication & Awareness**

Competence and confidence in cross-cultural communication is essential for TESOL educators. Students broaden their cultural awareness and sensitivity while discovering the richness of global diversity.

**TSL 1950X: TESOL Practicum**

A 40-hour observation and teaching program is the final step in attaining a Professional Certificate in Teaching English as a Second Language. This practicum enables students to model their newly acquired knowledge and skills by working side-by-side with a develop-mentor in a classroom environment. Students wishing to take the TESOL Practicum must speak with the program coordinator to receive the necessary details, such as evaluation procedures, forms, placement and requirements needed to successfully complete the practicum. This course is required for a Professional Certificate in Teaching English as a Second Language.



## **COURSE DESCRIPTIONS**

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**340 Prefix/Subject Area by School**

**341 Course Descriptions**





# PREFIX/SUBJECT AREA BY NATIONAL UNIVERSITY SCHOOL

## COLLEGE OF LETTERS AND SCIENCES

Prefix	Subject Area	Page
ADC	Alcohol & Drug Counseling	342
AGE	Applied Gerontology	343
ALN	Applied Linguistics	344
ARB	Arabic	346
ART	Art	347
ASL	American Sign Language	347
BGS	General Studies	347
BIO	Biology	348
BIS	Interdisciplinary Studies	349
BRO	Broadcast Media	350
CHD	Chemical Dependency	354
CHE	Chemistry	355
COM	Communications	360
EES	Earth & Environmental Science	373
ENG	English	375
FSC	Forensic Sciences	380
GLS	Global Studies	381
HIS	History	385
HUB	Human Behavior	390
HUM	Humanities	391
ILR	Information Literacy	392
LIT	Literature	397
MCW	Creative Writing	400
MTH	Mathematics	406
MUS	Music	411
PGM	Professional Golf Management	417
PHL	Philosophy	418
PHS	Physics	418
POL	Political Science	421
PSY	Psychology	421
SCD	Social Transformation & Community Development	427
SCI	Natural Sciences	428
SOC	Sociology	429
SPN	Spanish	434
THR	Theater	440

## SCHOOL OF BUSINESS AND MANAGEMENT

Prefix	Subject Area	Page
ACC	Accounting	341
BIM	Business Information Management	348
BKM	Business Knowledge Management	350
BUS	Business	351
ECO	Economics	369
FIN	Finance	378
GMB	Global Master of Business Administration	381
HCM	Hospitality & Casino Management	384
HOS	Hospitality	387
HRM	Human Resource Management	388
IBU	International Business	391
LED	Leadership	396
MGT	Management	402
MKT	Marketing	404
MNS	Management Science	405
ODV	Organizational Development	414
PMB	Project Management	420
SMG	Sports Management	429
SUS	Sustainability Mgmt Business	435

## SCHOOL OF EDUCATION

Prefix	Subject Area	Page
ABA	Applied Behavioral Analysis	341
CED	Counselor Education	352
CLD	Cross-Cultural Language & Development (CLAD)	358
DHH	Deaf and Hard-of-Hearing	366
ECE	Early Childhood Educaton	368
EDA	Educational Administration	370
EDT	Educational and Instructional Technology	372
ETL	e-Teaching and Learning	377
EXC	Special Education	377
ILD	Instructional Leadership	392
ISL	Innovative School Leadership	392
LTL	Language, Teaching, and Learning	398
MAT	Master of Arts in Teaching	399
NBC	National Board Certified	411
PED	School Psychology	415
SPD	Special Education	431
TED	Teacher Education	436

## SCHOOL OF ENGINEERING, TECHNOLOGY AND MEDIA

Prefix	Subject Area	Page
ANA	Analytics	344
BET	Biomedical Engineering Technology	347
CEE	Computer and Electrical Engineering	353
CEN	Construction Engineering	353
CIS	Information Systems	355
CSC	Computer Science	362
CYB	Cyber Security	364
DAT	Database	365
DEN	Design Engineering	366
EGR	Engineering	374
ENE	Environmental Engineering	375
ENM	Engineering Management	377
ITM	Information Technology Management	392
MUL	Digital Entertainment and Interactive Arts	408
PME	Advanced Project Management	421
SEM	Sustainability Management	429
SEN	Software Engineering	429
SSE	Safety and Security Engineering	435
SYE	Systems Engineering	435
TMG	Technology Management	440
WCM	Wireless Communications	440

## SCHOOL OF HEALTH AND HUMAN SERVICES

Prefix	Subject Area	Page
ANE	Anesthesia	345
ANH	Health Analytics	346
BST	Biostatistics	351
CAF	Clinical Affairs	351
CLS	Clinical Lab Studies	358
COH	Community Health	358
DNP	Doctoral Nursing Practice	367
GER	Gerontology	381
HCA	Healthcare Administration	382
HED	Health Education	385
HSC	Health Science	389

HTM	Healthcare Information Technologies	389
IHC	Integrative Health Coaching	391
IHM	Integrative Health Management	391
MRA	Clinical Regulatory Affairs	405
NSG	Nursing	411
RTT	Radiation Therapy	426

## SCHOOL OF PROFESSIONAL STUDIES

Prefix	Subject Area	Page
ADR	Alternative Dispute Resolution	343
CJA	Criminal Justice Administration	356
HSE	Homeland Security and Emergency Management	389
JJS	Juvenile Justice	393
JRN	Journalism	394
LAW	Law	396
MDC	Digital Cinema	401
PAD	Public Administration	414
PLA	Paralegal Studies	419
SCR	Screenwriting	428

### University Course Numbering System

**0- to 99-Level Courses:** Remedial courses that do not grant collegiate credit.

**100- to 200-Level Courses:** Lower-Division courses applicable to Associate degrees.

**300- to 400-Level Courses:** Upper-Division courses applicable to Bachelor degrees.

**500-Level Courses:** Courses which may be applicable as advanced upper-division credit or as graduate credit, as specified by the requirements of each program.

**600-Level Courses:** Graduate level courses.

**800-Level Courses:** Doctoral level courses.

*Note: All courses are 4.5 quarter units unless otherwise specified.*

## ABA - Applied Behavioral Analysis

### ABA 601 Assessment in ABA

Introduction to the philosophy of behaviorism and the basic tenets of applied behavior analysis. Focuses on behavioral assessment and observation, and time series research design and its use in the scientific evaluation of behavior-environment relations. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

### ABA 602 Processes of ABA

*Prerequisites:* ABA 601

Focuses on the fundamental aspects of behavior change strategies and tactics, such as stimulus control and the nature of reinforcing and aversive stimuli and their properties, and how these properties influence behavior change processes. Basic and applied empirical research demonstrating these strategies are covered. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

### ABA 603 Applications of ABA

*Prerequisites:* ABA 602

Continuation of ABA 602, and covers the complex aspects of behavior change strategies that are built upon the fundamental behavioral principles. Detailed examples of behavior change strategies from the basic and applied research literature are covered. Major topics covered include verbal behavior, generalization and maintenance, contingency contracting, and self-management. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

### ABA 604 Advanced Applications I

*Prerequisites:* ABA 603

Examines functional assessment and functional analysis procedures with a focus on mental health and educational settings. Emphasis is on providing students with an understanding of both procedural and conceptual issues surrounding evidence-based intervention design for persons with severe behavior problems. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

### ABA 605 Advanced Applications II

*Prerequisites:* ABA 603

Examines advanced issues related to designing and evaluating behavioral assessment and instructional interventions in educational systems. The focus is on scientifically supported methods of instruction and behavior change methods, such as direct instruction and precision teaching. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

### ABA 606 Ethics for Behavior Analysts

Overview of the major issues in the ethical use of applied behavior analytic practices. Students will be exposed to scenarios and case studies which impact

the ethical and legal treatment of persons receiving behavior change treatments. This course meets the ethics requirements established by the Behavior Analyst Certification Board. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

### ABA 607 ABA Intensive Practicum

*Prerequisites:* Permission of Program Lead Faculty

This practicum is designed to provide students with frequent, direct, on-site supervision of applied behavior analysis activities. The practicum is designed to meet the Behavior Analyst Certification Board criteria for an intensive, 750 hr. practicum experience.

## ACC - Accounting

### ACC 201 Financial Accounting Funds.

A survey of basic accounting theory and the application of accounting principles, this course includes the recording and summarization of business transactions in the form of financial statements under the rules of generally accepted accounting principles (GAAP). It is designed for students who have little or no prior knowledge of financial accounting, this course corresponds to Principles of Accounting I at other colleges.

### ACC 202 Managerial Accounting Funds.

*Prerequisites:* ACC 201

This course is an overview of the use of financial accounting and cost accounting data for the design and preparation of reports to aid management in organizing, directing, controlling, and decision-making functions. The topics include the fundamentals of cost accounting, budgeting and responsibility accounting for cost and profit centers.

### ACC 300 Applied Tech for Accountants

*Prerequisites:* ACC 201

Emphasis on the design and internal control perspectives of accounting information systems, including systems analysis, decision support systems, system implementation, and the audit of management information systems.

### ACC 410A Intermediate Accounting I

*Prerequisites:* ACC 201

Often referred to as "Intermediate Accounting," ACC 410A, B, and C cover a substantial portion of the U.S. accounting standards known as GAAP (generally accepted accounting principles). In particular, ACC 410A entails a more in-depth and detailed study of the principal financial statements, accounting concepts, revenue and expense recognition, and accounting for cash, receivables, and inventories.

### ACC 410B Intermediate Accounting II

*Prerequisites:* ACC 410A

Often referred to as "Intermediate Accounting," (See ACC 410A for a series description.) ACC 410B covers accounting for plant, property and equipment, intangible assets, leases, current and long-term liabilities, and stockholders' equity and retained earnings.

### ACC 410C Intermediate Accounting III

*Prerequisites:* ACC 410B

Often referred to as "Intermediate Accounting," (See ACC 410A for a series description.) ACC 410C covers earnings per share, investments, deferred income taxes, pensions, accounting changes and errors, preparation of the statement of cash flows, and full disclosures with emphasis on segment and interim reporting.

### ACC 431 Advanced Accounting

*Prerequisites:* ACC 410C

An examination of advanced concepts of accounting for business combinations, with emphasis on the consolidation of parent/subsidiary balance sheet and income statement reporting. It also covers accounting for the formation, operation, and liquidation of partnerships, as well as special reporting requirements for multinational entities.

### ACC 432A Taxation-Individual

*Prerequisites:* ACC 431

An introduction to the theory and practice of federal income taxation of individuals, including income, deductions, exemptions, credits, capital gains, depreciation, and deferred compensation plans. As a course requirement, students prepare Form 1040 income tax returns.

### ACC 432B Taxation-Business

*Prerequisites:* ACC 432A

An introduction to the theory and practice of federal income taxation of partnerships, subchapter S, and subchapter C corporations. Students learn the use of tax research publications.

### ACC 433A Managerial Accounting I

*Prerequisites:* ACC 201

A study of cost accounting principles and procedures including fixed, variable and mixed costs, break-even point analysis, job order costing, process costing, standard costing, activity based costing, variance analysis for variable and fixed costs, budgeting (static and flexible budgets), and preparation of variable and absorption costing statements.

### ACC 433B Managerial Accounting II

*Prerequisites:* ACC 433A

A continuation of Managerial Accounting I, this course covers additional managerial accounting topics for decision-making including relevant costs, balanced scorecard, value added and non-value added costs, allocations of indirect costs using direct, step, and reciprocal methods, allocating joint cost, main and by-product costing, determination of Economic Order Quantity (EOQ), accounting for spoilage, transfer pricing, performance measurement, and capital budgeting techniques.

### ACC 434 Government and Nonprofit Acct

*Prerequisites:* ACC 201

A study of the specialized accounting principles applicable to state and local governments and other non-profit organizations, with an emphasis on fund accounting principles used in the recording of assets, liabilities, equity, revenues and expenditures. Also covers the analysis and interpretation of financial statements of such governmental and nonprofit entities.

### **ACC 435A Auditing I**

*Prerequisites:* ACC 431

A study of financial statement audits in accordance with auditing standards promulgated by authoritative bodies. Topics include planning of the audit engagement, auditor's responsibility for fraud, review of internal controls, gathering substantive evidence using analytical procedures and test of account balances for the revenues, acquisition and expenditures, and inventory processes.

### **ACC 435B Auditing II**

*Prerequisites:* ACC 435A

A continuation of ACC 435A, this course focuses on sampling plan and techniques, gathering substantive evidence for cash and investment cycle, long-term debts and owners' equity, and contingent liabilities. It also covers audit work papers, audit opinions, attestation services, compilation and reviews, and auditor's legal liability associated with an audit engagement.

### **ACC 501 Accounting Fundamentals (1.5 quarter units)**

An introduction to accounting for students with no previous exposure to the subject, this two-week course covers accounting and financial statement terminology and the analysis of financial statements. Grading is by S or U only.

### **ACC 601M Foundations of Financial Acc**

Basic financial accounting theory, including the recording of business transactions and preparation of financial statements using "generally accepted accounting principles" (GAAP). Analysis and interpretation of financial data to assist users in their decision-making. Spreadsheets and accounting system software.

### **ACC 604 Managerial Accounting**

*Prerequisites:* ACC 501

A study of accounting concepts and reporting techniques applied in a management decision-making context. Students analyze accounting data from real-world case studies and present their analysis, conclusions, and recommendations. Managerial accounting models used by diverse enterprises in virtually all industrialized nations include cost accounting and the behavior of costs, budgeting, differential analysis, and responsibility accounting are examined. Reporting techniques involving the use of current spreadsheet and graphic presentation technology are presented.

### **ACC 610M Financial Accounting I**

*Prerequisites:* ACC 601M

The first course in a comprehensive three course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP including an in-depth review of the conceptual framework and principal financial statements. Emphasis on revenue and expense recognition, together with accounting for current assets.

### **ACC 611M Financial Accounting II**

*Prerequisites:* ACC 610M

The second course of a comprehensive three-course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP, accounting for tangible assets, natural resources and intangible assets, current and long-term liabilities, leases, and shareholder equity.

### **ACC 612M Financial Accounting III**

*Prerequisites:* ACC 611M

The third course of a comprehensive three-course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP, accounting for earnings per share, deferred income taxes, pensions, investments, changes and errors, the statement of cash flows, and full disclosures.

### **ACC 615M Advanced Financial Accounting**

*Prerequisites:* ACC 612M

Examination of concepts of accounting for business combinations, with emphasis on the consolidation and financial reporting of parent/subsidiary relationships. Accounting for the formation, operation, and liquidation of partnerships, foreign currency translation and hedging, segment reporting, and international financial reporting standards.

### **ACC 620M Taxation of Individuals**

*Prerequisites:* ACC 615M

Study of the statutory provisions, judicial doctrines, and implementation of the theory and practice of federal income taxation of individuals.

### **ACC 621M Taxation of Bus & Oth Entities**

*Prerequisites:* ACC 620M

Study of the statutory provisions, judicial doctrines, and implementation of the theory and practice of federal income taxation of "C" corporations, "S" corporations, and partnerships.

### **ACC 630M Cost Accounting**

*Prerequisites:* ACC 601M

The first course in a two course sequence. Tracking, recording, and analyzing costs associated with the products or activities of an organization. Cost terminology, cost measurement concepts, cost accumulation systems, accumulating and allocating overhead costs using various cost drivers.

### **ACC 631M Advanced Managerial Accounting**

*Prerequisites:* ACC 630M

The second course in a two course sequence. Measurement, analysis, and use of accounting information for management decision-making. Variable costing and inventory management, capital budgeting and operational budgeting decisions, and performance measurement and control of cost/profit/investment centers.

### **ACC 640M Acc for Gov't & NFP Entities**

*Prerequisites:* ACC 601M

Accounting principles used by governmental units and non-profit organizations. Concepts of fund accounting and the analysis and interpretation of the financial statements.

### **ACC 650M Auditing Principles**

*Prerequisites:* ACC 621M

The first course in a two course sequence. Audits of financial statements by Certified Public Accountants. Topics include: professional ethics, legal liability, planning of audit engagements, internal control, EDP and sampling.

### **ACC 651M Auditing Procedures**

*Prerequisites:* ACC 650M

The second in a two course sequence. Auditing

procedures (compliance and substantive) for cash, receivables, inventory, payables, long-term debt, equity balances and related income statement accounts. Writing of auditor's reports, including special reports, and review/compilation reports in accordance with AICPA standards.

### **ACC 657 Accounting Information Systems**

*Prerequisites:* ACC 601M

Study of the design and internal control perspectives of accounting information systems, including systems analysis, decision support systems, system implementation, and the audit of management information systems.

### **ACC 672 International Acctg Standards**

*Prerequisites:* ACC 501 or ACC 201

Anticipating the transition by U.S. companies from U.S. GAAP to International Financial Reporting Standards (IFRS), this course is designed to familiarize current and future accounting and finance professionals with the conceptual framework and major provisions of IFRS, with emphasis on differences between IFRS and U.S. GAAP.

### **ACC 690 Guided Study (variable units)**

This course is individual study under the direction of an instructor. It requires prior approval of the appropriate academic department.

### **ACC 695M Cases in Accounting & Auditing**

*Prerequisites:* Completion of prior core requirements

A capstone course in which students apply the knowledge and skills acquired in preceding coursework to their analysis of real life situations involving financial accounting and reporting, cost/managerial accounting, tax and/or auditing issues. Selected cases may require the researching of relevant authoritative pronouncements, laws, regulations and the like. Grading is by H, S, or U only.

## **ADC - Alcohol and Drug Counseling**

### **ADC 205 Intro to Substance Abuse**

*Prerequisites:* PSY 100, SOC 100

Focus on the definitions and diagnostic criteria for substance abuse and dependence, theories of etiology, medical and social model approaches, and the use of 12-step programs as adjuncts to treatment. It introduces the twelve core functions of chemical dependency counseling.

### **ADC 215 Physiology of Substance Abuse**

*Prerequisites:* PSY 100, SOC 100

A survey of drug classifications and medical complications of their use, and the basic mechanisms of drug absorption, metabolism, distribution, and elimination. Mechanisms of tolerance, dependence, and withdrawal are emphasized. Also covered is an overview of brain systems involved in drug use, abuse, and dependence.

### **ADC 225 Law and Ethics**

*Prerequisites:* PSY 100, SOC 100

This course explores the ethical and legal issues related to substance abuse counseling. Topics include laws related to confidentiality, mandated reporting, scope of practice, informed consent, and record

keeping as well as ethical systems and standards. Students will practice the application of standards in a case study format.

### **ADC 235 Case Management**

*Prerequisites: PSY 100, SOC 100*

The 12 Core Functions related to the assessment and management of client progress while in chemical dependency treatment are covered. Skills related to intake assessment, diagnosis, treatment planning and developing effective referrals will be taught and practiced. Concepts related to psychoeducation, special populations, prevention, and community outreach will be discussed.

### **ADC 245 Individual Counseling I**

*Prerequisites: PSY 100, SOC 100, ADC 205*

Focus on the major theories and techniques of substance abuse counseling. Emphasis will be on strategies related to assisting clients in accepting the diagnosis of substance abuse and the early stages of recovery. Considerations for working with special populations will be discussed. Students will use case studies to apply techniques.

### **ADC 255 Individual Counseling II**

*Prerequisites: ADC 245*

This course focuses on the application of the counseling techniques learned in ADC 245. Students will be expected to role-play techniques with volunteer(s) in their professional/social environment and submit videos of those sessions for discussion. Discussion of assessment techniques for clients with other psychiatric disorders will be covered.

### **ADC 265 Group & Family Counseling**

*Prerequisites: PSY 100, SOC 100*

This course examines group counseling and family systems theories related to working with substance abuse clients and their families. Students will learn the application of these theories through the use of video sessions and case studies.

### **ADC 275 Personal & Professional Growth**

*Prerequisites: PSY 100, SOC 100*

This course examines two inter-related concepts of counseling: personal awareness and growth with professional growth. This course is designed to assist students to begin the process of becoming aware of their personal issues and how those may impact their work with clients.

### **ADC 285 Practicum in Substance Abuse**

*Prerequisites: Satisfactorily complete 5 courses in the major, and Program lead faculty approval*

A two-part field practicum in which students work in an approved practicum site doing 255 hours of substance abuse counseling. They also participate in an academic seminar where they discuss their field work. This course is a minimum of 6 months in length.

### **ADC 295 Guided Study (variable units)**

Individual study of a selected topic or content area under the guidance of the instructor.

## **ADR - Alternative Dispute Resolution**

### **ADR 400 Alternative Dispute Resolution**

This introductory course will provide students with a broad understanding of ADR. The course will cover Negotiation, Mediation, Arbitration how each is used, and the advantages and disadvantages of each method. The course utilizes role plays, simulations, and case studies.

### **ADR 405 Negotiation Fundamentals**

An introductory interactive course designed for students and the business professional to develop the verbal and analytical skills required to perform effectively as a negotiator in conflict situations. Students will participate in negotiating exercises, and learn different negotiating techniques through simulations, videos, and case studies.

### **ADR 410 Facilitation Fundamentals**

An interactive, introductory course designed for students and business professionals to develop an understanding of group dynamics and decision making as a basis for learning the roles, processes and techniques of group facilitation. The course utilizes role plays, simulations, and case studies.

### **ADR 415 Mediation Fundamentals**

An introductory interactive and entertaining course designed for students and business professionals to develop the skills required to perform effectively as a mediator. Students will be introduced to different mediation styles such as facilitative, transformative, and evaluative methods. The course utilizes negotiating principles, role plays, videos, and case studies.

### **ADR 420 Communication & Conflict**

This course will explore workplace, interpersonal and team conflict dynamics and methods for effective communication in such conflict situations. Participants will learn communication skills for resolving such conflicts for themselves, between others and within a team or group, and strategies for preventing or defusing rising conflict. Additionally, participants will learn how to integrate conflict resolution into various organizational cultures.

### **ADR 425 Issues in Conflict Management**

This course will explore the nature of cultural differences in various conflict situations. Through the examination of various cultural perceptions, participants will learn how to apply concepts of cultural fluency in a variety of conflicting cultural scenarios, and employ personal, interpersonal and inter group skills to bridge cultural differences and achieve mutually beneficial outcomes. Students will participate in role plays, videos, and case studies to enhance their understanding of these issues.

### **ADR 430 Ethics and Neutrality**

This course explores the behavior of mediators, arbitrators and other neutrals to avoid conflicts of interest and perceived partiality. Through case study and role playing the participant will learn appropriate behavior that improves the quality of the process, enhances competency and promotes acceptance of and confidence in ADR processes. Students will be introduced to topics such as how to remain impartial during a mediation, avoiding conflicts of interest, quality of

the process, competency, confidentiality and promoting public confidence in the mediation process.

## **AGE - Applied Gerontology**

### **AGE 601 Foundations of Gerontology I**

Foundations of Gerontology I: Global and Societal Impacts of Aging Populations presents an overview of the global and societal aspects of aging through examination of critical, complex issues ranging from health care and social policy to new roles in the second half of life. Topics include long-term care and rationing of health care; autonomy and end-of-life decisions; the age-versus-need debate; Social Security and the future of retirement; and longevity and the biological basis of aging. Emphasis on trends and future developments is balanced by attention to case studies and practice and policy issues.

### **AGE 602 Foundations of Gerontology II**

This course reviews a broad range of topics relating to the personal and interpersonal aspects of aging. Through the major theoretical and methodological traditions in gerontology, the seeming paradox of continuity versus change for older adults in areas relating to self and others: health and wellness promotion, cognitive changes in aging, resilience of older women and elders of color, intergenerational relationships, and social and public policies for older adults.

### **AGE 610 Wellness/Engagement in Aging**

*Prerequisites: AGE 602*

Wellness and Engagement in Older Adults examines the coping, expressive, contributive, and influence needs of older adults. Topics include holistic geriatric care, reminiscence and autobiography, wisdom and creativity, lifelong learning, spirituality and contemplative practice, and social and civic engagement.

### **AGE 611 Psychology of Older Adults**

*Prerequisites: AGE 602*

Psychology and Neuropsychology of Older Adults will examine age-related changes in neurological and psychological function and methods for assessing them. Specific areas of study will include the age-related changes in memory, intellectual development in older adults, motivation and emotion over the life course, personality, and aging and mental health.

### **AGE 612 Public Policy and Aging**

*Prerequisites: AGE 601*

Public Policy, Politics, and Aging reviews major legislation and programs impacting older adults, including the analysis of current legal and regulatory issues and examination of policy-making and political processes affecting development and implementation of aging services. Learners will compare United States aging policies to those of other countries and develop resources for effectively advocating for policy changes.

### **AGE 613 Counseling Older Adults**

*Prerequisites: AGE 602*

Counseling Older Adults examines current theories and applications of assessment and intervention techniques with older adults and their families. Topics include innovative treatment modalities, ethical and legal issues affecting clinical practice with this population, and personhood in aging and dementia.

### **AGE 614 Cross-cultural Practice**

*Prerequisites: AGE 601*

Cross-cultural Practice with Aging Populations focuses on the processes of aging and the problems of older adults in the United States and throughout the world from both theoretical and applied perspectives. Particular emphasis is given to understanding the relationship between non-Western and Western experiences in terms of social, cultural, economic, political, and demographic concomitants.

### **AGE 615 Managing Aging Services**

*Prerequisites: AGE 601*

Administration/Management in Programs for Older Adults applies theories of administration and system management to public and volunteer programs and services for older adults including residential institutions and community programs; emphasis is on bringing a person-centered, life course perspective to the development of competencies needed to perform core managerial functions in aging services organizations: program planning, organizational design, human resource management, supervision, finance, information system, and program evaluation

### **AGE 616 Physical Change and Aging**

Physiology of Development and Aging examines the lifespan physiology of human development, growth, and aging; major emphasis on the physiology of the later years and implications for health maintenance and longevity.

### **AGE 620 Integrative Project A**

*Prerequisites: AGE 601, AGE 602*

First course of two-course sequence providing an interdisciplinary forum for exploring current issues in aging and culminating in a project that addresses a specific challenge or opportunity facing older adults and their communities. Topic areas will reflect the background and interests of students in the program.

### **AGE 630 Integrative Project B**

*Prerequisites: AGE 601, AGE 602, AGE 620*

The second course of a two-course sequence providing an interdisciplinary forum for exploring current issues in aging and culminating in a project that addresses a specific challenge or opportunity facing older adults and their communities. Topic areas will reflect the background and interests of students in the program.

## **ALN - Applied Linguistics**

### **ALN 600 English Phonology/Phonetics**

An overview of the phonetic and phonological features of American English, which relate to the teaching of English as a second/foreign language. In addition to an understanding of the English sound system, students will gain skills in developing activities for teaching pronunciation and evaluate current materials for teaching pronunciation.

### **ALN 610 English Syntax**

This course covers English grammatical structures which are central in TESL and TEFL teaching. Form, meaning and use will be studied. The pedagogical component of the course will provide ways to analyze learners' oral and written language organize grammar information for learners and help them

practice structures communicatively.

### **ALN 620 Second Language Acquisition**

This course is a survey of the second language acquisition research, and critically examines major hypotheses about the complex variables underlying second language acquisition and the various perspectives that form second language acquisition theories. Selected cases illustrating the relation of second-language acquisition studies to linguistic theory are examined.

### **ALN 630 Sec/Foreign Language Method I**

*Prerequisites: ALN 620*

This course provides a survey of theory and practice in the teaching of listening and speaking to non-native learners. An overview of the theoretical and practical issues involved, the theoretical and empirical perspectives are integrated with practical experiences including observation, teaching practices as well as material development/analysis.

### **ALN 640 Sec/Foreign Language Method II**

*Prerequisites: ALN 630*

This course is an overview of the theoretical and practical issues involved in the teaching of second or foreign language reading and writing. The course examines the relationship of second-language reading and writing development to second-language acquisition, composition theory, reading and writing research, and second-language teaching.

### **ALN 650 Current Issu in Sec Lang Learn**

*Prerequisites: ALN 640*

This course covers areas of second/foreign language education including but not limited to: teaching Heritage Language Learners (HLLs). Issues relevant to Heritage Language Learners and Heritage Language teaching/learning and Non Heritage Language Learners and Non Heritage Language teaching/learning will be covered along with linguistic, demographic, sociolinguistic and sociocultural profiles.

### **ALN 660 Diachronic Study of Eng Lang**

This course is a historical survey of the English language, as a model for other languages in their diachronic changes. Topics include the origin and derivation of words; historical changes in sounds, forms, and meaning; literary and philosophical influences on the language; and contributions from other languages and cultures.

### **ALN 670 Research Methods in Appl Ling**

*Prerequisites: Successful completion of 7 ALN courses*

Within the field of Applied Linguistics, this course covers fundamental concepts of research design and statistics, and the principal considerations involved in conducting quantitative and qualitative research including: methods, data collection and analyses, and ethics and style in research reporting. Discussions of these issues focus on individual research projects conducted by students.

### **ALN 680 Sec/Foreign Lang Assessment**

*Prerequisites: Successful completion of 7 ALN courses*

This course is intended to provide a working knowledge of the basic principles and procedures for test construction and testing within the second language

context. Students will learn about a variety of first and second language tests including standardized tests, integrative language tests, discrete-point tests, and tests of communicative competence.

### **ALN 690 Internship**

*Prerequisites: The Internship can only be taken at the end of the coursework and prior to taking the Thesis.*

This Internship provides practical teaching experience for students in the Applied Linguistics/TESL/TEFL MA Program, offered on S/U basis only. Prior teaching experience may be used to satisfy the requirements for this Internship. In addition Teaching Assistantship can be used to satisfy the Internship requirement. In the rare case where neither: 1- Prior Teaching Experience 2- Teaching Assistantship 3- Teaching Internship position is available to the student, with the consent of the Program Director, ALN 690 may be taken as Practicum to provide the student with best practices in Foreign/Second Language instruction, in a supervised teaching mode where the student will plan and conduct teaching sessions of varying levels and difficulties, assigned by the instructor.

### **ALN 699 Thesis**

*Prerequisites: ALN 690*

Each student is required to complete and file a Master's Thesis as a final demonstration of the ability to carry out original research. The Thesis consists of a critical essay of publishable quality. Proposals must be approved by the Thesis advisor with whom the degree candidate will be working as well as the program director. Students will take ALN 699 as the last course in the M.A. in Applied Linguistics program. Exceptions may be made if the student is within two courses of program completion, with the approval of the program director. Grading is by S or U only.

## **ANA - Analytics**

### **ANA 605 Analytic Models & Data Systems**

Forms of data, databases, gap analysis, and model building, analysis, and interpretation will form the foundation for students to ethically apply data analytics to facilitate modern knowledge discovery techniques. Visualization and discovery strategies using analytic models will be used to explore the interactivity and integration of data systems.

### **ANA 610 Data Management for Analytics**

*Prerequisites: ANA 605*

Application of the data management process for analytics including data acquisition, cleaning, structure, security, and working with customer-centered databases. Evaluation of how these data relate and aggregate in analytic databases, data marts, data warehouses, and how they are used by analytical decision tools will be explored through case studies and projects.

### **ANA 615 Data Mining Techniques**

*Prerequisites: ANA 610*

Application of methods using techniques in data mining, text mining, and predictive modeling for exploration and knowledge discovery. Design of objectives, data selection and preparation, analytic method selection such as classification and decision trees, and predictive modeling will be used for a variety of case studies and practical industry applications. Applying data mining using real world data will lever-

age statistical assessment and interpretation from database information.

### **ANA 620 Continuous Data Methods, Appl**

*Prerequisites: ANA 615*

Application of methods for analyzing continuous data for knowledge discovery. Analytic continuous data concepts and methods are developed with practical skills in exploratory data analysis. Descriptive statistics, goodness-of-fit tests, correlation measures, single and multiple linear regression, and analysis of variance and covariance are covered. Applying continuous data methods using case studies and real world data will leverage statistical assessment and interpretation.

### **ANA 625 Categorical Data Methods, Appl**

*Prerequisites: ANA 620*

Advanced application of data analytics methods for knowledge discovery. Analytic categorical data analysis concepts and methods are developed with practical skills in exploratory data analysis. Descriptive statistics of discrete data, contingency tables, and methods of generalized linear models are covered. Applying categorical methods using case studies and real world data will leverage statistical assessment and interpretation.

### **ANA 630 Advanced Analytic Applications**

*Prerequisites: ANA 625*

Advanced application of data analytics methods for knowledge discovery. This course will explore several of the advanced topics in data analytics such as methods for longitudinal data, factor and principal components analysis, multivariate logistic regression, and multivariate analysis of variance (ANOVA). Application using case studies and real world data will leverage statistical assessment and interpretation.

### **ANA 650 Database Design for Analytics**

*Prerequisites: ANA 630*

Analysis of database design and implementation for analytical applications in “big data.” Topics include requirements collection, conceptual and logical database design, normalization, an introduction to SQL, and the designing of a data mart.

### **ANA 655 Data Warehouse Design & Devel**

*Prerequisites: ANA 650*

A course on how to design and develop a data warehouse application for “big data”. Topics include user requirement collection, dimensional modeling, ETL (Extraction, Transformation, Loading) procedures, information access and delivery, as well as the optimization and long-term maintenance of a data warehouse.

### **ANA 660 Advanced SQL Programming**

*Prerequisites: ANA 655*

An in-depth treatment of data manipulation with Structured Query Language (SQL). This course covers views, triggers, sequences, reporting, sub-queries, query optimization and how to use SQL for data warehouse manipulation.

### **ANA 665 Data Mining & Machine Learning**

*Prerequisites: ANA 660*

This advanced data mining course focuses on various machine learning and artificial intelligence techniques. Topics include data mining methods ranging from classification rules, association rules, and in-

stance-based learning to semi-supervised learning and multi-instance learning.

### **ANA 699A Analytic Capstone Project I**

*Prerequisites: ANA 665*

Master’s level research in analytic project design, problem framing, hypothesis generation, and literature review. Team building, team collaboration, ethics, and conflict resolution are implemented. Strategic aspects such as mission and vision statements and managing an evolving analytic landscape are also incorporated into the analytic project scope.

### **ANA 699B Analytic Capstone Project II**

*Prerequisites: ANA 699A*

Master’s level research in analytic project implementation, technical writing, and project presentation. Team building, collaboration, ethics, and conflict resolution are implemented. Strategic and technical aspects are implemented and presented to project advisors and stakeholders.

## **ANE - Anesthesia**

### **ANE 600 Nurse Anesthesia Human Anatomy**

*Prerequisites: Admission to the Nurse Anesthesia Program and/or approval from the course lead and Nurse Anesthesia Program Lead.*

The Nurse Anesthesia gross anatomy course will provide the graduate nurse anesthesia student with a focused, advanced exploration of normal human anatomy, morphology, and embryology as it relates to anesthesia practice. The course utilizes both a lecture and laboratory component with gross anatomy laboratory dissection and pro-section study.

### **ANE 600A Nurse Anesthesia Anatomy Lab (1.5 quarter units)**

*Corequisites: ANE 600*

An advanced human anatomy laboratory course that explores the anatomical structure of the human body. Body structure will be studied by organ systems and will involve a balance between gross anatomical study and histology. Form-function relationships will be emphasized. The laboratory study will involve working with human skeletal collections and dissection of cadaveric and preserved specimens.

### **ANE 610 Nurse Anesthesia Assessment**

*Prerequisites: Admission to the Nurse Anesthesia Program and/or permission from course lead and Nurse Anesthesia Program Lead.*

Development of advanced clinical reasoning and assessment skills to determine client health status and needs. Application of physiological, pathophysiological, and psychosocial concepts with implications for Nurse Anesthesia.

### **ANE 615 Advanced Physiology/Patho I**

*Prerequisites: ANE 600, ANE 610*

Nurse Anesthesia Physiology/Pathophysiology I is a comprehensive examination of cellular, membrane, neurological, gastrointestinal and endocrine physiology with particular emphasis on how these topics relate to anesthesia management. Graduate nurse anesthesia students will also explore the common disorders and pathophysiology of each system.

### **ANE 616 Advanced Physiology/Patho II**

*Prerequisites: ANE 600, ANE 615, ANE 610, ANE 620, ANE 630, ANE 635*

This is the second of a 2-course advanced physiology series. Nurse Anesthesia Physiology II is a comprehensive examination of cardiovascular, renal and respiratory physiology with particular emphasis on how these topics relate to anesthesia management. Graduate nurse anesthesia students will also learn the common disorders of each system.

### **ANE 620 Advanced Pharmacology I (2.25 quarter units)**

*Prerequisites: ANE 600, ANE 610*

This is the first of two courses that provide the base of information necessary for advanced clinical prescribing of medications. It includes pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Within each class of therapeutic drugs, the course examines drug actions, interactions, reactions, and contraindications. The course will also include principles of prescribing and patient compliance.

### **ANE 621 Advanced Pharmacology II (2.25 quarter units)**

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 640*

*Corequisites: ANE 616*

The second course of a 2 course series. Clinical application of advanced pharmacology and pharmacotherapeutics for the advanced practice nurse managing complex and common disease conditions.

### **ANE 630 Anesthesia Pharmacology I**

*Prerequisites: ANE 600, ANE 610*

*Corequisites: ANE 620, ANE 615*

The anesthesia pharmacology course examines the unique pharmacologic agents that are specific to anesthesia administration. Focus will be placed on inhalation agents, induction drugs, neuromuscular blocker, adrenergic agents, and local anesthetics.

### **ANE 631 Anesthesia Pharmacology II**

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 621, ANE 630, ANE 635*

*Corequisites: ANE 616, ANE 640*

The second of a two course anesthesia pharmacology sequence. Continued exploration of pharmacokinetics and pharmacodynamics of anesthesia specific drugs. Factors modifying anesthetic management of patients are thoroughly explored.

### **ANE 635 Principles of Anesthesia I (7 quarter units)**

*Prerequisites: ANE 600, ANE 610*

*Corequisites: ANE 615, ANE 620, ANE 630*

An in depth study of the administration of anesthesia utilizing principles of anesthesia with a pathophysiologic approach for the use of anesthesia equipment, the anesthesia gas machine, documentation, patient preoperative assessment, and basic patient care. Basic and advanced clinical monitoring, patient positioning, and thermoregulation are covered. Airway anatomy, basic and advanced airway management with practical laboratory applications.

### **ANE 640 Principles of Anesthesia II (7 quarter units)**

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635*

*Corequisites: ANE 616*

Exploration of anesthetic delivery to patients with increasing co-morbidities, advanced pathophysiology, and complex anesthesia needs. Airway management and regional anesthesia techniques are thoroughly covered. Anesthetic techniques for the specialty practice of cardiac, thoracic, and vascular anesthesia is analyzed.

**ANE 645 Principles of Anesthesia III** (7 quarter units)

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631*

Detailed study of anesthetic techniques for differing surgical procedures for patients with acute and chronic pathophysiology requiring complex anesthesia management. Specialty practice of neurosurgery, renal, urology, transplant, hepatic, endocrine, trauma, pediatric, and high risk OB covered.

**ANE 650 Nurse Anesthesia EBP/Research**

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631*

*Corequisites: ANE 645*

Exploration of study designs, measurement tools, and data collection strategies in research and evidence based practice data collection. Logic of statistical models used in the evaluation of research designs and measures. Identification of an evidence based scholarly question pertinent to nurse anesthesia practice.

**ANE 655 Aspects of CRNA Practice**

Legal aspects of corporate liability, medical malpractice, informed consent, patient rights, privacy, fraud and abuse, plus governmental regulation of health professionals and health facilities. The legislative process, legislative oversight and regulatory agencies are discussed in depth. Code of ethics for CRNAs.

**ANE 660 Nurse Anesthesia Clinical I**

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650, ANE 655*

Provides supervised clinical practicum experience for the student nurse anesthetist to begin administering anesthesia to patients with minimal co-morbidities or complex anesthesia requirements. The student will engage in the entire perioperative course under the direct supervision of a CRNA or Anesthesiologist.

**ANE 661 Nurse Anesthesia Seminar I** (3 quarter units)

*Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650, ANE 655*

Explore and review of the principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development.

**ANE 665 Nurse Anesthesia Clinical II**

*Prerequisites: ANE 660, ANE 661*

Integration of knowledge, skills, and program objectives to a broader array of patients with increasingly complex comorbidities.

**ANE 666 Nurse Anesthesia Seminar II** (3 quarter units)

*Prerequisites: ANE 660, ANE 661*

*Corequisites: ANE 665*

Explore and review of the principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development, and intensive review.

**ANE 670 Nurse Anesthesia Clinical III**

*Prerequisites: ANE 665, ANE 666*

*Corequisites: ANE 671*

Supervised clinical opportunity for intermediate student nurse anesthetists to apply knowledge, advanced skills, and theory to a comprehensive range of patients. Anesthesia delivery to patients with increasing co-morbidities and anesthesia requirements.

**ANE 671 Nurse Anesthesia Seminar III** (3 quarter units)

*Prerequisites: ANE 665, ANE 666*

*Corequisites: ANE 670*

Explore and review of more complex principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development, and intensive review.

**ANE 675 Nurse Anesthesia Clinical IV**

*Prerequisites: ANE 670, ANE 671*

*Corequisites: ANE 676*

Supervised clinical opportunity for senior student nurse anesthetists to utilize increased independent decision making and critical thinking in advanced anesthesia delivery. Management of all complexity levels and case assignments throughout the entire perioperative phase. Engagement in pain management.

**ANE 676 Nurse Anesthesia Seminar IV** (3 quarter units)

*Prerequisites: ANE 670, ANE 671*

*Corequisites: ANE 675*

Explore and review of complex principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development, and intensive review

**ANE 680 Nurse Anesthesia Clinical V**

*Prerequisites: ANE 675, ANE 676*

*Corequisites: ANE 681*

Supervised clinical practicum with a high level of autonomy and critical thinking. Focusing on the entire spectrum of clinical nurse anesthesia practice, including pain management, outpatient surgery, emergency/trauma, OB, neonatal, and office based practice settings.

**ANE 681 Nurse Anesthesia Seminar V** (3 quarter units)

*Prerequisites: ANE 675, ANE 676*

*Corequisites: ANE 680*

Presentation and discussion of case studies related to pathophysiological states and safe anesthesia delivery. Evaluation of current best practice issues in the delivery of anesthesia. Presentation of scholarly inquiry culminating project.

## ANH - Health Analytics

**ANH 601 Health Management Analytics**

*Prerequisites: Completed program core classes in ANA, and HCA 626, and COH 606, and Recognized experience in the healthcare field, or HCA 600, and HCA 660*

Application of health data analytics to the area of clinical workflow including financial forecasting and service line efficiencies. Data integration and analytics with representation through dashboards will support decisions in a healthcare environment.

**ANH 604 Clinical Research Analytics**

*Prerequisites: ANH 601*

Application of health data analytics to improve health results in clinical care. The focus will be on data integration and analysis from the perspective of patient care, decision support, and quality control for evidence-based solutions.

**ANH 607 Health Outcomes Research**

*Prerequisites: ANH 604*

Application of health data analytics to guide decisions about the health of populations and individuals. Population and individual level data integration and analysis will be conducted to provide evidenced-based solutions in clinical trials and assessment of recovery time, patient stays, risk of complications, morbidity, and mortality.

**ANH 620 Health Analytics Internship**

*Prerequisites: ANH 607*

Experience in healthcare setting analyzing, implementing and/or evaluating health data for an actionable solution. Minimum of 120 hours of structured work experience with health data in a professional organization under the direct supervision of one or more experienced health data analytic specialists. Course is eligible for In Progress (IP) grade. This is a two month course.

**ANH 625 Health Analytics Capstone**

*Prerequisites: ANH 620*

Two-month capstone project focused on a relevant analytic problem in healthcare theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to healthcare. Student project may require Institutional Review Board (IRB) approval. Course is eligible for In Progress (IP) grade.

## ARB - Arabic

**ARB 100 Beginning Arabic I**

This is the beginning course in Modern Standard Arabic (MSA). Elementary skills in the standard communication modes of speaking, reading and listening to Arabic are introduced. The course includes an introduction to the Arabic alphabet and numerals and usage of basic vocabulary.

**ARB 101 Beginning Arabic II**

*Prerequisites: ARB 100*

A sequel to the beginning course in modern standard Arabic (MSA). The course includes an introduction to the basic parts of an Arabic sentence and the basic written Arabic phrases for oral and reading comprehension.

## **ARB 200 Intermediate Arabic I**

*Prerequisites:* ARB 101

Enhances the student's proficiency in spoken and written Modern Standard Arabic (MSA). This course emphasizes the difference between standard and dialectal spoken Arabic. Emphasis is given to both formal and informal Arabic. Grammar and vocabulary are expanded.

## **ARB 201 Intermediate Arabic II**

*Prerequisites:* ARB 200

This course gives emphasis to both formal and informal Arabic. Rules of grammar and vocabulary are applied in writing simple Arabic sentences when describing presented materials.

## **ART - Art**

### **ART 100 Introduction to Art History**

*Prerequisites:* ENG 100, and ENG 101

Survey of the main periods in art history, with emphasis on the complex relationship between art and society. Explores the development of Western art from Prehistoric to Contemporary. Includes overviews of the arts of Africa, Oceania, Mesoamerica, South America, the Middle East, India, China, and Japan.

### **ART 200 Visual Arts**

Fundamentals of visual arts presented through drawing and other media. Students develop their own creative vision while learning aesthetic values and concepts, as well as how to handle materials. Students supply basic art materials.

### **ART 250 Self-Reflection via Visual Art**

*Recommended Preparation:* ART 100 ART 200

Inquiry and self-reflection presented through the visual arts. Students explore their past, present and future aspirations through learning and applying the fundamental strategies and techniques of painting and other visual media. Students investigate self-knowledge through journal writing, a sketchbook practice and visual art assignments. Students supply basic painting art materials.

### **ART 315 Film as Art**

*Prerequisites:* ENG 100, ENG 101

Survey of the art of cinema from the silent period to the present; examines film techniques and theories; explores film styles and genres, focusing on elements such as lighting, editing, and cinematography; establishes a basis by which students can make aesthetic judgments.

### **ART 323 Modern Art**

*Prerequisites:* ENG 100, and ENG 101

An introduction to the major movements, styles and artists from Impressionism to the present. Examines how themes of contemporary art reflect the social, historical and cultural events of the period.

### **ART 329 World Art**

*Prerequisites:* ENG 100, ENG 101

This course approaches the fundamentals of visual and applied arts from a global perspective and provides an overview of non-Western art from ancient times to the present. Specific areas of focus are the art of South Asia and the Islamic World, East Asia,

Pre-Columbian Central and South America, Native North America, Africa and Oceania. Students learn how to look at, appreciate, and critically think and write about art from the perspectives of a diversity of cultures and historical eras.

### **ART 400 Expressive and Integrative Art**

Prepares students to integrate the arts into daily instruction in grade K-8. Emphasis is on recognition of cultural diversity through activities in the arts. Provides basic knowledge of content areas for planning appropriate cross-curricular activities.

### **ART 490 Guided Study** (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

## **ASL - American Sign Language**

### **ASL 120 American Sign Language I**

An introduction to American Sign Language (ASL). Students will learn basic ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

### **ASL 220 American Sign Language II**

*Prerequisites:* ASL 120

A continuation of American Sign Language I. Students will learn intermediate ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

### **ASL 320 American Sign Language III**

*Prerequisites:* ASL 220

A continuation of American Sign Language II. Students will learn advanced ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic component throughout the course.

## **BET - Biomedical Engineering Technology**

### **BET 401 Medical Devices I**

*Prerequisites:* EGR 240, EGR 324, EGR 340

Introduction to low risk medical devices and instrumentation. Devices such as electronic thermometers, surgical microscopes, ultrasonic nebulizers and sphygmomanometers will be studied. Topics include biosignals acquisition, processing, and filtering; design of devices; embedded design and implementation; and testing and calibration of devices.

### **BET 401L Medical Devices I Lab** (1.5 quarter units)

*Corequisites:* BET 401

Laboratory hands on practical course will support classroom theoretical pedagogy. The accelerated laboratory sessions will introduce fundamental embedded biomedical circuit designs of devices covered in BET 401. Analog, digital and mixed signals, real-time and emulated biosignals for broad biomed-

ical application as practice in clinical environment will be explored. The lab activities include setup, calibration, testing, troubleshooting, data collection and proper analytical report.

### **BET 402 Medical Devices II**

*Prerequisites:* BET 401, BET 401L

Advanced course that introduces medium and high risk medical devices and instrumentation. During this course, devices such as ECG, EEG, Endoscopes and ventilators will be examined. Topics include biosignals acquisition, processing, and filtering; design of devices; embedded design and implementation, and testing and calibration of devices.

### **BET 403 Medical Imaging Technology**

*Prerequisites:* BET 401, BET 402

Introduction the basic physics of medical imaging modalities. It will provide a variety of information about the human body, including anatomy, function, blood flow, and metabolism. The fundamental modality will include X-ray radiography, Computer Tomography (CT), Ultrasound (US), Magnetic Resonance Imaging (MRI) and Nuclear Spectroscopy along with introduction to the state-of-art in modern medical imaging.

### **BET 404 Medical Device Compliance**

Overview of medical device safety and applicable regulations including broad themes in medical device surveillance. Discussion of various regulatory agencies and how they oversee the various safety and regulatory aspects related to medical devices.

## **BGS - General Studies**

### **BGS 301 Intro. to General Studies**

Focus on the integration of knowledge across various disciplines, essential to a critical and interdisciplinary approach. Emphasis on the interconnectedness of different fields of knowledge central to broad, critical, and holistic view of education.

### **BGS 385 Methods of Research**

*Prerequisites:* BGS 301 and four additional courses from the major.

Study of qualitative and quantitative research designs and methods including observation, interviews, surveys, primary and secondary data analysis, and experimentation. Development of the critical ability to understand the ethical solutions to problems faced by contemporary researchers.

### **BGS 499 Capstone Project**

*Prerequisites:* Completion of other major requirements. Must be taken within last three classes prior to graduation.

Capstone course that focuses on portfolio and completion of capstone project. It is designed to provide students with an opportunity to integrate lessons learned from general studies portfolio-building and the research class. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.



## BIM - Business Information Management

### BIM 400 Info Mgmt in Organizations

Overview of Information Systems (IS) infrastructure and its utilization in today's global business environment. The use of technological tools and the role of information systems will be discussed from the organizational strategic, tactical and operational view. Students learn how to choose and utilize information and knowledge to gain competitive advantage in the industry.

## BIO - Biology

### BIO 100 Survey of Bioscience

Introduction to the scientific method and the basic principles of the life sciences. Examination of cellular, organismal, population, and community biology based on the unifying concept of evolution. This course may not be taken for credit if BIO161 and/or BIO162, or their equivalents, have been completed.

### BIO 100A Survey of Bioscience Lab (1.5 quarter units)

*Prerequisites:* BIO 100 for non-science majors (GE), or BIO 163 for science majors

Study of the unifying principles of life with emphasis placed on the following topics: molecular biology of the cell and cellular processes, including energy metabolism, membrane transport and cell division; classical genetics; population genetics; and the mechanism of evolution and the evolutionary basis of species classification. This laboratory course will complement the student's knowledge of biology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

### BIO 161 General Biology 1

Fundamental concepts of biochemistry, cell biology, genetics. Concepts include important organic molecules, cell structure and function, metabolism and enzyme activity, cellular respiration and photosynthesis, DNA structure, meiosis and mitosis, Mendelian genetics. Intended for science majors.

### BIO 162 General Biology 2

*Prerequisites:* BIO 161

Evolution, taxonomy, biodiversity, ecology. Concepts include evolutionary processes, taxonomy and phylogeny of the kingdoms of life, and ecological processes at the levels of the population, community and ecosystem. Intended for science majors.

### BIO 163 General Biology 3

*Prerequisites:* BIO 161, BIO 162

Morphology and physiology of multicellular organisms, particularly plants and animals. Concepts include plant structure and physiology, and comparative animal morphology and physiology. Intended for science majors.

### BIO 201 Human Anatomy & Physiol I

*Recommended:* Prior completion of: BIO 100 BIO 100A CHE 101 CHE 101A or equivalent courses.

Areas of study include cells, tissues, organ systems (integumentary, skeletal, muscular and nervous), and their functional relation to each other. Topics also include the aging process and diseases in these systems,

as well as the effects of genetics, diet, lifestyle, and the environment.

### BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)

*Prerequisites:* BIO 201

This laboratory course examines organ systems (skeletal, muscular and nervous). Students conduct cat/fetal pig dissections to identify and learn how skeletal muscles are organized according to body region. Sheep brain is used as a model to study human brain.

### BIO 202 Human Anatomy & Physiol II

*Recommended:* Prior completion of: BIO 201 and BIO 201A BIO 100 and BIO 100A CHE 101 and CHE 101A or equivalent courses

Organ systems (endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive), and their functional relation to each other. Topics also include the aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

### BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)

*Prerequisites:* BIO 202

This laboratory course examines homeostasis in the heart, lungs, liver and kidneys, along with digestive, and urinary systems. Chromosomes, mitosis, meiosis, development and different types of inheritance through the testing of vision, hearing and taste and smell. Cat/fetal pig is used to study the internal organs.

### BIO 203 Introductory Microbiology

*Recommended:* Prior completion of: BIO 201 and BIO 201A BIO 202 and BIO 202A BIO 100 and BIO 100A CHE 101 and CHE 101A or equivalent courses

Biology of pathogenic and nonpathogenic microbes, including bacteria, fungi, protozoans, and viruses. The epidemiology of disease-causing agents is studied, along with the fundamentals of the human immune response.

### BIO 203A Introductory Microbiology Lab (1.5 quarter units)

*Prerequisites:* BIO 203

This laboratory course introduced students to procedures for handling microbes, methods of identification of microorganisms (microscopic and by diagnostic media), preparation of stained slides and wet mounts, aseptic techniques, isolation of a single colony, preparation of a pure culture, inoculation and interpretation of select diagnostic tests. This two-month course is a combination of lecture and laboratory activities.

### BIO 253 Environmental Microbiology

*Prerequisites:* BIO 100, BIO 100A, CHE 101, CHE 101A, or CHE 120A

The structure, function, and diversity of microbes are explored, including viruses, bacteria, protozoans, algae, and fungi. The growth of microbial cultures, and their control, are studied. Principles of microscopy, identification of microbes, taxonomy, toxicology, and field sampling are covered. Concepts in applied and industrial microbiology are included.

### BIO 253A Environmental Microbiology Lab

(1.5 quarter units)

*Prerequisites:* BIO 100, BIO 100A, CHE 101, CHE 101A, or CHE 120A

Laboratory techniques with regard to sampling, handling, and identifying microbes. Identification of microbes by various methods, including staining. Preparation of cultures, proper transfer and incubation protocols, and aseptic techniques. Selected characteristics of microbes, such as fermentation and culture growth, are studied. Environmental sampling for water, air, and solid matter samples.

### BIO 302 Biodiversity

*Prerequisites:* BIO 100, and BIO 100A or equivalent

Survey of the scope and importance of biodiversity. Examines concepts of biodiversity, with emphasis on the importance of biodiversity to ecosystem functioning and human society. Threats to biodiversity are considered, as well as conservation and preservation solutions.

### BIO 305 Genetics

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A

Principles of genetics and heredity. Topics include DNA replication and repair, gene expression and regulation, inheritance of traits, genetic engineering, relationship of genetics to human health, and application of genetics to understanding the evolution of species.

### BIO 310 Evolution

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A

Evolutionary biology. Topics include the history of life, fossil record, causes of microevolution (including natural selection and mutation), macroevolutionary processes (including speciation and extinction), evolutionary genetics and developmental biology ("evo-devo"), phylogeny construction and taxonomy.

### BIO 330 Ecology

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A

A study of the relationship of plants and animals to their environment and to one another. Emphasizes populations, the population-community interface and community structure and interactions within the ecosystem.

### BIO 380 Human Biology for Teachers

*Prerequisites:* BIO 163

*Recommended Preparation:* BIO 161, BIO 162 and BIO 100A

Human anatomy and physiology for students pursuing careers in education. Concepts include structure and functioning of major human organ systems, such as cardiovascular, immune, respiratory, nervous, sensory, endocrine, digestive, urinary, and reproductive systems.

### BIO 385 Biomechanics of Sport

*Prerequisites:* BIO 100, and BIO 100A

This course looks at the role of external and biomechanical factors in athletic performance. Course content includes the biomechanics of athletic performance, linear and angular kinetics, the role of torque and force in athletic performance, and the risks associated with biomechanical stress in athletics.

**BIO 386 Exercise Physiology**

*Prerequisites:* BIO 100, and BIO 100A

Provides a theoretical basis for understanding the body's acute and chronic adaptations to the stresses of exercise. Emphasis is given to systems physiology, the neuromuscular and cardiovascular bases of training responses, vascular physiology, energy production, cardiopulmonary function, and the significance of these effects for health and performance. Emphasis will be placed upon the practical application of exercise physiology principles to coaching, teaching, and other physical training practices.

**BIO 406 Cellular Biology**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
*Corequisites:* BIO 406A

An introduction to cellular biology, including fundamentals of cell structure and function, inter- and intracellular communication through signaling and signal transduction, cell growth and energy generation through aerobic respiration and photosynthesis.

**BIO 406A Cellular Biology Lab** (1.5 quarter units)

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
*Corequisites:* BIO 406

This course emphasizes techniques essential to cellular biology, including cell culturing, protein extraction, and western blots.

**BIO 407 Molecular Biology**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
*Corequisites:* BIO 407A

An introduction to molecular biology focusing on gene structure, organization, regulation and expression. Topics in genetic engineering and genome evolution are covered, as well as DNA replication, recombination, transcription and post-transcriptional mechanisms in both eukaryotic and prokaryotic cells.

**BIO 407A Molecular Biology Lab** (1.5 quarter units)

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
*Corequisites:* BIO 407

This course emphasizes techniques essential to molecular biology including DNA extraction, purification and quantification; polymerase chain reactions; and restriction enzyme digestion.

**BIO 411 Biodiversity**

*Recommended: Prior completion of:* BIO 161, BIO 162, BIO 163, BIO 100A or BIO 100 and BIO 100A or equivalent

Survey of the form and function of diverse life forms on earth. Describes representative members of the various kingdoms within the framework of evolutionary ecology and conservation. Includes current issues in habitat loss, extinctions, preservation of tropical rain forests and coral reefs, resource values for humans and restoration ecology.

**BIO 414 Invertebrate Zoology**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
*Corequisites:* BIO 414A

Comparative study of invertebrates: taxonomy, structure, physiology, reproduction, evolution, and behavior.

**BIO 414A Invertebrate Zoology Lab** (1.5 quarter units)

*Corequisites:* BIO 414

Laboratory complement of invertebrate zoology, involving specimen investigations, demonstrations, and experiments. Contact hours (45.0) are based on a 3:1 ratio; i.e., 3 lab hours = 1 lecture hour equivalent.

**BIO 416 Vertebrate Zoology**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
*Corequisites:* BIO 416A

Study of the life of Vertebrates integrating the anatomy, physiology, ecology, evolution and behavioral adaptations that enable them to survive effectively in their natural environment.

**BIO 416A Vertebrate Zoology Laboratory** (1.5 quarter units)

*Corequisites:* BIO 416

Laboratory complement of vertebrate zoology, involving specimen investigations, anatomical examination, and live observations when feasible.

**BIO 420 Animal Behavior**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 100A  
Study of animal behavior, integrating genetic, physiological, ecological, and evolutionary perspectives.

**BIO 440 Botany**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A  
Plant biology, including structure, function, evolution, taxonomy, and diversity of major groups of plants.

**BIO 450 Natural History of California**

*Prerequisites:* BIO 161, BIO 162, BIO 163, BIO 100A, or BIO 100, BIO 100A  
Study of the flora, fauna, and biomes of California. This course includes field trips, with sites selected for each academic center within the University.

**BIO 480 Studies in Field Biology**

Field-based study in biology under the individual direction of the faculty. Topics and sites are specifically designed in collaboration with teachers and students. Units can be taken separately or cumulatively; this course can be repeated depending upon the needs of individual students.

**BIO 600 Contemporary Issues in Biology**

Examination of current topics in biology, including discussion of analysis and interpretation of results and data.

**BIO 610 Seminar in Molecular Biology**

*Prerequisites:* BIO 600

Discussion of the structure, function, and synthesis of DNA, RNA, and proteins, and of the roles of macromolecules in the regulation of information in the cell. Students examine research topics at the level of the molecule.

**BIO 620 Seminar in Cell Biology**

*Prerequisites:* BIO 610

Discussion of cellular and subcellular organization, structure, and function. Students examine research topics at the level of the cell.

**BIO 630 Seminar in Organismal Biology**

*Prerequisites:* BIO 620

Discussion of concepts in organismal biology, including development, gross anatomy, morphology, physiology, behavior, heredity. Students examine research topics at the level of the organismal.

**BIO 640 Seminar in Ecology**

*Prerequisites:* BIO 630

Discussion of concepts in ecology, at the levels of the individual, population, community, ecosystem, landscape, and geographical region. Students examine research topics in ecology.

**BIO 650 Seminar in Evolution**

*Prerequisites:* BIO 640

Discussion of concepts in evolution, including the origin of features and species in evolutionary time, and the genetic and developmental bases of evolutionary change. Students examine research topics in evolution.

**BIO 660 Research Design**

*Prerequisites:* BIO 650

Students develop a proposal for thesis research in biology, incorporating fundamentals of research and experimental design and appropriate statistics. Students must present a thesis proposal to their thesis advisor before the end of the course.

**BIO 680 Thesis Formulation**

*Prerequisites:* BIO 660

Students modify thesis research proposed in BIO 660. Students focus on logistical design, including location of research activities, necessary equipment and hardware, and estimated time and labor. Thesis proposal must be approved for thesis work by the end of the course.

**BIO 691 Thesis Research 1**

*Prerequisites:* BIO 680

Initiate thesis research under guidance of thesis advisor. Student conducts research, with regular conferences with course instructor. S/U grades only.

**BIO 692 Thesis Research 2**

*Prerequisites:* BIO 691

Continuation of thesis research under guidance of the thesis advisor. Student conducts research, with regular conferences with course instructor. S/U grades only.

**BIO 693 Thesis Research 3**

*Prerequisites:* BIO 692

Two-month course. Conclusion of thesis research under guidance of thesis advisor. Students submit completed thesis. S/U or "In progress" grades.

**BIS - Interdisciplinary Studies****BIS 301 Intro to Interdisc. Studies**

This course is designed to develop the mindset of a holistic thinker or inter-disciplinarian and that of a knowledge explorer, a participant observer and citizen leader in a culturally-diverse and interdependent world. The course is organized around instructional units and a number of related modules. It is based on a principle of "information-giving, information-receiving, and information-exchanging." Emphasis is placed on reading, reflection, web resources and en-

richment lectures, action research, writing, dialogue, and debate.

### **BIS 401 Interdisciplinary Practice: In**

*Prerequisites: BIS 301 and four additional courses from the major*

This course is a sequel to the introductory course in interdisciplinary studies, BIS 301. It is the second of three course courses in the Bachelor of Arts program. It is a "how-to course" on interdisciplinary inquiry designed to provide students with an opportunity to use digital tools to explore and examine the assumptions and the relevance of connectivity between and among various disciplines on the College of Letters and Sciences. It is anticipated that the students will learn how to examine issues critically and approach problems holistically. They will also learn how to integrate the knowledge acquired in their program of study to date and create a space and a voice to demonstrate the practice of interdisciplinary.

### **BIS 405 Genetic Anthropology**

*Prerequisites: BIS 301*

*Recommended: Prior completion of: MTH 215*

This elective is open to non-science majors. This trans-disciplinary course is a comprehensive team science approach to learning the basic concepts of genetic anthropology, human evolution, migration and cultural diversity, genetics and human variation, and epidemiology of disease. It will make use of computer technology. Students will participate in virtual learning environments and be introduced to interdisciplinary case studies. Teams of students will engage in investigative data search and analysis. Patterns of human migration will be examined within the context of cultural diversity, language, and the impact of environment on disease.

### **BIS 499 Interdisciplinary Studies Proj**

This is an eight-week, 4.5 quarter unit capstone course that focuses on portfolio and research methodologies. It is designed to provide students with an opportunity to integrate lessons learned from interdisciplinary portfolio-building and understand the craft of interdisciplinary research. The main course content areas include: 1) Portfolio packaging and interdisciplinary analysis on a topic as a model for students, 2) Internet research, 3) Developing an interdisciplinary research project, 4) Paper editing, 5) Constructing a sound argument, and 6) Clarifying elements across disciplinary boundaries. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

## **BKM - Business Knowledge Management**

### **BKM 400 Business Knowledge Mgmt Strat**

In the quest for sustainable global competitive advantage companies have finally come to realize that technology alone is not what sustains knowledge. Knowledge lies in your company's people, processes, and experience. The student will learn the process of conducting knowledge audits, knowledge analysis, and how to fill any knowledge gaps found through exploration and exploitation. The ability to identify tacit and explicit knowledge assets within an organization is related to how to capture knowledge, how to transfer it, how to share it, and how to manage it. BKM 400 provides the student with practi-

cal guidance on linking knowledge management to business strategy rather than approaching KM from a technically biased perspective.

### **BKM 600 Knowledge Mgmt for Bus Strateg**

An overview of the methodologies used in today's learning organization for the capturing, transferring, sharing and managing of knowledge. The use of technological tools and the role of Knowledge Management (KM) are discussed from the perspective of an organization's strategic goals and objectives.

### **BKM 610 Managerial Sup Syst, DSS & ESS**

An overview of the methodologies and expert system and mind mapping software used by Strategic and Middle Management to distribute a company's most valuable asset and expert knowledge, to the people that need it. The topics covered will include the mastering of the process of Mind Mapping which allows executive and strategic managers to project and modify their thoughts in a collaboration mode with other stakeholders to maximize the organization's strategic goals and objectives.

### **BKM 615 Knowledge Audits & Managing Kn**

This course seeks to explain the purpose of a knowledge audit, the steps involved with identifying, evaluation and rating critical process knowledge, the various audit methods available, how to form a knowledge audit team and how to actually audit and analyze a company's existing knowledge. Furthermore, the course explores ways that knowledge gaps are best bridged and managed, including the use of both explorative and exploitative strategies.

### **BKM 620 Knowledge Integr, Trns, & Shar**

An in-depth study of the integration and transfer methods as part of a culture-based process by which adaptive organizational knowledge that lie in peoples heads is exchanged with others. The course provides a comprehensive, thoroughly up-to-date treatment of formal knowledge transfer as a basic process by which documents, data, or other types of resources is captured and stored in formats and media that allows for retrieval by others when needed in a distributed computing environment. Primary emphasis will be on the integration of tacit and explicit knowledge in an enterprise with practical focus on web-enabled multi-tiered client/server distributed computing environments within the confines of a modern Intranet and Extranet.

### **BKM 630 Knowledge Repos & Integr Metho**

An in-depth study of knowledge repositories, integration methods, and systems design in a distributed computing environment. The course provides a comprehensive, thoroughly up-to-date treatment of databases, datamarts, and data warehousing in a web-enabled integrated enterprise environment. Primary emphasis will be on the integration of explicit knowledge in an enterprise and its design, analysis, and implementation. Practical focus will be placed on web-enabled multi-tiered client/server computing and the integration of legacy systems within the confines of a modern Intranet.

### **BKM 650 Enter Telecom & Global Collabo**

Complex collaboration refers to situations where working together effectively across boundaries is critical for complex projects and problems. Complex

collaboration refers to knowledge-intensive business processes that require highly interactive communication, coordination, negotiation, research and/or development. Such projects may cross disciplinary, organizational, national, and/or cultural boundaries. Complex collaboration represents a capability that is essential to effective execution in such situations as new product development, mergers and acquisitions, joint ventures, and supply chain management, as well as large government projects. A number of issues emerge in examining complex collaboration, including: unit of analysis, critical relationships, resource development, virtual teaming, key skills, and improvement processes. BKM 650 provides the student with an understanding of the challenges of managing such situations include ambitious schedules, conflict of cultures and practices, massive amounts of information, multiple languages, and ambiguity of roles and responsibilities.

### **BKM 670 Knowledge Mgmt Design & Dev**

An effective organization today relies on its shared knowledge among its stakeholders for successfully arriving at the goals set in its business strategy. This course will make use of theories, processes, behaviors, and issues that allow knowledge based organizations to transform themselves in to ones that organize and share knowledge in an effective and efficient manner. The course will involve students in the design and development of a management focused system that will support knowledge management in a selected organizational setting. Students will make use of various management tools including the five-tier knowledge management hierarchy as well as case-based studies that focus on the design and development of knowledge systems.

### **BKM 680 Proto & Deploy Using Prj Mgt**

An in-depth study of iterative process of prototyping and deploying knowledge management system software before, during, and after the knowledge audit and capture phase of the Knowledge Management Development Lifecycle. The course provides a comprehensive, thoroughly up-to-date treatment of the capturing, codifying, and mapping of tacit knowledge in the enterprise; applying the iterative prototyping development process for software development and integration; and the time-based deployment process using modern project management software tools. Practical focus will be placed on the use of Project Management Software to manage the Knowledge Management Development Lifecycle.

## **BRO - Broadcast Media**

### **BRO 210 History of Television**

*Prerequisites: ENG 100, ENG 101, and COM 100, or COM 103*

Overview of the history, theory and criticism of broadcast television in the United States and abroad. Teaches the creative and technical evolution of television, as well as investigates the social, political and cultural impact of broadcast television on 20th and 21st century society.

### **BRO 305 Media Storytelling**

*Prerequisites: ENG 100, and ENG 101, and COM 100, or COM 103, or COM 220*

Basic theory, terminology, and practice essential to

craft narrative formats in broadcast and digital media production. It covers conceptual, analytical and creative writing skills necessary to produce a script, and grasp contemporary narratives on multiple screens.

### **BRO 340 Studio Production I**

*Prerequisites: BRO 305, or JRN 310*

Provides an introduction to television studio production and the roles and responsibilities of the production team staff. Offers hands-on experience in production design, lighting, studio camera operations, audio recording, and directing.

### **BRO 350 Graphics for Video**

Teaches computer-aided manipulation of graphic text and images used in video and theory of graphic design for video screens. Software tools include Illustrator, Photoshop, and AVID to create titles and overlay text, graphics, and images. Learn and use various file formats and compression codecs to integrate graphics and video production.

### **BRO 430 Field Production II**

*Prerequisites: BRO 305, BRO 310, MUL 300, MKT402A, BRO 320, BRO 325, JRN 315, BRO 340, and HUB 400*

Covers the advanced theory and practice of multi-camera field production. Focuses on the planning, acquiring, and editing of interview, news, information, and performance formats. Teaches skills necessary to produce remote multi-camera video segments and packages for inclusion in longer programs.

## **BST - Bio Statistics**

### **BST 322 Intro to Biomedical Statistics**

An introduction to concepts, procedures and software used in the statistical analysis of data in the health professions.

## **BUS - Business**

### **BUS 100 Intro to Business**

This course is an introduction to the private enterprise system. Topics covered include forms of business organizations, business finance, human resource management, production, entrepreneurship, business ethics, marketing, and the changing business environment.

### **BUS 480 Capstone: Integrated Bus Policy**

*Prerequisites: Completion of at least 9 BBA preparation and upper-division core courses*

Integrated Business Policy provides students with the opportunity to apply the principal concepts and skills learned in each of their BBA program core courses to real-world business situations. Students' ability to integrate this knowledge and to apply and articulate critical analysis to cases and other assignments are among the key objectives of this course. Students must complete at least 9 BBA preparation and upper-division core courses before starting this capstone course.

### **BUS 491 Internship Project**

*Prerequisites: 31.5 quarter units in business or business related courses and a 2.5 GPA*

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real-world setting. Normally, 90 hours on-the-job are needed to qualify for 4.5 quarter units. The course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

### **BUS 500A Intermediate Algebra (no units)**

An introduction to quantitative methods for business graduate students with no previous exposure to the subject, it covers topics including algebraic operations, equations, graphs and functions, exponential and logarithmic functions, and an introduction to linear programming. No credit is awarded.

### **BUS 500C Macro & Micro Economics (no units)**

An introduction to economics for business graduate students with no previous exposure to the subject, it covers topics including microeconomics, macroeconomics, and an introduction to management. No credit is awarded.

### **BUS 691 Internship Project**

*Prerequisites: 13.5 quarter units in graduate business course and 3.0 GPA*

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real world setting. Normally, 90 hours on-the-job are needed to qualify for 4.5 quarter units. Course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

## **CAF - Clinical Affairs**

### **CAF 600 Clinical Research Survey**

*Recommended: Prior completion of: previous or concurrent work experience and/or employment within the biomedical industry specifically within the Clinical, Quality or Regulatory Affairs functions.*

This course provides the CAF student with a broad overview of clinical research as applied to the development of biotechnology, pharmaceutical and medical device products. Clinical research will be considered within the corporate, legal, and regulatory environments within which the industry operates. The course will consider key issues concerning the design and execution of successful clinical development programs.

### **CAF 605 Good Clinical Practice (GCP)**

*Recommended: Prior completion of: CAF 600*

This course is designed to present an introduction to the global regulations governing the conduct of clinical trials and for regulatory approval of a new

biologic, medical device, or pharmaceutical product. The student will be introduced to EMA, FDA & ICH regulations and standards, regulatory violations documented in warning letters, clinical roles and responsibilities, as well as the IRB/IEC process, and key study documents and principles of clinical study management.

### **CAF 615 CAF Data Mgmt & Statistics**

*Recommended: Prior completion of: CAF 600*

This course provides the student with a solid foundation and understanding of how clinical data contributes to the market application process. Beginning with describing the documents required for regulatory approval of products for marketing, the course will discuss the planning process for data collection, processing, management, analysis, and summarization. Overall consideration in the generation of databases and analyses of data will be explored. Key statistical principles and tools will be applied to clinical trial protocols and statistical analysis plans.

### **CAF 621 CAF Ethics & Pharmacovigilance**

*Recommended: Prior completion of: CAF 600*

This course identifies and describes the background and history for the protection of human subjects in clinical research. It also provides the student with a solid understanding of the ethical principles and practical challenges associated with protecting human subjects in clinical research. Students will identify and discuss ethics as a discipline, the Declaration of Helsinki, Institutional Review Boards, Informed Consent Forms, Data Management Committees/Data Monitoring Boards, Compliance, and HIPAA.

### **CAF 635 Clinical Trial Design**

*Recommended: Prior completion of: CAF 600*

This course identifies and discusses the basic concepts describing the design of clinical trials for demonstrating safety and efficacy for biologics, medical devices, or pharmaceutical products. It will identify, describe and discuss the similarities and differences of clinical trials between the various biomedical product segments. Students will identify and understand clinical trial nomenclature, key components of a clinical development plan and various options for the design of clinical trials. The life cycle and timeline for a clinical trial will be identified and understood.

### **CAF 645 CAF Communications**

*Recommended: Prior completion of: CAF 600*

This course will provide the student with the necessary background for preparing verbal and written communications for the clinical affairs function within a biomedical organization. Beginning with an understanding of the documents required for regulatory approval of products for marketing, the course will identify and discuss the planning process for data collection, processing, management, analysis, and summarization. Overall considerations in generation of clinical trial protocols, regulatory communications, and final clinical reports will be covered.

### **CAF 650 Clinical Operations Part 1**

*Recommended: Prior completion of: CAF 600*

This course provides the student with an in-depth foundation for all operational aspects in the process of clinical research. The focus will be on developing, executing, and completing a single clinical trial. There will be detailed exploration of all aspects of

the responsibilities of investigators and sponsors and the key operational aspects involved in setting up, running, monitoring, and completing a clinical trial. This Part 1 covers all requirements and activities through clinical trial initiation.

### **CAF 651 Clinical Operations Part 2**

*Prerequisites:* CAF 650

This course provides the student with an in-depth foundation for all operational aspects in the process of clinical research. The focus will be on developing, executing, and completing a single clinical trial. There will be detailed exploration of all aspects of the responsibilities of investigators and sponsors and the key operational aspects involved in setting up, running, monitoring, and completing a clinical trial. This Part 2 covers all requirements and activities from clinical trial start through trial close-out and archiving.

### **CAF 660 Clinical Trial Project Mgmt**

*Recommended:* Prior completion of: CAF 600

This course provides the student with an in-depth foundation in project management principles and tools for managing clinical trials from initiation through trial close-out and archiving. There will be detailed exploration, identification, and discussion of all aspects of Good Project Management practice (GPM), including developing an understanding of the responsibilities of project leaders, managers, members, and mentors, team interactions, required documents, study site management involvement, and the project life cycle.

### **CAF 699A Capstone Thesis Option**

*Prerequisites:* CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660

This course is designed to have the student develop and implement a formal research document (thesis) that integrates all facets of “clinical affairs” including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program.

### **CAF 699B Capstone Project Option**

*Prerequisites:* CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660

This course is designed to have the student develop and implement a formal research document (project) that integrates all facets of “clinical affairs” including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program.

### **CAF 699C Capstone Internship Option**

*Prerequisites:* CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660

This course is designed to have the student actively experience a “Clinical Affairs” working environment according to the NU policies and procedures which govern such internships. The student will integrate all facets of “clinical affairs” including GCP, regulations, documentation, data and project management, statistical analysis and other principles taught throughout the entire CAF program.

### **CAF 699D Capstone Comprehensive Exam**

*Prerequisites:* CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651, CAF 660

This course is designed to have the student study and

prepare for a comprehensive final “Clinical Affairs” degree program examination that integrates all facets of “clinical affairs” including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program.

## **CED - Counselor Education**

### **CED 600 Applied Child/Adol Development**

The counseling process, interventions, and strategies will address cultural, ethnic, issues presented in class. The course analyzes and conceptualizes human development themes from the perspective of various learning and personality theorists. Practicum experience is required.

### **CED 601 Consultation in the Schools**

*Prerequisites:* CED 610

This course introduces School Counseling and Psychologist candidates to collaborative consultation leadership techniques and models, including communication, diplomacy and interpersonal skills necessary toward effective consultation at the individual, group, and systems level.

### **CED 602 Societal Issues in the Schools**

*Prerequisites:* CED 607

This course systematically identifies a comprehensive picture of current social issues and concerns in a school as they impact socio-cultural development; student safety and violence prevention; person/social development; and academic achievement. Issues include but are not limited to poverty, achievement motivation, dropouts, homelessness, teen pregnancy and parenting, eating disorders, obesity, child abuse, substance abuse, physical and mental abuse, gang violence, bullying, HIV/AIDS, and suicide. Practicum experience is required.

### **CED 603 Multicultural Counseling**

*Prerequisites:* CED 610

Emphasis is on the building on skills developed in the individual and group counseling course including culture conflict, personal identity, managing gender and racial issues as well as lifestyle concerns; coping vs. personal empowerment; effective intervention models when working with ethnic and linguistic minorities including building effective parent involvement programs. Principles of effective cross-cultural counseling including applicable theories, goals, skills and techniques will be reviewed. Case examples, current regulations, and issues in counseling culturally diverse students are explored. Practicum experience is required.

### **CED 605 Instructional Design**

Basic expectations in curriculum and instruction at the elementary/secondary levels and the role of the school counselor in the development of this curriculum, addressing character education and working with at-risk students; (b) the role of the counselor as it relates to the exceptional student, the special education student and inclusiveness, and includes master scheduling considerations; (c) the creation of lesson plans in counseling areas which will be delivered in the elementary/secondary levels; (d) classroom management; and (e) the role of the counselor in Student Study Teams (SST) and Individualized Ed-

ucation Plan (IEP) meetings. Content-specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

### **CED 606 Development and Evaluation**

*Prerequisites:* CED 607

This course will focus on the designing, developing, implementing, and evaluating of a contemporary school counseling program in accordance with the National Standards. Foundations of school counseling programs are covered, as are results based guidance. Finally, students will learn the leadership skills necessary to implement the program and counseling services to meet the needs of the community they are servicing. Practicum experience is required.

### **CED 607 School Counseling Orientation**

An exploration of the field of school counseling and its suitability as a personal career choice. Emphasis is on an understanding of the multiple roles of school counselors including counseling, cross cultural counseling, coordination, collaboration, crisis intervention, conflict resolution, and advocacy. Field experiences, using interviews and observations will give candidates insight into their future vocation. Emphasis is placed on oral, written communication, and observational skills. Practicum experience is required. Grading is S or U only.

### **CED 610 Adv Coun Theories & Methods**

*Prerequisites:* CED 600, or PED 667

An examination of the major theories of individual counseling and their application for school counselors and school psychologists. The focus is on building the theoretical knowledge and practical skills required for expert counseling. Issues of social and cultural diversity in the context of helping relationships are addressed. Practicum Experience is required.

### **CED 611 Group Counseling**

*Prerequisites:* CED 610

Candidates will identify, compare and apply basic knowledge of the roles, functions and dynamics among group leaders and group participants. The course covers group process theory and the research pertaining to group processes. Students participate in and analyze the interaction within a group. Practicum experience is required.

### **CED 612 Career & Academic Counseling**

This course provides a general examination of current career development/ career education literature including theories and major concepts, career education programs and practices, resource materials, academic and career counseling skills, and the use of computerized career information systems. Practicum experience is required.

### **CED 613 Assessment for Ed Counselors**

*Prerequisites:* CED 607, and Advancement to Candidacy

An overview of the counselor’s role in the use and interpretation of individual and group assessment instruments and the implications of assessment results on instructional and support programs in schools. Basic statistical concepts and procedures, diversity issues, ethics as it relates to assessment, RtI assessment and resulting implications, limitations of standardized

testing, and alternatives to traditional assessment are studied. Students learn to effectively use and interpret assessment results as a consumer of research and in their capacity as a school counselor, but they will also gain a foundational understanding of basic statistical methods, concepts, and assessment tools.

#### **CED 614 Legal and Ethical Practices**

Provides an introduction to professional, ethical, legal, theoretical, and practical aspects of counseling. Students will examine the roles and responsibilities of counselors, professional organizations, and associations. Historical and social context along with emerging professional issues and directions are included. National Standards and ethical guidelines for practice are examined.

#### **CED 616 School Counseling Intern. I**

*Prerequisites: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.*

Students are placed in a school settings ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is S or U only.

#### **CED 617 School Counseling Intern. II**

*Prerequisites: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.*

Students are placed in a school settings ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only.

#### **CED 618 School Counseling Intern. III**

*Prerequisites: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.*

Students are placed in a school settings ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only.

#### **CED 619 Couns Practicum Comm College**

*Prerequisites: A record of a passing score on the CBEST, completion of all program prerequisites, completion of ten(10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.* Students are placed in a variety of school settings and expected to perform a variety of counseling re-

lated activities for a minimum of 200 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only.

#### **CED 620 Internship Seminar (3 quarter units)**

*Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor.* Students will review the knowledge, skills, and standards of the graduate program in counseling in final preparation for their employment as professional counselors. Leadership opportunities within the counseling role are identified and developed. Students will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is by S or U only.

#### **CED 637 School Counseling Research**

*Prerequisites: ILD 625*

This course is designed to provide the knowledge and skills required to generate and evaluate research relevant to various areas of professional education. The work of the educator will be emphasized throughout the course as students produce a major research and writing project. Students prepare a research proposal in their area of practice, obtain Institutional review Board (IRB) approval, conduct the study and prepare an oral and written report. Course include relevant aspects of professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Grading is H, S, or U only.

### **CEE - Computer and Electrical Engineering**

#### **CEE 310 Circuit Analysis**

*Prerequisites: MTH 433*

An overview of basic circuit design and analysis. Introductory topics include: Ohm's law, Kirchhoff's Laws, the mesh-current method, and Thévenin and Norton Equivalent circuits. Students will apply these topics to RL, RC, and RLC circuit analysis. Advanced topics include the understanding and application of operational amplifiers.

#### **CEE 310L Circuit Analysis Lab (1.5 quarter units)**

*Corequisites: CEE 310*

Centers on experiments covering the theoretical material in CEE310. Students will design, implement and analyze basic circuits. Experiments include: Ohm's law; Kirchhoff's laws; series and parallel resistors; voltage and current dividers; delta-wye configurations; mesh-current and node-voltage analysis; superposition and Thevenin equivalents; inverting and non-inverting amplifier circuits; series RC and RL circuits.

#### **CEE 420 Microelectronics**

*Prerequisites: CEE 310*

Describes the fundamentals of semiconductor devic-

es and microelectronic circuits. Students will explore the terminal characteristics of p-n junction and Zener diodes, diode circuits, and transistors and transistor circuits. Specifically, discussion includes principles of MOSFET and BJT operations, biasing technology, and their application in transistor circuit analysis.

#### **CEE 430 Digital Signal Processing**

*Prerequisites: CEE 420*

Describes all the necessary tools and techniques required to understand and design digital signal processing systems. Topics include: transformations of discrete time signals, the fast Fourier transform, and the z-transform. Advanced topics include: A/D and D/A converters and digital signal filtering.

#### **CEE 440 VLSI Design**

*Prerequisites: CEE 430*

VLSI design introduces students to fabrication and layout techniques necessary to design large scale systems. Specific topics include: CMOS logic, MOSFET theory, layout design rules including all the factors required for an effective circuit design. Advanced topics include: capacitance requirements, clocking, and power consumption, circuit simulation and performance estimation.

#### **CEE 498 Capstone Design Project I**

*Prerequisites: Complete all core courses except CEE499 or Permission of the program lead.*

Students apply the knowledge and skills that they gained from Electrical and Computer Engineering courses to solve a real-world engineering problem. Student start work on their project after it is approved by the faculty teaching the course. During this course students complete different phases of project. Students deal with a set of realistic constraints during the design and implementation of the project such as economic, social, political, ethical, and social impacts. Grading is S/U only. Eligible for In Progress (IP) grading.

#### **CEE 499 Capstone Design Project II**

*Prerequisites: CEE 498*

A second course of a two-course sequence in which students continue work on a major design project. With the mentoring of the faculty, this course integrates all the courses in the Electrical and Computer Engineering program. The capstone course also helps students improve their written and oral presentations. Grading is S/U only. Course is eligible for In Progress (IP) grade.

### **CEN - Construction Engineering**

#### **CEN 320 Surveying, Metrics and GIS**

*Prerequisites: EGR 219*

Land and topographic surveying with global position systems and geographic information systems (GIS). Fundamentals of distance, leveling angles, theodolites, transverse surveys and computations. Hands-on with ArcView GIS to understand the basic GIS concepts and applications in land planning.

#### **CEN 323 Structural Analysis**

*Prerequisites: EGR 220, and EGR 225*

Introduction to analysis of wood, steel and concrete structures. Basic structural loads, forces and mo-

ments in beams, columns and trussed systems. Internal reactions and method of sections. Stress, shear and deformation in beams and columns. Properties of soils and foundations. Basic design fundamentals.

### **CEN 325 Soil Mechanics and Foundation**

*Prerequisites: CEN 323*

The course introduces soil mechanics and foundation engineering to the students; teaches the students how to solve certain fundamental problems related to consolidation, shear strength, and design of shallow and deep foundations; and familiarizes students with relevant terms and soil tests so that they can work effectively with geotechnical engineering specialists. The course features soil basics, including their derivation, identification and classification. The principles of water flow in soils, settlement and heave, and shear strength of soils will be discussed. Consolidation problems, factors of safety for foundations, and foundation settlement prediction will also be covered.

### **CEN 410 Constr Materials and Methods**

*Prerequisites: MTH 215*

An overview of the basic materials and methods utilized in construction projects. Wood, steel, masonry, glass, and concrete and other material are introduced along with their associated construction systems in foundations, framing, cladding, windows, doors, finishes and roofing.

### **CEN 413 Plans and Specifications**

*Prerequisites: EGR 219*

Drawing and interpretation of plans, sections, details, symbols, notes and details in architectural, construction and shop drawings. Coordination and reference between drawings. Specification creation incorporating material properties, construction techniques and legal factors. Industry standards from AIA and CSI are presented.

### **CEN 416 Mech and Electrical Systems**

*Prerequisites: MTH 215*

The impact of M/E systems on the design and construction process including energy considerations. Fundamentals of HVAC, plumbing, fire protection, electrical distribution, lighting, information systems, and vibrations in the building system.

### **CEN 419 Est., Scheduling and Control**

*Prerequisites: CEN 410*

Introduces the fundamentals of construction management, estimating, scheduling and control. Quantity takeoff estimations for material, time, equipment and overhead are presented. Activity durations, scheduling and project updating for control are covered.

### **CEN 420 Est., Scheduling & Control II**

*Prerequisites: CEN 419*

This course builds on the fundamentals of construction management, estimating, scheduling and control introduced in CEN 419. Advanced topics concerning quantity takeoff estimations for material, time, equipment, overhead, critical path, and precedence networks for activity durations, scheduling and project updating for control are presented.

### **CEN 421 Constr, Acct, Finance and Law**

*Prerequisites: ACC 201*

This course applies the principles of business ac-

counting and financial principles and engineering economics to the construction industry. Construction accounting systems, depreciation and financial analysis are introduced. Labor, overhead, and profit management are presented. Cash flow, time value of money, and legal aspects specific to construction industry contracts are introduced.

### **CEN 422 Field Inspection and Safety**

*Prerequisites: CEN 410*

Integration of safety and productivity into daily field operations through inspection and accountability. Examines accident costs and contributing factors and techniques for risk minimization. Presents the relationship between safety and quality and techniques for site, structure, general and mechanical and electrical system inspections.

### **CEN 425 Design & Const Process Integra**

This course focuses on the detailed processes of construction management and the relevant tools, processes and techniques are involved. Students will be developing skills and knowledge to integrate and manage the overall construction process including the project proposal and design, cost estimate, contract document drawings and specifications, construction schedule, and project presentation.

### **CEN 427 Electrical Syst Est & Bidding**

*Prerequisites: CEN 420*

This course builds on the advanced concepts of construction cost estimating techniques covered in CEN 420 and presents cost estimating techniques applied specifically to electrical systems. Advanced topics concerning electrical contracting and estimating procedures, job costs electrical labor units, unit costs, electronic estimating, estimate indexing, submittal preparation and review, change orders and cost adjustments are presented.

### **CEN 429 Mechanical Syst Est & Bidding**

*Prerequisites: CEN 420*

This course builds on the advanced concepts of construction cost estimating techniques covered in CEN 420 and presents cost estimating techniques applied specifically to mechanical systems. Advanced topics concerning mechanical contracting and estimating procedures, job costs electrical labor units, unit costs, mechanical systems estimating, estimate indexing, submittal preparation and review, change orders and cost adjustments are presented.

### **CEN 450 Construction Documents I**

*Prerequisites: CEN 413, and CEN 419*

An overview of the construction project documents and processes, the stages of a typical construction project and the participants and their relationships, within the context of the construction project life-cycle. Introduction to activities of the project conception phase, schematic programming and program development and benefits and limitations of construction project delivery types and substitution procedures. Preliminary project descriptions, outline specifications, schematic design, design development stages, allowances, alternates and unit pricing.

### **CEN 453 Construction Documents II**

*Prerequisites: CEN 450*

Continuation of CEN 450. Construction formats such as OmniClass, UniFormat, MasterFormat,

SectionFormat and PageFormat to organize, store and retrieve information. General and procedural requirements, methods of specifying, specification language and practices, project manual, procurement, warranties and construction bonds. Pricing, project information, agreements, construction stage submittals, project closeout, and facility management.

### **CEN 460 Construction Specifications I**

*Prerequisites: CEN 453*

In-depth coverage of construction contracts and limitations, owner-contractor agreements, general conditions, supplementary conditions for modifications, bidding document changes, document organization and requirements coordination. Advanced concepts of the benefits of "MasterFormat" and "UniFormat", Division 01 and other contract relationships and Division 01 and the relevance to project manual organization.

### **CEN 463 Construction Specifications II**

*Prerequisites: CEN 460*

Continuation of construction specifications and processes, covered in CEN 460. Advanced topics in master guide specification section scoping and preparation, project manual production, product decision and procurement organization, specification methods, insurance and bonding terms and warranty purposes and limitations. Detailed topics in appropriate specifications methods, procurement contracts and the Uniform Commercial Code, procurement and construction contract differences, performance method usage, short-form specification, preliminary project description organizations and proper specification writing using PageFormat and SectionFormat.

### **CEN 470 Construction Contract Admin I**

*Prerequisites: CEN 453*

Continuation of construction documents knowledge gained in CEN453. In-depth coverage of documents used for construction and project delivery, the roles and responsibilities of project participants, preconstruction submittals and administrative procedures, pricing and bidding considerations, proper meeting procedures, and submittal maintenance procedures. Advanced concepts in the schedule of values, site visits, inspections, nonconforming work, quality assurance and quality control.

### **CEN 473 Construction Contract Admin II**

*Prerequisites: CEN 470*

Continuation of the concepts of construction contract administration and processes, covered in CEN 470. Advanced topics on contract interpretation and modification, change order procedures, execution of work, claim handling methods, dispute prevention and resolution, measurement and payment methods, schedule of values usage, payment processes and liens. Project closeout, substantial and final completion, pre and post occupancy activities, project feedback and facility management transition.

## **CHD - Chemical Dependency**

### **CHD 440 Drugs, Values and Society**

An examination of the history of substance use and abuse in the United States. Examines individual and institutional values that underpin chemically dependent behavior as well as socio-cultural factors, including media images, consumer product advertising, myths and

stereotypes and subculture/life-style issues. Provides an overview of the social services structure, including outreach, education, prevention and treatment models.

### **CHD 601 Drugs in American Society**

A survey course intended for a general audience with diverse interests in the phenomenon of drug use and abuse. Topics include pharmacology, history, theories of drug abuse, treatment methods, special populations, education and prevention models and ethical, political, social and legal considerations. Open to any graduate students with approval of their school except those who have completed CD 640.

### **CHD 640 Treatment of Addictions**

This course covers the theories, etiology, assessment, diagnosis, and treatment of addictive and compulsive disorders from the resiliency, recovery, and medical models. This course also addresses the impact of SES, ethnicity, other environmental factors and contemporary controversies on the development and treatment of addictive disorders.

## **CHE - Chemistry**

### **CHE 101 Introductory Chemistry**

*Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B*

Fundamentals of inorganic and organic chemistry, including bonding and basic types of reactions. An introduction to nuclear, biological and environmental chemistry. Basic principles and calculations of chemistry with emphasis in the areas of atomic structure, molecular structure and properties, equilibrium, thermodynamics, oxidation-reduction and kinetics.

### **CHE 101A Introductory Chemistry Lab (1.5 quarter units)**

*Prerequisites: CHE 101, or CHE 141 for science majors*

This laboratory course will complement the student's knowledge of chemistry with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

### **CHE 120A Intro to Chemistry Lab for Eng (1.5 quarter units)**

*Prerequisites: CHE 101*

An online-only laboratory class that introduces engineering students to the fundamentals and procedures of chemistry laboratory. Open only for students in the Master of Science in Environmental Engineering, and is not a substitute for the course SCI 101A.

### **CHE 141 General Chemistry 1**

*Prerequisites: MTH 215 or equivalent, CHE 101*

General chemistry topics important for higher level chemistry and science courses: thermodynamics, reaction kinetics, and quantum mechanics. Successful completion of a college algebra course is required for enrollment in this course.

### **CHE 142 General Chemistry 2**

*Prerequisites: CHE 141*

Second course of general chemistry, covering: bonding, solutions, chemical kinetics, chemical equilibrium, acids/bases, and thermodynamics.

### **CHE 143 General Chemistry 3**

*Prerequisites: CHE 142*

Third course of general chemistry, covering: electro, nuclear, organic, bio, and coordination chemistry. Chemistry of metals and non-metals is also covered.

### **CHE 150 Introductory Organic Chemistry**

*Prerequisites: CHE 101, and CHE 101A*

This course is designed to introduce students to the fundamentals of organic chemistry. This course covers the properties and reactions of hydrocarbons and their functional groups, aromatic compounds, and biological molecules. Special efforts are made in demonstrating the interrelationship between organic chemistry and other areas of science, particularly biological, health, and environmental sciences.

### **CHE 150A Introductory Organic Chem Lab (1.5 quarter units)**

*Prerequisites: CHE 150*

This course is designed to introduce students to the practical aspects of organic chemistry. This course covers basic techniques for handling, analyzing, and identifying organic compounds. In addition, students will learn how to synthesize simple and practical small organic molecules.

### **CHE 350 Organic Chemistry I**

*Prerequisites: CHE 142*

Introduces students to the chemistry of carbon compounds and their properties, structures and reactions. It emphasizes the study of the properties and reactions of aliphatic, halides, alcohols, esters, thiols and sulfides, and aromatic compounds, which in conjunction with selected experiments, gives an understanding of the mechanisms of organic reactions.

### **CHE 351 Organic Chemistry II**

*Prerequisites: CHE 350*

Study of the properties and reactions of aromatic compounds, aldehydes, ketones, carboxylic acids, amines, and amides. In addition, students are introduced to the use of modern spectroscopic techniques to analyze and predict structures of organic molecules.

### **CHE 360 Biochemistry I**

*Prerequisites: CHE 350, CHE 350A, CHE 351*

Study of the structures and functions of important classes of biological molecules: proteins, carbohydrates, nucleic acids, and lipids. A strong and current background in chemistry is required to successfully complete this course.

### **CHE 361 Biochemistry II**

*Prerequisites: CHE 360*

A continuation of CHE 360. This course concentrates on the principles of cellular regulatory processes and synthesis of biological molecules.

## **CIS - Information Systems**

### **CIS 301 Mgmt Information Systems**

Overview of core concepts related to the emerging interconnections between technology, the organization, and information management.

### **CIS 310 Technology Project Management**

Foundation of project management - project integration, scope, time, cost, quality, human resources, communications, risk, and procurement. The focus is on the concepts, skills, tools, and techniques involved in information technology project management. Students will develop a project plan using Microsoft Project.

### **CIS 320 Systems Analysis & Integration**

Comprehensive introduction to the planning, analysis, design, and implementation of contemporary information systems. Students will examine the role and responsibility of a System Analyst. Several approaches to system requirements are also covered.

### **CIS 330 System Development**

Introduces the Object-Oriented approach to system development with emphasis on user and computer interface design. Introduction to object-oriented programming, java, and Unified Modeling Language (UML) standard are also covered.

### **CIS 340 Data Communications**

Covers in detail all the critical technical areas in data communications, wide-area networking, local area networking, and protocol design. The focus is on current technology of the data and computer communications field. Emphasis is on both the fundamental principles as well as the critical role of performance in driving protocol and network design.

### **CIS 350 Database Management Systems**

Fundamentals of database systems. An introductory approach to developing database applications; students learn to evaluate a business situation and then build and design a database application. The focus is from systems design to distribution and integration of the system through hands-on experience. Core theories and ideas of database management systems are also covered.

### **CIS 416 Database Administration**

*Prerequisites: CIS 340*

Designed to give the Oracle database administrator (DBA) a firm foundation in basic administrative tasks. Through instructor-led learning, structured hands-on practices and challenge-level exercise labs, the DBA will gain the necessary knowledge and skills to set up, maintain and troubleshoot an Oracle7 or Oracle8 database.

### **CIS 420A Information Systems Project I**

*Prerequisites: CIS 310 and 80 percent of courses in the major, except CIS 420B*

A precursor to the final IS/IT product development capstone course. Students research their area of interest and learn how to apply project management tools in the preliminary development process of their final project product. Grading is by H, S, or U only.

### **CIS 420B Information Systems Project II**

*Prerequisites: CIS 420A*

A capstone hands-on project in the student's area of interest. Students apply skills learned, principles, topics and tools that have been taught throughout the program to develop an IS/IT specific product. Grading is H, S, or U only.



### **CIS 425 Programming for IT Environment**

Introduction to programming concepts in an integrated computing environment. It also examines contemporary programming design techniques including event-oriented approaches. Develop applications using Microsoft Visual Basic in a graphical user interface (GUI) environment.

### **CIS 430 Web/EB Design & Development**

Focuses on two aspects of website management: technical and business aspects. An introduction to Web languages and technologies is made with some in-depth coverage of HTML and CSS. How to manage people, content, and suppliers is covered in the business focus.

### **CIS 440 Systems Quality Assurance**

Fundamentals of measuring an organization's system quality and ways to improve it. This cover also covers the testing process and how to staff and execute a test plan from start to finish.

### **CIS 450 Information/Systems Assurance**

Provides understanding of how to audit information systems, including enterprise systems, fraud and fraud detection. The combination of text and software create a double learning environment in which students will gain an understanding of how these audits take place in the real world.

### **CIS 460 Human Factor /Ergonomic Design**

Introduction to methods that incorporate human capabilities and limitations, environmental factors, human-machine interaction, and other factors into system design. The focus is on the interface between humans, technology, and systems. Human factors and ergonomics in systems analysis, design, and evaluation will also be examined.

### **CIS 470 Computer Forensics**

Introduction of computer forensics in networked systems, provides understanding of technical issues in acquiring computer evidence with emphasis on computer forensic analysis. File systems and current computer forensics tools are also examined.

### **CIS 480 Health Information Management**

Overview of the health information management and health care delivery systems. Coverage includes the patient record, numbering and filing systems, record storage and circulation, indexes, registers, and health data collection.

### **CIS 601 Information Systems Strategies**

Exploration of the merger of Information Systems with legal, ethical, cultural, human resources, business philosophies and organizational structures. Learn the strategic role IS professionals play in the modern work-place environment and the role telecommunications plays in the modern work place, networked environment.

### **CIS 602 Network Services & Protocols**

*Prerequisites: CIS 601*

Study of the principles and applications of telecommunications. Examination of voice, data, analog and digital transmission in local area and wide area networks will be explored and the related existing and emerging communications protocols. Discover the

strategic role telecommunications plays in the modern networked environment.

### **CIS 604 Management and Security**

*Prerequisites: CIS 601*

Study of organizational management, network infrastructures and information, including information risk analysis, threats, vulnerabilities and protection methods. Analyze a business enterprises information management security risks and vulnerabilities and prepare a comprehensive security plan for Intranet, Extranet and Internet infrastructures.

### **CIS 606 End User Information Systems**

*Prerequisites: CIS 601*

Study of the end-user approach to systems analysis, addressing the links between information systems technology and organizational goals. IS design, analysis and implementation, with a focus on shaping information systems to enhance employee performance and carry out business strategies.

### **CIS 607 Systems Integration**

*Prerequisites: CIS 601*

The study of information systems technology through systems integration and distributed computing, to maximize efficiencies to meet organizational goals. Comprehensive treatment of IS design, analysis and implementation, with a focus on client server computing and the integration of legacy systems with newer applications.

### **CIS 620A Master's Research Project I**

*Prerequisites: All core requirements with a GPA of 3.0 approval of lead faculty.*

This course is the first part of the master's research project. It focuses on the research and selection of an appropriate topic related to information systems. Students develop the project in a three-to-five member group and utilize skills previously acquired in their respective core curriculum. This is a regular one-month course. Grading is H, S, or U only.

### **CIS 620B Master's Research Project II**

*Prerequisites: CIS 620A*

Two-month course, meets once a week. A continuation of CIS 620A. Students develop the project in a three-to-five member group. Students complete a detailed analysis and design of the project within the first two weeks of the course. After completing the project, students formally present their final product to a review panel for evaluation and grading. Grading is H, S, or U only.

## **CJA - Criminal Justice Administration**

### **CJA 101 Intro to Criminal Justice**

Introduction to the characteristics of the American Criminal Justice System. Emphasis placed on examining due process, U.S. Constitutional rights, criminal activity, crime causation, and law enforcement response to criminal activity. Explores the components of the American Criminal Justice System.

### **CJA 102 CJ Report Writing**

Identification of the techniques of communicating facts in a clear, comprehensive, concise, and logical manner. Emphasis is placed on administration of

justice terminology, use of English and organization of information, note taking and report writing, and presentation of testimony in court.

### **CJA 103 Basic Criminal Investigation**

Basic investigative responsibilities and procedures as applied to criminal investigations. Topics include crime scene management, forensic and physical evidence handling, search and seizure, property crimes, violent crimes, and others.

### **CJA 104 Police-Community Relations**

Examination of the complex, dynamic relationship between communities and the institutions of the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse, multicultural population. The role that race, ethnicity, gender, sexual orientation, and social class play in shaping these relationships.

### **CJA 105 Basic Criminal Law**

Case study based examination of the philosophy, history, and structure of criminal law in the United States. Special emphasis is placed on the classification and elements of crime, the definitions of common and statutory law, and the nature of acceptable evidence. Classification of crimes against persons, property, morals, and public welfare. U.S. Constitution, prosecution and defense decision-making, criminal culpability, and defenses to crimes.

### **CJA 106 Basic Criminal Evidence**

Examination of the constitutional foundation of the rules of evidence as applied in U.S. law. Emphasis is placed on the types of evidence and the laws governing admissibility of evidence in criminal proceedings.

### **CJA 229 Introduction to Policing**

This course is designed to provide the student with a basic understanding of the role of the peace officer in American society. The course will examine the steps in selecting candidates for the position of police officer, the complexity of the enforcement requirement, the challenges that face peace officers each day, the limitations placed on peace officers by all three branches of government at both the state and federal levels.

### **CJA 337 The Juvenile Offender**

A study of the nature and control of juvenile delinquency. Examines patterns of delinquent behavior, factors of causation, juvenile law and the juvenile justice system. Students also learn policies and procedures in treatment and prevention.

### **CJA 340 Corrections**

An introduction to the field of corrections and the corrections continuum. Topics include contemporary theories of punishment, corrections and rehabilitation, local, state, federal and military confinement facilities and community alternatives to incarceration.

### **CJA 351 Courts & the Judicial Process**

A study of concepts and theories regarding the utilization, organization and management of the judicial process. Critically reviews the issues of fair trial, speedy trial, free press, calendar control, judicial responsibility and new technology. Students analyze the roles of

the legal actors, problems of lower, trial and appellate courts and the distribution of judicial powers.

#### **CJA 352 Criminal Law and Procedure**

A survey of jurisprudential philosophy and case study of common law and statutory crimes. Discusses historical development, theory, principles and functions of criminal law. Also covers elements of due process, rule of law and the role of the constitution in protecting rights.

#### **CJA 356 Criminal Evidence**

A study of the elements of criminal law as applied to various theories of criminal evidence to enhance understanding of the various issues facing prosecutors, criminal justice practitioners and law enforcement agents. This course will explore the application of evidentiary issues and its relationship to investigations and criminal conduct.

#### **CJA 400 Gangs in America**

Exposes students to the basic trends of criminal behavior as it relates to gangs in America and the causative and contributory factors of gang behavior. It explores the general personality, intellectual and social perspectives of criminal behavior as it relates to gangs.

#### **CJA 401 Criminal Intelligence**

Exposes students to the basic trends of criminal intelligence as it relates terrorism around the world. The focus will be on the domestic and international threats of terrorism and the basic security issues that surround terrorism today. The student will gain an understanding of terrorism and the many factors that support and drive the terrorist movements throughout the world. The students will also analyze the laws and special forces which nations within the international community have created to meet this challenge. This course also presents an overview of computer crimes and the use of the internet to disrupt computer services throughout the world. The student will learn about emerging laws and digital solutions to block the use or spread of digital crimes or terrorism.

#### **CJA 431 Criminology**

This course exposes the students to the basic tenets of criminal behavior, the causative and contributory factors of behavior. It explores the general personality, intellectual and social perspectives of criminal behavior.

#### **CJA 434 Survey of Forensic Sciences**

An introduction to the forensic sciences. Includes topics such as forensic photography, firearms and tool mark identification, the examination of questioned documents, hair and fiber analysis, serology, instrumental analysis, forensic pathology and odontology and forensic psychology.

#### **CJA 441 Organized & White Collar Crime**

This course will expose the students to elite and corporate deviance, the incidence and prevalence of white collar and organized crimes. The course explores the theoretical foundations of all types of occupational crimes, with a comparative, analytical global look at these crimes. It also exposes the students to the forms and causes of these crimes, the legal and law enforcement and societal responses to such crimes.

#### **CJA 443 Curr Issues in Law Enforcement**

Using a seminar approach, this course focuses on current specific problems and issues within the law enforcement community. Topics may include police morale, the retention of sworn personnel and future trends in law enforcement.

#### **CJA 446 CJ Management and Leadership**

An analysis of the organization and management of criminal justice agencies. Discusses principles of supervision and motivation of personnel, management problems and solutions, decision-making and administration of policies and procedures.

#### **CJA 448 Violence and Society**

An exploration of methods, patterns and meanings of individual and collective violence. Focuses on gangs, terrorists and the assaultive individual. Students analyze the causes of violence, attitudes toward violence and methods of controlling violence as well as the impact of gun control.

#### **CJA 449 Research Methods**

An introduction to conducting research in criminal justice-related fields. Students learn how to identify current problems in criminal justice, develop a practical research question, formulate hypotheses, identify appropriate resources to answer the research question and describe an appropriate research method to answer the research question.

#### **CJA 457 Minorities/Crime/Soc. Justice**

A review of the criminological literature and theoretical applications of the law and criminal justice as seen from a racial, gender specific, class and ethnic orientation.

#### **CJA 458 Financial Investigations**

Investigates the accounting steps required to effectively pursue financial crimes. Topics include the five standards of proof, different classifications of evidence as well as the intricacies involved in how an investigator might develop the evidence necessary for a forfeiture proceeding.

#### **CJA 460 Principles of Investigation**

An introduction to the practices and procedures involved in conducting civil and criminal investigations. Topics include learning about crimes and their elements, modus operandi, major goals of investigations, primary functions and responsibilities of investigating officers/agents and the investigator's relationship with other individuals and agencies involved in an investigation.

#### **CJA 464 Constitutional Law for CJ**

A study of the fundamentals of the U.S. Constitution, the rights and protections of the accused; an exploration of the case law and the judicial system, the rights and responsibilities of the police and citizenry

#### **CJA 465 Practicum in Criminal Justice** (variable units)

A practicum designed for students seeking field experience in law enforcement. Students receive academic guidance from criminal justice faculty and supervision at the field placement site. Typically, the practicum requires students to work a minimum of 100-150 hours under supervision. At the completion

of the practicum, students are required to write an in-depth research paper about their experiences during their placements with coordination and support from their faculty advisor and field supervisor. Units are arranged and determined based on assignment and number of hours prearranged at the placement site. Grading is S or U only.

#### **CJA 467 Intl. & Domestic Terrorism**

Exposes the students to the basics of terrorism and its global impact; terrorism investigation and intervention strategies. It describes the factors to be considered when implementing psychological, social, investigative and legal techniques against terrorism and its related crimes.

#### **CJA 470 Supervised CJ Senior Project**

*Prerequisites: CJA 449*

The supervised senior project is undertaken by students of criminal justice once they have completed all core courses in the program. The project is chaired and coordinated by the instructor of record. Each student will select a viable topic in criminal justice to research. Students meet as a class once a week for two months. Upon completion of the project, students present the project to the instructor, other faculty, and peers in an open forum. Grading is H, S, or U only. Accelerated study is not permitted with CJA 470. CJA 470 is two months in length. Students who do not complete the Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of (IP). This allows the student up to one year to complete the project (from the start date of the class). Students who do not complete the project within one calendar year from the start date of the class will need to retake CJA 470. No grade of (I) can be given for this course. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

#### **CJA 490 Guided Study** (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department. Grading is by H, S, or U only.

#### **CJA 600 CJ Theory, Practice & Policy**

An overview of criminal justice administration, the history of police administration, organizational systems theory, principles, ideology, and managerial practice that has shaped the criminal justice profession.

#### **CJA 610 Critical Issues in CJ**

A seminar course focusing on contemporary issues related to problem-oriented policing (POP) and community-oriented policing (COP). Other topics include morale, motivation, retention, selection, recruitment, standards and training, evidence, arrest, lethal force, victim-witness, police reserves, and the cooptation of citizens in law enforcement by the criminal justice manager.

#### **CJA 620 Legal Issues in CJ**

An assessment of legal issues, legal terminology and analysis of court decisions involving criminal justice agencies' exposure to criminal or civil liability involving wrongful death, wrongful termination, police corruption, and discrimination lawsuits.

### **CJA 622 Professional Ethics in CJ**

A study of ethical, legal, professional controversies, personal dilemmas and approaches to solving those conflicts. Using a case study format, students evaluate personal values or biases and the abuse of power and authority. The course also examines police or justice practices involving cases of ethical or police policy violations.

### **CJA 625 Security Management & Planning**

An overview of the history, structure, importance and specific function of security management and administration. Students are exposed to the objectives of security management, security planning, education and training, organizational leadership, risk analysis, communication, legal liability for security managers, asset protection, emergency planning and development of security programs

### **CJA 627 Comparative CJ Systems**

A comparison of the American criminal justice system with other systems around the world. Students will evaluate the systems of law, police, courts and corrections in 30 different countries and examine the diversity that exists in the world legal systems. Also examines and compares American and foreign justice policies.

### **CJA 650 Advanced Criminological Theory**

A seminar course that explores the important criminological theories. The course will evaluate and compare the following theories: Classical, Positivist, Trait, Social Disorganization, Differential Association, Strain, Control, Labeling, Radical Choice, Deterrence, and Feminist theories. The course will analyze each theory and its relevance to crime in 21st century America

### **CJA 655 Advanced Research Methods**

The course is designed to aid graduate students to improve their writing and research skills and is specific to criminal justice. It includes an overview of the writing mechanics and process, how to properly conduct research, cite sources and guidelines for writing specific types of criminal justice papers.

### **CJA 660 Drugs, Alcohol & Public Policy**

A series of perspectives and reflections of the world's of drug taking, drug seeking, and public policy. Examines the history and patterns of abuse of the major drugs effecting crime in today's society and analyzes the public policy issues related to the legalization of certain drugs and medical marijuana

### **CJA 665 Violence and Victimization**

This course examines the causes of criminal victimization and looks at theories associated with violent victimization. It analyzes the offender-victim relationship, and presents ideas on preventing violence, and on responding to criminal victimization.

### **CJA 690 Research Project Thesis**

*Prerequisites: CJA 600, CJA 610, CJA 620, CJA 622, CJA 627, CJA 650, CJA 655*

A two-month course required of all MCJ students. Culminates in the research and writing of a substantial original work on a criminal justice pre-approved research project of personal interest involving the critical examination and evaluation of primary sources

and appropriate secondary materials with faculty supervision and guidance. Grading is by H, S, or U only. Course is eligible for In Progress (IP) grade

## **CLD - Cross-Cultural Language and Development**

### **CLD 627 Meth. Crosscult. Instr.**

An examination of content-area instruction for English language learners. Covers strategies that foster English Language Development (ELD) lesson development, adaptation, and delivery. Also covers Specially Designed Academic Instruction in English (SDAIE) and "instructional scaffolds" as well as "instructional conversations" to support ELD.

## **CLS - Clinical Lab Studies**

### **CLS 301 Clinical Biochemistry**

*Recommended: Prior completion of: CHE 142*

Explores the physiologic aspect of human metabolism and its role in health and disease. The derivation of energy and nutrients from digestive and absorptive processes, and the synthesis and metabolism of carbohydrates, fats and proteins.

### **CLS 305 Clinical Immunology**

*Recommended: Prior completion of: CHE 101 BIO 161 BIO 203 or equivalent*

Explores the immune system structure and function in health and disease. Topics include hypersensitivity, autoimmunity, immunodeficiency, transplant and tumor immunology, flow cytometry and other immunological techniques.

### **CLS 310 Clinical Virology**

*Recommended: Prior completion of: CHE 101 BIO 161 BIO 203 or equivalent*

Exploration of viral structure, classification, properties and interaction of viruses with cells, organisms and populations. Viral cultivation, the laboratory diagnosis of viral infections, and prevention and control of infection.

### **CLS 315 Molecular Diagnostics**

*Recommended: Prior completion of: BIO 162 and CHE 142*

This course provides an overview of the principles of clinical molecular diagnostics, the use of molecular techniques to diagnose disease, quality assurance in the molecular lab and DNA based tissue typing.

### **CLS 320 Clinical Lab Management**

Exploration of financial, personnel-related, operational and marketing issues affecting the clinical laboratory.

### **CLS 401 Quantitative Analysis**

*Recommended: Prior completion of: CHE 142*

Study of established methods and instrumentation used in chemical analysis including titration, extraction, chromatography, spectroscopy, buffers, electrochemistry and kinetic methods.

### **CLS 405 Clinical Microbiology**

*Recommended Preparation: CLS 301, CLS 305,*

### *CLS 315*

The Clinical Microbiology course is a comprehensive course which will cover major groups of pathogenic bacteria, fungi, parasites, and Mycobacteria. Students will learn correct safety procedures, differentiate BSL's, disinfection techniques, and BSC use. Study current trends in antibiotic use and their applications. Additionally study of human parasitic disease and Mycobacterial disease will be covered.

### **CLS 410 Clinical Hematology**

*Recommended Preparation: CLS 301, CLS 315, CLS 305*

The Clinical Hematology course will cover the diagnosis and management of blood cell disorders, anatomy and physiology of hematopoiesis, routine specialized hematology tests, analysis, classification, and monitoring of blood cell abnormalities.

### **CLS 495 Clinical Lab Science Capstone**

*Prerequisites: Must have completed all required core classes.*

A student initiated project in the field of clinical laboratory science or a closely related subject area which culminates in a scholarly professional written report and an oral presentation. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

## **COH - Community Health**

### **COH 100 Personal Health**

Designed to assist individuals to establish health behaviors for optimal physical, emotional, and sexual health and maintain a healthy environment.

### **COH 150 Healthcare Terminology**

Presentation of healthcare service terminology and word forms. Includes language describing health and disease. Emphasizes development of medical vocabulary employing the building of terms for application in understanding and analysis of medical records.

### **COH 201 Integrative Health**

Introduction to the emerging therapies and best supported scientific evidence in complementary and integrative healthcare. Covers systems and therapies including mind, body and spirit, traditional western healing, and ethnomedical systems from around the world. Includes legal and operational issues and explains how and why various therapies work in areas such as acupuncture, energy healing and mind-body therapies. Students will create a personal development plan for integrating learned principles towards lifelong practices for self-care and wellness.

### **COH 250 Public Health IT**

Overview of specialized public health IT applications such as registries, epidemiological databases, biosurveillance, and situational awareness and emergency response; information exchange issues specific to public health.

### **COH 300 The Ecology of Public Health**

*Prerequisites: COH 100, COH 310, and COH 320*

Consideration of the interrelationships and interdependencies between individuals, families, groups, organizations, communities, and societies and their effects on health status. High level wellness, health,

and disease are distinguished. Concepts are developed based on the evolution of public health in civilizations as well as contemporary influences.

### **COH 310 Culture and Health**

Focuses on the influence of culture on illness, health, and rehabilitation. The relationship that culture plays in the health and wellness of both individuals and the community in which they live will be explored.

### **COH 315 Introduction to Epidemiology**

*Prerequisites:* BST 322

Presents concepts and processes of this core public health discipline. Occurrence, distribution, effects, and control of diseases and conditions examined from a broad perspective. Applications of epidemiological methods included.

### **COH 317 Public Health Nutrition**

Human nutrition is examined in the context of physical and emotional health across the lifespan. The cultural, economic and political context of nutrition in contemporary society is considered. Students develop a personal nutrition plan. Interventions designed to influence better eating habits in communities are examined.

### **COH 318 Drug Use and Abuse**

Social, psychological, behavioral and physiological impacts of psychoactive drug use and abuse explored. Impacts of specific drugs on health status examined. Educational programs, public policy and treatment of addiction considered.

### **COH 319 Human Sexuality**

An exploration of the biological, psychological and sociological aspects of human sexuality. Development of a personal sexual philosophy, informed personal choice, awareness, tolerance and respect for sexual diversity. Critical analysis of research, information and public policy regarding sexuality.

### **COH 320 Chronic & Communicable Disease**

Introduction to concepts of pathological process from a public health viewpoint. Consideration of historical and contemporary disease patterns based on an understanding of pathogenic, behavioral, and environmental dimensions.

### **COH 321 Health Behavior**

Considers the significant influence that individual and collective behavior exerts on health status. Relationships of behavior and social variables are examined, including natural and built environments, economics, and public policy.

### **COH 370 Alternative Healthcare**

Focus is on providing an understanding of complementary and integrative therapies. The historical context and theoretical basis as well as the most recent scientific research and clinical applications will be explored. The most prevalent complementary therapies in use today will be discussed.

### **COH 380 HP Program Planning & Eval**

*Prerequisites:* COH 300, COH 315, HTM 310

Knowledge and skills essential to assessing needs, developing goals and objectives, and planning activities for health promotion programs presented. Devel-

oping program plans incorporating evaluation standards included. Program implementation explored.

### **COH 400 Environmental Health**

Focus is on the foundations of environmental science and environmental issues. Global climate change, agriculture, biodiversity, resource management, environmental toxins, waste management, and other topics will be explored.

### **COH 401 Health Promotion Concepts**

*Prerequisites:* COH 300, COH 315, COH 400, and HTM 310

Designed for entry-level professionals, covers the evolving profession of health promotion. Principles and practice of health promotion included. Essential core knowledge and skills considered. Health promotion's link to other health and human service endeavors reviewed. Challenges to health promotion included.

### **COH 412 Injury Prevention**

Occurrence and distribution of intentional and unintentional injuries in society and in selected population groups considered. Multiple physical, behavioral, social, and other variables contributing to injuries examined. Effective means for anticipating and preventing injuries identified.

### **COH 415 HP & Stress Management**

Traces the biological foundations of the stress response in contemporary society. Associates stressors with factors that may lessen or increase effects. Concept of allostatic load and disease occurrence considered. Specific strategies to manage stress presented.

### **COH 416 PH & Physical Activity**

Challenges to establishing and maintaining a physically active lifestyle in society examined. Physical, psychological, and social benefits of habitual physical activities considered. Public health impacts of sedentary living presented. Interventions to improve physical activity assessed.

### **COH 420 Health of Vulnerable Groups**

Considers population groups from different views: Biological, disease, educational, cultural, social, economic, political, geographic, age, gender, citizenship status, behavioral, and housing. Consideration of factors making certain groups vulnerable to premature and excess morbidity and mortality.

### **COH 422 Global Health Promotion**

Behavioral, environmental, and public policy factors affecting populations. Transportation, emigration, and immigration patterns affect health status. Substantial differences in health status among world's population examined. Course presents a broad understanding of the global aspects of health promotion.

### **COH 425 Health and Safety**

Focus is on health and safety management in the workplace. Emphasis is on how to protect employees, reduce illness and injury on the job, and develop a safety culture. OSHA required training, inspections, and postings and labeling will be explored.

### **COH 430 HP Strategies & Tactics**

*Prerequisites:* COH 300, COH 315, COH 400, and HTM 310

Methodologies to implement health promotion programs emphasized. Levels of intervention, from individual to society, are shown. Criteria for selecting methodologies presented.

### **COH 435 PH Communications & Advocacy**

*Prerequisites:* COH 300, COH 315, COH 400, and HTM 310

Means for influencing social environments and public policy affecting public well-being. Reaching identified target audiences through a variety of strategies examined. Successful communications and advocacy campaigns reviewed.

### **COH 440 Preparedness & Disaster Mgmt**

*Prerequisites:* COH 300

Introductory study of the public health response to disasters at all levels of county, state and federal government. Emergency planning and management relative to human made and natural disasters will be explored. Students complete risk analysis, manage disaster preparation efforts, identify and analyze potential disasters, provide corrective action, plan, organize and implement contingency and recovery programs.

### **COH 494A Internship in Health Promotion**

*Prerequisites:* COH 300, COH 315, COH 400, HSC 410, and a minimum completion of 36 quarter units of the Health Promotion core.

Practical application of knowledge and skills required for a health promotion professional in a community agency. Students assigned to agencies according to interests, abilities, and availability of approved internship sites. Two month requirement.

### **COH 494B Public Health Capstone Project**

*Prerequisites:* COH 494A, and Evidence of valid CPR and First Aid certification.

Summative, integrative experience drawing student curricular and related experiences together. Student initiated written project required addressing a significant health promotion challenge. Completed written project may be presented orally.

### **COH 499 Public Health Field Practicum**

*Prerequisites:* COH 100, COH 150, COH 300, COH 310, COH 315, COH 320, COH 321, COH 380, COH 400, COH 401, COH 412, COH 416, COH 317, COH 318, COH 319, COH 422, COH 430, COH 435, COH 440

Practical application of knowledge and skills required for a public health professional in a community agency. Students initiate agreement with an agency according to interests, abilities, and availability of approved internship sites and produce a group or individual written project addressing a significant public health challenge. Three month requirement.

### **COH 601 Global Public Health**

Analysis of global public health with emphasis on defining and evaluating preventive efforts to affect the quantitative, biological, economic, social, political, and behavioral determinants of health. Investigation of burden of disease, social justice and equitable health care. Emphasis on reproductive health, population dynamics, complex humanitarian emergencies, globalization and global cooperation.

### **COH 602 Biostatistics**

An introduction to the use of statistical analysis in public health. Provides an understanding of the basic methods and underlying concepts of statistics that are used in public health decision-making. Among topics explored are descriptive statistics, probability, sampling, hypothesis testing and non-parametric statistics.

### **COH 603 Public Health Biology**

Biological foundations of public health issues including infectious and chronic diseases. Reproduction and development of disease pathogens and transmission, immune responses and constitution of the host. Anatomical, physiological and cellular foundations for understanding chronic diseases. Focuses on methods for the control and prevention of disease.

### **COH 604 Theories of Health Behavior**

The theoretical basis of individual health behavior. Application of cognitive, psychosocial and environmental theories of health behavior and theories of self-directed and professionally facilitated health behavior change. Emphasis on Behavior Modification, Health Belief Model, Theory of Planned Behavior, Social Cognitive Theory, Stress and Coping, Social Support, and Transtheoretical Model.

### **COH 605 Public Health Promotion**

*Prerequisites:* COH 604

Exploration of health status and issues in various communities. Application of the national agenda for health promotion and disease prevention in the United States. Emphasis on health disparities by socioeconomic status, ethnicity, gender, age, ability and literacy. Examination of diffusion of health innovations throughout communities.

### **COH 606 Epidemiology**

*Prerequisites:* COH 602

The study of determinants and distribution of disease and disability in human populations. Empirical analysis of population data related to morbidity and mortality. Investigation of disease outbreaks, risk factors, health outcomes and causal relationships. Critical evaluation of public health literature and study design.

### **COH 607 Public Health Program Develop**

Development of community-wide interventions to promote health and prevent disease. Systematic design by application of the principles of epidemiology, health behavior and Evidence-Based Public Health. Includes Community-Based Participatory Research and investigation of ethical issues in conducting community-based public health programs.

### **COH 608 Public Health & the Enviro**

Analysis of the health impact of home, workplace, community and global environments. Examines scientific understanding of causes and control of the major environmental health problems. Includes environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination; solid hazardous waste; susceptible populations; biomarkers; and emerging global environmental problems.

### **COH 609 PH Program Evaluation**

*Prerequisites:* COH 607, or COH 619

Fundamentals of evaluation methods applied to public health interventions. Effective use of measurement tools to evaluate achievement of program goals and objectives. Includes analysis of validity and reliability of measurement instruments. Emphasis on reach, effectiveness, acceptance, implementation and maintenance of community programs. Includes fundamentals of proposal development.

### **COH 611 Public Health Research Methods**

*Prerequisites:* COH 602

Fundamentals of research methods and statistical analysis of public health data. Includes principles of research investigation, research design, sampling, measurements, and the use of descriptive and inferential statistics for data analysis and hypothesis testing. Focuses on health survey design, sampling methodologies, questionnaire construction and administration, interviewing, and coding procedures.

### **COH 612 Health Policy and Advocacy**

Explores the roles health advocates assume and how individuals working in public health settings might participate in advocacy strategies to affect policy. Focuses on frameworks for conceptualizing and promoting the right to health as well as strategies to give consumers more power in making decisions, defining issues, designing programs, and developing policies.

### **COH 613 Public Health Informatics**

*Prerequisites:* COH 606

Application of information systems and technology to public health practice and research. Information technologies that support and improve the status of individual and community health. Development, deployment and maintenance of these systems. Effective use of data, information and knowledge tools to build, manage, merge, retrieve and analyze public health data.

### **COH 614 Psychosocial Epidemiology**

*Prerequisites:* COH 606

Analysis of the epidemiological study of mental illness. Investigation of contemporary applications of epidemiology in investigating disease distribution and etiology. Emphasis on the use of epidemiological studies to plan mental health services, design prevention programs and to evaluate the effectiveness of mental health programs.

### **COH 616 Mental Health Promotion**

Analysis of the evidence-based programs designed to prevent mental illness. Investigation of applications of evidence-based public health in planning and evaluating programs to prevent mental disorders. Analysis of existent programs, databases and professional literature. Design of mental health services and evaluation of the effectiveness of proposed mental health programs.

### **COH 617 PH Aspects of Violence**

*Prerequisites:* COH 604

Intimate partner violence, child neglect and abuse, assault, homicide, war and terrorism are explored from a public health perspective. Focus on risk factor reduction and prevention of deaths, disability and human suffering.

### **COH 618 Health Promotion Strategies**

*Prerequisites:* COH 605

Investigation and evaluation of strategies implemented to promote health in communities. Emphasis on community organization, coalition building, curriculum development, communication theory and technology, social marketing, mass media and ecological models. Critical analysis of interventions that implement each strategy through systematic analysis of public health literature.

### **COH 619 PH Aspects of Human Sexuality**

*Prerequisites:* COH 604

Exploration of biological, psychological, behavioral and social aspects of health sexuality throughout the lifespan. Community level interventions to promote healthy sexuality.

### **COH 621 PH Aspects of Drug Addiction**

Substance use disorders examined from the public health perspective. Prevention and treatment of substance use disorders to reduce deaths, disability and human suffering in communities.

### **COH 691 Public Health Internship**

*Prerequisites:* HCA 600, COH 602, COH 604, COH 606, COH 608, COH 611

Work in public health agency planning, implementing and/or evaluating a health promotion program or programs. Minimum of 120 hours of structured work experience in a healthcare organization under the direct supervision of one or more experienced health promotion specialists. Course is eligible for In Progress (IP) grade. This is a two month course.

### **COH 692 Public Health Capstone**

*Prerequisites:* COH 691

Two-month capstone project focused on a relevant problem in public health theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to public health. Student project may require Institutional Review Board (IRB) approval. Course is eligible for In Progress (IP) grade.

## **COM - Communications**

### **COM 100 Intro to Mass Communication**

Survey course that many students take to fulfill a general education requirement. It is also a prerequisite for further in-depth studies in the field of communication. The course examines the cultural, linguistic and institutional factors that shape even the most everyday talk or exchange of information. It also looks at the major mass media industries, including books and newspapers, TV and radio, film, advertising, and the Internet. Through readings and projects, the course introduces students to the history and evolution of the media as well as rhetorical analysis and theories used to study the media.

### **COM 101 Intro. to Oral Communication**

*Prerequisites:* ENG 100, ENG 101

Introduction to fundamentals of oral communication. Focus on theories of the communication process. Emphasis on listening, non-verbal communication and audience analysis, in different contexts.

**COM 103 Public Speaking**

This class is an introduction to the principles and application of speaking effectively to diverse audiences in a variety of settings. Focus is on topic selection, organization, analysis of research, and delivery, with special attention on learning effective delivery skills.

**COM 120 Intro to Interpersonal Comm**

An introduction to the principals and application behind effective interpersonal communication. Students will study various styles of interpersonal communication, apply different techniques, and evaluate their effectiveness. Important components of interpersonal communication that include listening, conflict management, and developing and maintaining relationships, will be addressed in the personal and professional setting.

**COM 130 Intro. to Intercultural Comm.**

*Prerequisites: ENG 100, ENG 101, COM 101*

Introduction to the ways culture shapes communication. Focus on exploring the way different aspects of culture contribute to the way we create, send and receive messages.

**COM 150 Small Group Communication**

*Prerequisites: ENG 100, ENG 101, COM 101*

Introduction to the dynamics of working in a small group setting. The focus will be on leadership styles, roles, conflict management and goal setting.

**COM 160 Argumentation and Debate**

*Prerequisites: ENG 100, ENG 101*

Study of the skills in effective argumentation. Examination of the processes of creating and delivering a public argument. Emphasis on the construction of sound argument through research and critical thinking, and decision making.

**COM 190 Business Communication**

*Prerequisites: ENG 100, ENG 101*

Examination of the professional work environment and the ways employees communicate. Introduction to theories of business communication in different contexts, including interviewing, workplace relationships, and professional presentations.

**COM 220 Media Literacy**

Teaches ability to access, analyze, and evaluate information received from the media. Investigates message design strategies, the effects of media consumption and information fatigue, and the influences of bias and economic forces on media content. Covers meaning formation, verbal and visual rhetorical structures and the effects of media convergence.

**COM 230 Social Media Studies**

Facebook, Twitter, social networks and other Web 2.0 applications now account for the majority of time people spend on the Internet. Blogs, videoblogs, podcasts, online video, wikis, social recommendation sites, geotagging, virtual reality and mobile environments, and live collaboration are just some of the newest and most powerful topics students will learn and use.

**COM 300 Interpersonal Communication**

*Prerequisites: ENG 101, and COM 101, COM 103, or COM 220*

Examines the theory and research behind interpersonal communication. Explores communication processes in dyads, small groups, and teams, and in organizational settings. Teaches skills to improve students' communication competence in both personal and professional environments. The course also covers self-awareness, self-disclosure, relational development, and conflict resolution.

**COM 303 Digital Literacy 2.0**

*Prerequisites: ENG 100, ENG 101*

A multidisciplinary course about knowledge management in the 21st Century: tools, acquisition, evaluation, synthesis, formatting, presentation, and sharing. Essential digital skills to participate in the collaborative learning, work, and social environments of Web 2.0.

**COM 305 Intercultural Communication**

*Prerequisites: ENG 101, and COM 100, COM 103, or COM 220*

Looks at communication across cultures and considers how culture influences communication. Focuses on the dynamics of cross-cultural face-to-face interaction, conflict styles across cultures, societal influences on ethnocentrism and racism, cultural value orientations, non-verbal dimensions of communication, language interaction, stereotypes, relationship development, and cultural adaptation.

**COM 310 Communication Theory**

*Prerequisites: ENG 101, and COM 100, COM 103, or COM 220*

Provides a broad survey of the theoretical approaches employed in the study of communication. Focuses on theories relevant to many levels of interaction from interpersonal to mass and mediated communication. Also explores how and why theories are developed and how they can be evaluated.

**COM 315 Communication Research Methods**

*Prerequisites: ENG 101, and COM 101, COM 103, or COM 220*

Introduces students to quantitative and qualitative communication research methods to enable them to become competent evaluators, designers, and authors of research. Teaches the fundamental principles of communication research, providing learners with the knowledge base and experience to answer questions in the practice of professional communication.

**COM 324 Critical Thinking and Ethics**

*Prerequisites: ENG 101*

Examines critical thinking and ethics, and their application to academic, personal, and professional situations. Covers systems of logical reasoning, critical analysis, and evaluation of message content, including supporting evidence, and logical fallacies. Discusses the morality and ramifications of decision-making in media industries.

**COM 334 Persuasion**

*Prerequisites: ENG 101*

Introduces learners to the principles, functions, and practices of social influence. Examines how to influence others' attitudes, beliefs, opinions, values, and behaviors through communication. Explores scientifically established principles of persuasion that are used in contemporary media.

**COM 344 Organizational Communication**

*Prerequisites: ENG 101*

Provides for the study and application of current theories and research on communication within and among organizations. Includes the study of the influence of management styles on organizational communication. Discussion of communication structure, functions, contexts in organizations, and communication ethics in organizations.

**COM 354 Professional Presentations**

*Prerequisites: ENG 101*

Explores professional speaking and presentations. Identifies and provides practice of theory and skills used in advanced speaking. Teaches creation and integration of text, graphics, audio, and video into presentations. Offers hands-on experience applying theory and methods to create professional presentations.

**COM 360 Representation in the Media**

*Prerequisites: ENG 100, and/or ENG 101*

An exploration of the ways in which popular media represents our diverse and dynamic culture. The course focuses particularly on images and narratives of race and gender on television, in the movies and in popular culture. It also examines the cultural forces that influence how such representations are produced and perceived, their political and behavioral consequences, and various methods for analyzing and critiquing popular media.

**COM 364 Communication Technologies**

*Prerequisites: ENG 101*

Examines communication technologies and their effects on society. Looks at the history of such systems: how they emerged, diffused, and evolved. Covers current systems, with an emphasis on how the Internet and other new platforms are changing media, education, business, and politics around the world.

**COM 365 Integrated Marketing Comm**

*Prerequisites: ENG 101, COM 364, and MKT 302A, or COM 315*

IMC allows organizations to plan and implement unified communication campaigns using traditional and new media. They can use these multiple media platforms to reach multiple audiences and publics, leveraging their assets to develop more efficient and effective efforts. Through case analysis, students learn how leading organizations use the principles of IMC. Hands-on projects give learners the experience and confidence they need in the workplace.

**COM 380 Democracy in the Info. Age**

*Prerequisites: ENG 100, and ENG 101*

A critical examination of the media and power in modern democracies. Covers theories of democratic participation and media responsibility, as measured against contemporary practices around the world. Explores effects of television news, popular access to video and electronic technologies, and global electronic networks on contemporary political and cultural discourse.

**COM 385 Interactive Storytelling**

*Prerequisites: ENG 101*

Introduces the evolution of storytelling, from oral delivery to written and interactive texts, and trans-media publication. Examines the effects of this evolution on storytellers and participants. Offers hands-on creation of online identities and texts.

### **COM 394 Strategic Writing**

*Prerequisites:* ENG 101, and COM 101, COM 103, or COM 220

Teaches strategic writing and presentation for traditional and new media platforms. Provides students practice in creating content that meets organizational objectives, and in applying communication theory and persuasion techniques. Learners develop content for advertising, PR, and corporate communications.

### **COM 400 Mediated Messaging**

*Prerequisites:* COM 354, COM 385, and COM 394

Course examines 21st-century mediated communication systems and technology. Theory and methods used in creating, shaping, encoding, and transmitting mediated messages for personal and professional communications are examined. Software and skills for encoding mediated messages into text, graphics, audio, and video are learned and practiced.

### **COM 404 Media Management**

*Prerequisites:* COM 400

In-depth study of topics in media management, including managing media enterprises and units, business practices, content marketing and distribution, and technologies such as content and media asset management systems, as well as distribution and delivery networks. Students learn analytical techniques necessary to weigh business strategies and technology choices in bringing a variety of types of media content products to market.

### **COM 410A Advertising Strategies**

*Prerequisites:* COM 334, and COM 394

Presents strategies for the successful development of integrated advertising messages. Focuses on creative copywriting and art direction, and on analyzing clients, products, and audiences. Considers the challenges and rewards provided by advertising campaigns directed to increasingly diverse consumers and markets.

### **COM 411A Advertising Campaigns**

*Prerequisites:* COM 410A, or MKT 443, and COM 365, or COM 400

Students create and present a complete advertising campaign, and produce materials for multiple media platforms, including print, broadcast, and digital. Provides hands-on experience presenting a creative plan to a potential client.

### **COM 420A Public Relations Strategies**

*Prerequisites:* COM 334

Introduces the principles and strategies used by PR practitioners to plan and implement communication campaigns. Provides training in how to identify and reach audiences and to develop campaign plans in traditional and digital media.

### **COM 421A Public Relations Campaigns**

*Prerequisites:* COM 400, and COM 420A

Teaches the creation and production of public relations campaign materials across media platforms. Covers all forms of public relations materials, including news releases, public service announcements, media alerts, newsletters, backgrounders, brochures, audio, video, and interactive content.

### **COM 430A Interactive Strategies**

*Prerequisites:* COM 334

Examines the fundamental principles of communicating over the Internet to implement organizational objectives. Teaches use of the Internet as a marketing and persuasive medium. Students develop a new media communication campaign that includes traditional and digital media.

### **COM 431A Interactive Campaigns**

*Prerequisites:* COM 400, and COM 430A

Learners apply new tools and techniques to design, create, and implement interactive communication programs and campaigns. Offers hands-on experience producing multimedia content.

### **COM 444 Issues in Communication**

*Prerequisites:* Satisfactory completion of 7 300 or 400 level COM courses.

Course examines the rhetoric and communication systems associated with current issues in communication. Analyzes the contextual, rhetorical, and communication systems that make an issue salient and contribute to its impact on society. Explores implications of technological changes on social, political, technological, economic, and global systems.

### **COM 490 Independent Study** (variable units)

*Prerequisites:* Approval of Instructor and Department Chair.

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### **COM 499 Communication Program Capstone**

*Prerequisites:* Completion of 13 core and advanced core courses.

Students assemble and create materials necessary to produce an ePortfolio that demonstrates their research, analysis, strategic thinking, content production, and campaign evaluation skills. The ePortfolio demonstrates the student's experience and capabilities. It will be an asset in the job search and in career advancement.

### **COM 600 Comm in Global Environment**

Explores theory and practice of interpersonal communication in the workplace, focusing on the ability to communicate with others in professional interactions. Covers the development of interpersonal and professional relationships between people with different characteristics and backgrounds to provide learners with tools for encoding and decoding verbal, nonverbal, and mediated messages.

### **COM 610 Integrated Marketing Comm**

Covers IMC process for creating and fostering relationships with customers and public through strategically controlling or influencing messages sent to and exchanged with these groups. Course teaches effective integration of an organization's marketing communication initiatives. Through case analysis, students learn how IMC has become critical to marketing efforts.

### **COM 615 Research Methods**

Presents fundamentals of research underlying communication campaigns and programs. Covers qualitative and quantitative methodologies, secondary research, internal market intelligence, and data analysis. Offers practical experience with techniques to identify

and reach audiences and publics and to track results of campaigns. Teaches research strategies to develop communications that fulfill organizational goals.

### **COM 620 Crisis Communications**

Provides learners with principles and procedures for handling multiple stakeholders and publics under crisis conditions. Offers training to deal with media in less-than-optimal situations, when they may be faced with indifference or even hostility. Looks at case studies of strategies and tactics of organizations that have dealt with crises.

### **COM 625 Campaign & Program Management**

Provides learners with knowledge to manage communication campaigns by covering theories and processes of campaign development and implementation. Covers best practices project management techniques, communication audits, budgets, and resource allocation. Offers hands-on experience creating, writing, and presenting communication campaign implementation plans.

### **COM 630 Campaign & Program Evaluation**

*Prerequisites:* COM 610, COM 615

Course covers communication campaign evaluation, before during and after the campaign period. Focuses on systematic qualitative, quantitative, and observational methods appropriate to guide campaign planning, make mid-course corrections to messages and media mix and to assess post-campaign effectiveness.

### **COM 640 Persuasion**

Exploration of theories of persuasion that guide the preparation of messages intended to influence others. Focuses on use of persuasion techniques to develop decisions about creative and production implementation. Uses case studies to analyze persuasive messages in contemporary media and to compare techniques used in alternative media platforms.

### **COM 650 Legal and Ethical Issues**

Provides students with a clear understanding of the legal environment for public communications and the ethical considerations that must be taken into account. Examines international regulation of copyright and intellectual property protection and legal and regulatory provisions in the U.S. Teaches skills in assessing ethical risk and following ethical guidelines.

### **COM 660 Capstone Project**

Presentation of skills the learner has acquired in the program. Their research, analysis, strategic thinking, message shaping, and evaluation skills will all come together in the final project: The preparation of a digital, web-based e-portfolio that will be an asset in the search for an appropriate post-graduation position. Grading is by H, S, or U only.

## **CSC - Computer Science**

### **CSC 200 Orientation to Comp. Science**

An introductory survey course covering current developments and future prospects in the field of computing. Coverage begins with the fundamentals of computer architecture and progresses to software and software development processes. Topics included are operating systems, networking, programming

languages, software engineering, database systems, and ethical issues in computing.

### **CSC 208 Calculus for Comp. Science I**

*Prerequisites:* MTH 215

(Cross-listed and equivalent to MTH220) Focus on differential and integral calculus with applications. Topics include limits and continuity, derivatives, standard rules of differentiation including chain rule, exponential and logarithmic forms, curve sketching, definition of anti-derivative; integration rules including substitution and by parts, coverage of Fundamental Theorem of Calculus and a brief exposure to numeric integration. Students may not receive credit for both CSC 208 and MTH 220.

### **CSC 209 Calculus for Comp. Science II**

*Prerequisites:* CSC 208

Continuation of Calculus I with emphasis on understanding of concepts and developing problem solving techniques and strategies. Topics include integration of trigonometric functions, functions of several variables, convergence of series and sequences. Applications in the areas of series approximation, continuous probability distributions, random variables, and modeling are discussed and examined.

### **CSC 220 Applied Probability & Stats.**

*Prerequisites:* MTH 215

Introduction to the theory and applications of probability and statistics. Topics include fundamental concepts of probability, conditional probability, random variables, common distributions, and statistical inference (estimation, hypothesis testing, and regression). The emphasis is on developing problem solving skills and applying key results to computing and engineering problems such as algorithm analysis, queuing, and simulation.

### **CSC 242 Intro to Programming Concepts**

*Prerequisites:* CSC 208

Introduction to modern programming design techniques using C++. A study of basic programming constructs, techniques and fundamental control structures. Emphasis is on Object Oriented and modular programming. Coverage includes data types, functions, arrays and pointers. The course examines problem analysis, decomposition and modern programming paradigms and methodologies.

### **CSC 252 Programming in C++**

*Prerequisites:* CSC 242

Fundamentals of Object-Oriented Programming in C++ including class definition and object instantiation, inheritance and polymorphism. Detailed coverage of exception handling, operator overloading, I/O and file streams, templates, and the Standard Template Library (STL). Exposure to Data Structures and basic algorithms for sorting and searching.

### **CSC 262 Programming in JAVA**

*Prerequisites:* MTH 215

The course introduces the Java programming language and its features. Topics include introduction to object oriented programming, basic control structures, java graphics and GUI objects, multimedia components, exposure to event driven programming, arrays and strings in java. Coverage includes encapsulation, inheritance, and polymorphism.

### **CSC 300 Object Oriented Design**

*Prerequisites:* CSC 252

Covers the key concepts and methodologies required for object-oriented design, evaluation and development with focus on practical techniques such as use-case, CRC analysis, and patterns. The Unified Modeling Language (UML) is presented in detail. Special emphasis is given to the use of object patterns in developing software systems.

### **CSC 310 Linear Algebra and Matrix Comp**

*Prerequisites:* CSC 300

The course includes the study of vectors in the plane and space, systems of linear equations, matrices, determinants, vectors, vector spaces, linear transformations, inner products, eigenvalues and eigenvectors. The course will approach the study of linear algebra through computer based exercises. Technology will be an integral part of this course. Students will also develop experience applying abstract concepts to concrete problems drawn from engineering and computer Science

### **CSC 331 Discrete Structures and Logic**

*Prerequisites:* CSC 252, and CSC 310

(Cross-listed and equivalent to MTH 325) A theoretical foundation for computer science. Introduction to topics such as sets, propositional logic, Boolean algebra, counting techniques, recursive equations and solution techniques, graph algorithms with application to trees. Introduction to mathematical proofs. Students may not receive credit for both CSC 331 and MTH 325.

### **CSC 335 Data Structures and Algorithms**

*Prerequisites:* CSC 300, CSC 331

An overview of data structure concepts, arrays, stack, queues, trees, and graphs. Discussion of various implementations of these data objects, programming styles, and run-time representations. Course also examines algorithms for sorting, searching and some graph algorithms. Algorithm analysis and efficient code design is discussed.

### **CSC 338 Algorithm Design**

*Prerequisites:* CSC 335

This course presents an introduction to the techniques for designing efficient computer algorithms, proving their correctness, and analyzing their running time complexity. General topics include asymptotic behavior, solving summations and recurrences, algorithm design techniques such as divide-and-conquer, dynamic programming, and greedy algorithms applied to sorting, searching and graphs. The course includes an introduction to the theory of parallel and distributed algorithms

### **CSC 340 Digital Logic Design**

*Prerequisites:* CSC 208, or EGR 220

Foundation in design and analysis of the operation of digital gates. Design and implementation of combinational and sequential logic circuits. Concepts of Boolean algebra, Karnaugh maps, flip-flops, registers, and counters along with various logic families and comparison of their behavior and characteristics.

### **CSC 340L Digital Logic Design Lab (1.5 quarter units)**

*Corequisites:* CSC 340

A study of basic digital logic circuit design and implementation. Circuit schematic development and computer modeling and simulation of digital sys-

tems. Experiments explore designs with combinational and sequential logic. Students work through design activities, which include testing, troubleshooting and documentation.

### **CSC 342 Computer Architecture**

*Prerequisites:* CSC 340, and CSC 340L

An examination of advanced hardware design, analysis, and low level programming with emphasis on the structure of the machine. In addition, the machine cycles and instructions, pipelining, addressing modes, and architecture concepts are covered. Includes assembly language programming and program control structure

### **CSC 350 Computer Ethics**

Analysis of the values, ethics and ideologies in computing and their applications to current issues in computer industry within the contemporary socio-cultural setting. Focuses on ethical decision-making in computing matters. students develop an ethical outlook on a wide variety of workplace issues in computing through case study, debate and readings.

### **CSC 400 OS Theory and Design**

*Prerequisites:* CSC 335

An introduction to operating system concepts including implementation, processes, deadlocks, communication, multi-processing, multilevel memory management, file systems, protection, resource allocation, and scheduling.

### **CSC 421 Compiler Design**

*Prerequisites:* CSC 335

An introduction to the theory of programming language processors focusing on lexical analysis, syntax analysis, and compile-time mechanics, including code generation and optimization, execution of interpretive representations, and management of data structures.

### **CSC 422 Database Design**

*Prerequisites:* CSC 300

A survey of principles, structure, analysis, and techniques of database design and implementation. Topics include physical and logical design, normalization, database models, security, integrity and queries.

### **CSC 430 Programming Languages**

*Prerequisites:* CSC 300

A comparative study of programming languages. Syntax, semantics and pragmatics are considered. Language features that support software engineering are emphasized. Recent trends in programming language design and type theories are studied.

### **CSC 436 Comp. Communication Networks**

*Prerequisites:* CSC 335, or CSC 340, and CSC 340L

An in-depth study of fundamental concepts in the design and implementation of computer communication networks. Coverage of core problems such as framing, error recovery, multiple-access, flow control, congestion control, routing and end-to-end reliability. Topics include basics of switched communication networks, packet switch architecture, TCP/IP networking, routing algorithms, Quality-of-Service networks, and wireless communications. Mathematical tools are applied in quantitative modeling and analysis of networks.



### **CSC 440 Advanced Programming in Java**

*Prerequisites:* CSC 262, or CIS 303

A treatment of advanced programming techniques in Java using abstraction, encapsulation and inheritance. Development of applets and applications using client server technology, multithreading, event-driven programming techniques, and multimedia.

### **CSC 445 Wireless Appl. Development**

*Prerequisites:* CSC 242, or CSC 262, or CIS 303

Current wireless technologies and communication protocols. Coverage includes the current and emerging mobile applications, wireless and mobile infrastructure, devices, middleware, and network access issues. Examines the impact of wireless applications on individuals and organizations. Students will study the current tools, and techniques employed in development of mobile software solutions.

### **CSC 450 Artificial Intelligence**

*Prerequisites:* CSC 335

An introduction to problem solving using modern artificial intelligence techniques. Examines the role of heuristics in problem solving. Concepts such as agents, production systems, and natural language communication are studied. Experimental artificial intelligence systems are developed.

### **CSC 451 AI Programming**

*Prerequisites:* CSC 335

A study of artificial intelligence programming techniques. The role of heuristic programming in pattern matching and search problems is examined. Introduction to intelligent agents, and decision game trees. Implementation strategies for computing systems underlying the concepts such as, production systems, heuristic search and natural language communication are examined.

### **CSC 452 Human Computer Interactions**

*Prerequisites:* CSC 300, or CSC 440

Methods facilitating effective human-computer interaction. Procedures and environments fundamental to the development of a successful user interface are examined. Design philosophy, guiding principles, and technologies for constructing and sustaining interactive systems that optimize user production are appraised. Discussion of multidisciplinary dynamics of HCI, current and projected developments in HCI research.

### **CSC 454 Computer Graphics**

*Prerequisites:* EGR 220, and CSC 335

A study of the fundamental mathematical, algorithmic and representational issues in computer graphics, with emphasis on 3 dimensional graphics. Examination of topics including the graphics process, projective geometry, homogeneous coordinates, projective transformations, line-drawing, surface modeling and object modeling using spatial sampling and parametric functions, approaches to rendering, texture synthesis and mapping, and polyhedral representations.

### **CSC 455 Game Programming**

*Prerequisites:* CSC 454

A study of tools and techniques for design and implementation of interactive games. The course will emphasize programming aspects, including event loops and execution threads, rendering and animation in 3D, terrain/background representation, polygonal models, texturing, and collision detection.

### **CSC 456 Advanced Game Programming**

*Prerequisites:* CSC 455

An advanced study of formal models and design principles of interactive games. The course will emphasize algorithms, models, programming techniques, including event loops and execution threads, rendering and animation in 3D, terrain/background representation, polygonal models, texturing, and collision detection.

### **CSC 480A Computer Science Project I**

*Prerequisites:* Completion of core courses.

A study of the software development life cycle. Emphasizes logical organization of system and communicating design through documentation suitable for generating a concrete implementation. Students construct an original project with practical applications applying software engineering concepts. This project includes program specifications, test plans, and user documentation. Grading is by H, S, or U only.

### **CSC 480B Computer Science Project II**

*Prerequisites:* CSC 480A

A continuation of the student project. Student teams complete the internal specification and test plan. The project is coded, modules-tested, system tested and all documentation is completed. Grading is by H, S, or U only.

### **CSC 606 Modern Operating Systems quarter**

A study of relation between architectures, system software and application software. Topics include process, thread, and memory management issues, multiprogramming, timesharing, multithreading, multiprocessing, inter-process communication, synchronization, virtual machines, client-server systems, distributed systems, real time systems, resource allocation, shared resources, input output, file systems, computer security and related problems. Scope and limitations of current Operating Systems are considered.

### **CSC 607 Security in Computing**

This course examines the use of security vulnerabilities and threats in computer programs, operating systems, networks, and databases. The use of cryptography and other countermeasures to provide confidentiality, integrity, and availability is then evaluated in depth, from the perspectives of both technical effectiveness and ethics of users and developers.

### **CSC 610 Mathematical Foundations**

A study of mathematical models of computation and theoretical foundations of computer science. Proof techniques, automata theory, Chomsky hierarchy, decidability and computational complexity are emphasized.

### **CSC 615 Advanced Programming**

Review of structured, object oriented and event driven programming and data and procedural abstractions. Complex program development with advanced multi-threading and multiprocessing for parallel computing in multiple environments.

### **CSC 668 Topics in Computing**

Each time this course is offered, it addresses a topic in computer science that is not covered as a regular course. The topic is covered at an advanced level that is appropriate for any student who has successfully completed the prerequisite courses. Possible topics

include grid computing, semantic web, intelligent systems and knowledge abstraction.

### **CSC 670 User Interface Engineering**

A study of techniques in design and implementation of user interfaces. Emphasis will be on effective human computer interaction strategies that meet human cognitive capabilities and organizational practices and processes.

### **CSC 686 Computer Science Project I**

*Prerequisites:* Completion of all MSCS core courses or permission of the instructor.

A study of the software development practices. Emphasizes logical organization of system and communicating design through documentation suitable for generating a concrete implementation. Students construct an original project with practical applications utilizing software engineering concepts. This project includes requirements engineering, design, test plans and user documentation. Grading is by H, S, or U only.

### **CSC 687 Computer Science Project II**

*Prerequisites:* CSC 686

course, meets once a week. A continuation of the student project. Student teams complete the project in this phase. The project is coded, module-tested, system-tested and all documentation is completed. Grading is by H, S, or U only.

## **CYB - Cyber Security**

### **CYB 600 Cyber Security Technology**

Examines the environment to be secured, and defines the attributes of that environment. Includes securing the environment, security technologies in the environment, security threats and security responses.

### **CYB 601 Cyber Sec. Toolkit Utilization**

*Prerequisites:* CYB 600

Designed to introduce technical tools and begin to use them in hands-on exercises in both onsite and online instruction. This will facilitate students to complete future assignments and develop projects in teams. Technical tools used will include Microsoft and VMware virtual machines of Windows and Open Source operating systems, certificate authorities, SSL/TLS and browser certificates, web and database servers, programming frameworks, and network/packet analysis and sniffing strategies.

### **CYB 602 Threat Mitigation Policy/Audit**

*Prerequisites:* CYB 601

Security awareness, education and organizational security policy are examined. Includes formal security models. Programming security and physical security are considered. Particularly physical security threat management. Security auditing is discussed as well as legal and ethical issues.

### **CYB 603 Cyber Security Ethical Issues**

*Prerequisites:* CYB 602

Examines information technology issues including hardware reliability and network security, Ethics are introduced with a focus on professional ethics. Topics include intellectual property, plagiarism, privacy and work and wealth.

### **CYB 604 Wireless and Mobile Security**

*Prerequisites:* CYB 603

Concepts covered include a comprehensive wireless and mobile security overview including the design, planning, installation, and maintenance of wireless network security infrastructures. Emphasis is placed on information warfare countermeasures relative to government, military, terrorist and rogue, and private enterprise demographics

### **CYB 606 Net Defense & Countermeasures**

*Prerequisites:* CYB 604

An introduction to network security including types of attacks. Firewalls are considered and intrusion detection systems. Efforts considered to enhance security include encryption, virtual private networks, and operating system hardening. Defending against network born security attacks is also examined. Security policies, standards and computer-based espionage are also topics.

### **CYB 608 Ethical Hacking**

*Prerequisites:* CYB 606

This practicum focuses on the legal and regulatory requirements, ethical issues, basic methodology and technical tools used for ethical hacking and penetration tests. Students learn to establish a pre-test agreement with the enterprise, discover and exploit vulnerabilities, participate as a member of a pen test team and prepare a penetration test report.

### **CYB 612 Disaster Rec./Bus. Continuity**

*Prerequisites:* CYB 608

In-depth focus on the development of an enterprise disaster recovery and business continuity plan that includes assessing impact and risks, prioritizing systems and functions for recovery, identifying data storage and recovery sites; specifying plans, procedures and relationships; creating a test process for the plan; and continued assessment of needs, threats and solutions.

### **CYB 613 Information Assurance**

*Prerequisites:* CYB 608

The functions and processes required to achieve physical and logical control over the entire security infrastructure are analyzed from an IA organizational and life cycle perspective. Personnel security, network and physical security, business continuity and cryptology are highlighted.

### **CYB 614 Privacy of Information**

*Prerequisites:* CYB 608

Addresses the privacy requirements of information and the techniques for maintaining the confidentiality of personal data in healthcare, financial, defense and industry sectors. Techniques for dealing with the anonymization of data including encryption are evaluated. Approaches of dealing with the requirements of HIPAA, the Patriot Act, Sarbanes Oxley and the European Union Data Privacy Act are evaluated. Includes the comparative security requirements of relational databases.

### **CYB 615 Securing the Enterprise**

*Prerequisites:* CYB 614

The specific information assurance requirements of Healthcare are addressed as they relate to designing and maintaining secure, confidential medical records. Wireless data entry and retrieval devices are

evaluated including PDAs, cell phones and wireless computer tablets.

### **CYB 616 Certification & Accreditation**

*Prerequisites:* CYB 613

This course gives in-depth focus for Information Assurance from an INFOSEC, US defense/military, perspective. Information systems security from an INFOSEC perspective focuses on protection of information systems against unauthorized access to or modification of information, whether in storage, processing or transit, and against the denial of service to authorized users, including those measures necessary to detect, document, and counter such threats. Emphasis is upon defining the IA priorities, baseline and current snapshot posture for an organization; and establish and manage an IA defense in-depth strategy.

### **CYB 621 Computer Forensics Principles**

*Prerequisites:* CYB 608

Introduction of computer forensic principles: admissibility of electronic evidence, preparing for e-evidence collection; forensic examination of computers, detecting intrusions, malware, and fraud; and legal, ethical, and testimony topics.

### **CYB 622 Computer Forensics Technology**

*Prerequisites:* CYB 621

Expansion of computer forensic principles to include tools and technologies: live incident response, network-based forensics; acquiring a forensic duplication; forensic analysis techniques; creating a complete forensic toolkit; mobile device forensics; and online-based forensics.

### **CYB 623 Database Forensic Principles**

*Prerequisites:* CYB 622

Application of forensic principles to server data bases with an SQL emphasis. This serves as a guide to artifact and incident identification and analysis that can be applied to other relational data base systems.

### **CYB 632 Info Sys Vulnerab & Attacks**

*Prerequisites:* CYB 608

Students will apply principles of penetration testing to identify and exploit vulnerabilities in network facing information systems and make recommendations for mitigation. This course uses tools such as the Metasploit Framework that is a free, open source penetration testing solution developed by the open source community.

### **CYB 633 Red Teaming**

*Prerequisites:* CYB 632

Red Teaming, or Alternative Analysis, is the practice of viewing a problem from an adversarial or competitor's perspective. The objective of Red Teams is to enhance decision making, practices of secured system protection applicable by establishing countermeasures of defense. A contributing outcome of this course to the entire MS CSIA program is to help students employ actively open-minded/problem solving, unbiased thinking to CSIA.

### **CYB 634 Red vs. Blue Team Exercise**

*Prerequisites:* CYB 633

Students will analyze and perform Red vs. Blue Team objective-based cyber operations as an active approach to establish a defensive posture improve-

ment. The basic idea of Red vs. Blue team countermeasures is simple – war gaming. A virtual enterprise computer infrastructure is established and the Red Team will attack the infrastructure, whereas, the opposing Blue Team will defend against the attack. This level of risk management has been actively deployed in both government and industry. This exercise prepares the student for the final team project in MS CSIA course CYB699.

### **CYB 699 Cyber Policy Project**

*Prerequisites:* CYB 606 and completion of one specialization area

A Master's Project dealing with a student's area of concentration on Cyber Security and Information Assurance policy is presented to a review panel for evaluation and approval. In-depth focus on security policy definition, regulations and framework including asset classification, control, personnel security, physical, environmental, communications, operations management, access control, systems development and maintenance, disaster recovery and business continuity policies and procedures. Specific regulatory emphasis is placed on defense, financial, healthcare, critical infrastructure, educational and small business sectors.

### **CYB 699A Cyber Security Project I**

*Prerequisites:* CYB 608 and completion of one specialization area.

A Master's Project dealing with a student's area of concentration on Cyber Security and Information Assurance policy is presented to a review panel for evaluation and approval. In-depth focus on security policy definition, regulations and framework including asset classification, control, personnel security, physical, environmental, communications, operations management, access control, systems development and maintenance, disaster recovery and business continuity policies and procedures. Specific regulatory emphasis is placed on defense, financial, healthcare, critical infrastructure, educational and small business sectors.

### **CYB 699B Cyber Security Project II**

*Prerequisites:* CYB 699A

A Master's Project dealing with a student's area of concentration on Cyber Security and Information Assurance policy is presented to a review panel for evaluation and approval. In-depth focus on security policy definition, regulations and framework including asset classification, control, personnel security, physical, environmental, communications, operations management, access control, systems development and maintenance, disaster recovery and business continuity policies and procedures. Specific regulatory emphasis is placed on defense, financial, healthcare, critical infrastructure, educational and small business sectors.

## **DAT - Database**

### **DAT 604 Database Design and Impl.**

Introduction to Database. DBMS Architecture. High Level Conceptual Data Models: ERI, Relational, ER to Relational Mapping. Operations and Relational Constraints Violations. Database Design Theory and Methodology: Functional Dependencies and Normal Forms. SQL \*Plus environment and commands: Re-

lational Algebra Operations, Creation and Modification of relations, Data Management and Retrieval using Multiple Tables.

#### **DAT 605 Web and Cloud Computing**

*Prerequisites:* DAT 604 or approval of lead faculty.

A survey of the technologies required for software development of current applications, such as internet and client/server with a focus on database applications and software systems that solve a particular real-world problem. Examine application design and external, conceptual and internal levels of databases. Design and develop front-end application using GUI/API, server-side and client-side programming, and multi-threading for modern relational databases in the client/server environment.

#### **DAT 615 Advanced Database Programming**

This course teaches the skills for implementing and maintaining databases using Structured Query Language (SQL), including Data Design Language and Data Manipulation Language. Topics include creating databases using Transact-SQL and Data Transformation Services (DTS) to manipulate data; programming business logic using stored procedures, triggers, user-defined functions, and views.

#### **DAT 625 Database Management Systems**

*Prerequisites:* DAT 604 or approval of lead faculty.

This course concentrates on the study of the internals of database management systems. Topics include: principles and theories of physical storage management, Storage and File Structure. Indexing and Hashing, query processing and optimization, index structures for relational databases, transaction processing, ACID properties, concurrency control, database backup and recovery.

#### **DAT 635 Database Installation & Config**

*Prerequisites:* DAT 615 or approval of lead faculty.

Identify system requirements, Use Optimal Flexible Architecture. Install Database with the Universal Installer. Identify and configure commonly used environment variables. Explain the database and instance architecture. Use the management framework. Configuring, tuning and performance optimization. Identify common database interfaces.

#### **DAT 645 DB Management & Security**

*Prerequisites:* DAT 635 or approval of lead faculty.

This course also teaches theory and application for providing effective administration and security in database management systems. The skills for managing database users and roles, database maintenance plans, security policies and procedures, documentation, the principal of least privilege, manage user accounts, implement standard password security features and audit database activity.

### **DEN - Design Engineering**

#### **DEN 308 Computer Aided Engineering I**

*Prerequisites:* EGR 219

Introduction to simulation modeling and analysis, model development, intermediate and detailed modeling, modeling issues and techniques.

#### **DEN 411 Computer Aided Engineering II**

*Prerequisites:* EGR 219

Introduction to the powerful computer aided design package SolidWorks for mechanical design applications, modeling and analysis.

#### **DEN 414 Computer Aided Engineering III**

*Prerequisites:* EGR 219

Introduction to the LabVIEW essential techniques for designing virtual instrument configurations and controls.

#### **DEN 417 Computer Aided Engineering IV**

*Prerequisites:* EGR 219

Introduction to the industry-standard engineering language provided by MATLAB latest versions for computation, analysis, and visualization, with emphasis on engineering graphics applications.

#### **DEN 420 Computer Aided Engineering V**

*Prerequisites:* EGR 219

Advanced topics on three-dimensional parametric modeling tools, features and functions of SolidWorks with emphasis on mechanical design solutions, standards, simulation and techniques.

#### **DEN 422 Materials and Manufacturing**

*Prerequisites:* EGR 225

An introduction to the thermal, bonding, usage and machining characteristics of materials and manufacturing processes used in the production industry. The course introduces the basic concepts of manufacturing and emphasizes quantitative analysis of manufacturing processes and the relationships between material properties and the variables of manufacturing processes.

#### **DEN 423 Human Factors in Engineering**

*Prerequisites:* MTH 215

Consideration of human characteristics in the requirements for design of the systems, products and devices. Human-centered design with focus on human abilities, limitations and interface.

#### **DEN 426 Reliability Engineering**

*Prerequisites:* MTH 215

An introduction to reliability engineering with emphasis on practical applications and the mathematical concepts. Cover mechanical, electronic and software failure mechanisms, design and testing.

#### **DEN 429 Product Design Optimization**

*Prerequisites:* MTH 215

This course focuses on analytical and empirical tools that allow designers and manufacturing engineers to predict the manufacturing and assembly cost estimates for optimized design.

#### **DEN 432 Concurrent Design Engineering**

*Prerequisites:* MTH 210

An introduction to the concepts, methodologies and practices of the concurrent engineering design environment for effective and efficient integration of products, systems and manufacturing processes.

#### **DEN 435 Design & Analysis of Experiments**

Introduction to the concepts of making the design and analysis of engineering experiments more effective and efficient. Coverage includes advanced techniques to analyze experimental results, Taguchi's robust design

strategy, combination designs, and Qualitek-4 software for automatic experiment design and analysis.

### **DHH - Deaf and Hard-of-Hearing**

#### **DHH 632 Charac of D/HH Learners**

An overview of the etiologies and cultural differences related to hearing loss and the learner characteristics that impact the unique needs of deaf and hard-of-hearing learners including language and cognitive development, social growth and academic development. Comparison of service delivery models and interventions, including cochlear implants, for students ages birth through 22 will be made.

#### **DHH 634 Assess & Inst D/HH Birth-5yrs**

Candidates will develop the collaboration skills to enable participation in a multi-disciplinary educational team that provides appropriate assessment in the language, listening, cognitive and social skills of deaf and hard of hearing students and develops an appropriate intervention and education program for students ages birth through 5.

#### **DHH 636 Language Develop Methods D/HH**

Candidates will develop the knowledge and ability to apply a wide variety of instructional techniques to develop age-appropriate language and cognitive skills for students who are deaf or hard of hearing. Candidates are expected to demonstrate skill in both visual (signed) and/or auditory (spoken) communication in the implementation of these techniques.

#### **DHH 638 Literacy Develop D/HH**

Candidates will learn a wide variety of strategies to develop the literacy skills of deaf and hard of hearing learners, including skills in reading and writing English. Candidates will develop and implement lesson plans that reflect grade level State Standards for all areas of Language Arts.

#### **DHH 640 Inst D/HH with Special Needs**

Candidates will describe the characteristics of deaf and hard of hearing learners who exhibit additional disabilities such as cognitive impairment, specific learning disability, visual impairment, emotional disturbance, autism spectrum disorder and those with significant behavior disorders. Candidates will develop lesson plans and instructional strategies that include specialized adaptations and modifications to meet the needs of these learners.

#### **DHH 682A Student Teaching**

*Corequisites:* SPD 688A

Twelve weeks or 60 days of full-day supervised teaching with Deaf and Hard of Hearing students. Candidates are supervised by a teacher with a clear Deaf and Hard of Hearing credential and by University Supervisor with at least three years of pre-K to 12 classroom experience. The course is graded satisfactory (S) or unsatisfactory (U).

#### **DHH 682B Student Teaching**

*Corequisites:* SPD 688B

Twelve weeks or 60 days of full-day supervised teaching with Deaf and Hard of Hearing students. Candidates are supervised by a teacher with a clear Deaf and Hard of Hearing credential and by Univer-

sity Supervisor with at least three years of pre-K to 12 classroom experience. The course is graded satisfactory (S) or unsatisfactory (U).

#### **DHH 688A Clinical Practice Seminar (2.25 quarter units)**

*Corequisites:* DHH 682A, or DHH 682B, or DHH 692  
Focus on three CTC Teaching Domains. Create or revise artifacts reflecting knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

#### **DHH 688B Clinical Practice Seminar (2.25 quarter units)**

*Corequisites:* DHH 682B, or DHH 692  
Focus on three CTC Teaching Domains. Create or revise artifacts reflecting knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

#### **DHH 692A Internship DHH**

*Prerequisites:* SPD 608, SPD 614, TED 621B  
The National University Special Education Internship for Deaf and Hard of Hearing population is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in education of the deaf classrooms/programs, earn full time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 3 months while completing required coursework for authorization to teach students who are Deaf or Hard of Hearing. Does not grant graduate units towards graduate degree. The course is graded satisfactory (S) or unsatisfactory (U).

#### **DHH 692B Internship DHH**

*Prerequisites:* DHH 692A  
The National University Special Education Internship for Deaf and Hard of Hearing population is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in education of the deaf classrooms/programs, earn full time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 6 months while completing required coursework for authorization to teach students who are Deaf or Hard of Hearing. Does not grant graduate units towards graduate degree. The course is graded satisfactory (S) or unsatisfactory (U).

### **DNP - Doctoral Nursing Practice**

#### **DNP 801 Doctor of Nurs. Practice Role**

*Prerequisites:* Doctoral standing  
Introduction to the practice doctorate role and contributions graduates are prepared to make in nursing practice and education. Students explore the history, social context, and philosophical basis of the role. Differentiation between Masters, DNP, and PhD roles and competencies are explored. Students define goals for DNP program and future roles.

#### **DNP 803 Decision Support Systems**

*Prerequisites:* DNP 801  
Informatics tools and knowledge systems, including data analysis, information retrieval systems, expert systems, artificial intelligence explored. Human decision-making strategies and the need for decision support presented. Design of expert systems described. Health applications of artificial intelligence discussed.

#### **DNP 805 EBP: Theory & Inquiry**

*Prerequisites:* DNP 801, DNP 803  
Provides an advanced foundation for the use of translational research and evidence-based clinical practice. Critical analysis, synthesis, and application of translational research models will be considered. Areas of emphasis include: (a) bridging the gap between scientific research and clinical practice, (b) evaluation of research findings for application in evidence based practice, (c) analytic approaches to translational research (including interdisciplinary models), and (d) examining the impact of translational research findings into practice.

#### **DNP 807A QI & Project Management**

*Prerequisites:* DNP 801, DNP 803, DNP 805  
*Corequisites:* DNP 807B  
Analysis of conceptual frameworks, models of Quality Improvement (QI) and Project Management (PM) prepare DNP students to direct healthcare projects. Application of QI and PM studies to change practice and policy emphasized. Current PM systems used in clinical management, administration, change management and policy covered.

#### **DNP 807B Quality Improvement Practicum (1.5 quarter units)**

*Prerequisites:* DNP 801, DNP 803, DNP 805  
*Corequisites:* DNP 807A  
Introduction to practicum sites. With expert mentors, students negotiate practice goals, begin practice. In collaboration with mentors, students utilize EBP, QI knowledge to identify healthcare quality/safety question, begin research analysis, project development for DNP Capstone Project. This course is 100 practicum hours in length. Grading is by S or U only.

#### **DNP 809 Advanced Data Analytics I**

*Prerequisites:* DNP 801, DNP 803, DNP 805  
Prepares the student to critically evaluate research findings and determine their applicability to advancement of nursing practice. Statistics used in healthcare research are explained from the perspective of research factors required by the statistic, research questions the statistic can answer, and interpretation of results.

#### **DNP 811 Advanced Data Analytics II**

*Prerequisites:* DNP 801, DNP 803, DNP 805, DNP 809  
Assists students to critically analyze research methodology and findings to determine if results sustain evidence-based guidelines. Advanced statistics used in healthcare research are discussed from the perspective of the research factors required by the statistic, research questions the statistic can answer, and interpretation of results.

#### **DNP 813 Healthcare Financial Mgmt**

*Prerequisites:* DNP 801, DNP 803, DNP 805  
U.S. healthcare financial system impact on care access, costs, outcomes analyzed. Healthcare bud-

geting, fiscal reporting and evaluation, financial forecasting, risk and market analysis, and strategic planning covered.

#### **DNP 815 Population Health**

*Prerequisites:* DNP 801, DNP 803, DNP 805  
Integrates principles of epidemiology, biostatistics, health risk assessment, behavior and disease surveillance in: a) designing, delivering, evaluating disease prevention, health promotion programs; b) minimizing health impacts of natural, manmade disasters; c) identifying, addressing emerging communicable, non-communicable disease epidemics, pandemics. Population health impacts of migration, world travel, overpopulation, environmental degradation, bioterrorism, violence, war discussed. Strategies for collaboration in design, implementation of healthcare, emergency preparedness and policy systems covered.

#### **DNP 817 Policy Analysis, Advocacy**

*Prerequisites:* DNP 801, DNP 803, DNP 805  
Uses a socio-political perspective to explore health policy development, implementation and evaluation at national, state, and local levels. Students will be prepared to discuss the complexities of health policy development, analysis, implementation, and advocacy, including challenges and barriers. The DNP contribution to health policy and the use of evidence to inform policy will be discussed.

#### **DNP 840A Informatics Practicum I (3 quarter units)**

*Prerequisites:* DNP 801, DNP 803, DNP 805, DNP 807A, DNP 807B  
*Corequisites:* Can be taken concurrently with all courses\* except the prerequisites or DNP 870.  
Students apply knowledge from DNP Core courses to improve healthcare quality and safety through evidence-based changes in nursing Informatics Practice. Students integrate informatics and DNP Core competencies to advance patient care quality through improved data, information, and knowledge designed to support nursing judgment and decision-making. This course is 200 practicum hours in length. Grading is by S or U only.

#### **DNP 840B Informatics Practicum II**

*Prerequisites:* DNP 840A  
*Corequisites:* May be taken concurrently with DNP 813, 815 or 817\*.  
Continued practice experience with expert Informatics mentor. Continue to develop Informatics Specialist competencies, and complete learning contract goals. This course is 200 hours in length. Grading is by S or U only. This course is eligible for an IP grade.

#### **DNP 842A Administration Practicum I (3 quarter units)**

*Prerequisites:* DNP 801, DNP 803, DNP 805, DNP 807A, DNP 807B  
*Corequisites:* Can be taken concurrently with all courses\* except the prerequisites or DNP 870.  
Students in the DNP Administration precepted practicum apply knowledge from DNP Core courses to improve quality of patient care through evidence-based changes in healthcare Administration Practice. Students integrate prior practice and DNP Core knowledge and competencies in healthcare facilities on projects that use best evidence to advance the quality of administrative practice and de-

cision-making. This course is 200 hours in length. Grading is by S or U only.

### **DNP 842B Administration Practicum II**

*Prerequisites:* DNP 842A

*Corequisites:* May be taken concurrently with DNP 813, 815 or 817\*.

Continued practice experience with expert Administration mentor. Continue to develop Administration competencies, and complete learning contract goals. This course is 200 hours in length. Grading is by S or U only. This course is eligible for an IP grade.

### **DNP 870 Capstone**

*Prerequisites:* All required theory and practica courses.

Students demonstrate integration of advanced practice competencies through completion of a capstone project conducted in the student's practice focus area. The project requires the student to identify an opportunity for practice improvement, and to plan, implement, and evaluate a new practice, protocol, program, or system improvement in a clinical setting. This course is 100 hours in length. Grading is by S or U only. The course is eligible for an IP grade.

## **ECE - Early Childhood Education**

### **ECE 201 The Growing Child: Zero to 8**

Overview of major and theoretical frameworks and perspectives. Focus on gender and cultural impact on biological, physical, cognitive, social, moral, emotional and behavioral aspects of development for effective educational practices.

### **ECE 210 Child, Family, School and Comm**

Focus on the influence of family, school and community on development and education of the young child. Special emphasis on the role of nutrition, positive home and school environments and community resources.

### **ECE 211 Diversity: Development & Ed.**

Focus on cultural pluralism and its impact on development and education in regards to teaching and learning strategies. Emphasis on self-examination, reflection, and integration of current processes involved in interactions and relationships in society.

### **ECE 212 Principles and Practices**

*Recommended Preparation:* ILR 260

Examines the underlying theoretical principles of developmentally appropriate practices as they apply to Early Childhood Education programs/environments. Emphasis is on the key role of adult-child interactions and teaching strategies that support the development of all children. A review of the history of ECE and how, over time, it has evolved to include professional practices, advocacy, ethics and professional identity is included.

### **ECE 213 Basics of Curriculum**

Introduction to the knowledge and skills related to appropriate curriculum and environments for young children. Emphasis is on the role of the teacher in supporting development and fostering learning through use of effective strategies across content areas. Content areas include: Literacy, Social/Emotional development, Sensory learning, Math and Science.

### **ECE 214 Oral Language & Read Aloud**

*Recommended Preparation:* COM 103

Focus is on how to recognize and implement appropriate strategies that support oral language and early literacy development of young children. Emphasis is on improving knowledge of language development and acquisition, early literacy including read alouds, and involvement of families in the process. Field experiences required.

### **ECE 215 Basics of Assessment**

Focus on appropriate use of observation and assessment instruments to document development and learning in all domains in order to plan appropriate child-centered curriculum and effective instructional strategies for typical and atypical children.

### **ECE 216 Intro to Special Education**

An introduction to special education with an overview of suggestions to assist beginning early education teachers prepare to recognize and handle special needs of children and their families.

### **ECE 217 Supervised Field Experience**

*Prerequisites:* Candidates must have successfully completed all core courses with an average grade of "C" (2.0) or better and approval from the Faculty Lead. Current TB and finger-print clearance are required.

Successful Candidates have an opportunity of applying theory and practice into a child-centered curriculum which shows competence in selection of teaching strategies designed to create diverse developmentally appropriate, safe, healthy and learning environment in a preschool setting under supervision.

### **ECE 301 Early Childhood Teaching**

Focus on teaching as a profession. Emphasis on California Early Childhood Preliminary Multiple Subject Teaching Credential requirements, California standards of the teaching profession (CSTP), teacher expectations (TPE) and performance (TPA), and procedure for creating an ePortfolio. This two (2) month course must be taken prior to enrolling in any ECE/TED program course.

### **ECE 312 Infant and Toddler Care**

Focus is on infants and toddlers in group care settings. Emphasis is on close, caring relationships in the cultural context of the child and family, understanding developmental milestones, the identification of special needs, and current issues of health, safety and nutrition.

### **ECE 330 Early Cognition**

*Prerequisites:* ECE 201, ECE 210, HED 220, and ECE 211

Inquiry into the nature and tasks of early cognition including social, cultural and biological foundations. Attention paid to current research implications for learning theory, individual differences and classroom instruction.

### **ECE 410 Early Language and Literacy**

*Prerequisites:* ECE 330

Focus on acquisition and developmental aspects of language related to emergent literacy skills. Emphasis on current research regarding language experiences that contributes to literacy acquisitions, including assessment and instruction.

### **ECE 415 Designing Emergent Curriculum**

*Prerequisites:* ECE 330

Focus on essential elements of curriculum design including writing of goals, learning outcomes, developmentally appropriate activities, assessment measures and integration of the arts. Alignment with national and state standards stressed.

### **ECE 420 Nature, Numbers and Technology**

*Prerequisites:* ECE 330

Focus on identification, design and delivery of developmentally age appropriate experiences that encourage active math, science and technology inquiry. Inquiry related to emerging notions of mathematical and scientific processes is basis for activities along with the inclusion of technology as a strategy.

### **ECE 430 Play as Pedagogy**

*Prerequisites:* ECE 330

Focus on play as the primary learning modality for young children. Theoretical basis for play as a means of teaching, role in learning and as a means of assessment emphasized.

### **ECE 435 Music, Movement, Drama, Dance**

Focus on enriching and enhancing young children's learning through the creative arts. Emphasis on integrating creative experiences within core subjects to create developmentally appropriate experiences.

### **ECE 440 Observing, Assessing & Plannin**

*Prerequisites:* ECE 330, and ECE 415

Focus on acquiring and enhancing skills in the selection, administration, scoring, interpretation, reporting of screening assessment instruments. Emphasis on designing and implementing curricula based on assessment results.

### **ECE 443 Children with Special Needs**

*Prerequisites:* ECE 330

Exploration of variations in child development and identification of specific disabilities in young children. Inclusive early childhood programs, specific strategies for adaptation and accommodation of the core curriculum to meet the social, emotional, and academic needs of children who are at-risk or have special needs are examined.

### **ECE 445 Strategies: Guiding Behaviors**

*Prerequisites:* ECE 330, ECE 415, and ECE 430

Focus on observation, identification, description, and assessment of challenging behaviors. Designing and implementing effective teaching and learning strategies to successfully guide these behaviors within a social and cultural context.

### **ECE 446 Literature and Young Children**

A survey of literature for young children in preschool through first grade. Emphasis on effective read aloud and story telling strategies for the developing language and listening skills, for developing concepts of print and vocabulary and for fostering a love of reading and early literacy skills.

### **ECE 450 Academic Seminar/Field Experie**

*Prerequisites:* Satisfactory completion of all core courses with an average grade of "C" (2.0) or better in the core.

Participation in a collaborative field/academic experi-

ence to reflect and actively practice material covered in core classes. Field experience must be in approved setting and arranged by student. Grading is S or U only.

#### **ECE 451 Observation and Assessment**

*Prerequisites: ECE 312*

Focus on authentic informal and formal assessments for infants and toddlers, and the use of case study to develop observation skills leading to the promotion of responsive environments.

#### **ECE 452 Partnering With Families**

*Prerequisites: ECE 312*

Focus on acquiring knowledge through current research and developmental theories to plan responsive environments for infants and toddlers that strengthen family-school partnerships. Will explore through case studies optimum communication techniques for building and maintaining positive relationships with family members.

#### **ECE 453 Developing Appropriate Curricula**

*Prerequisites: ECE 312*

Focus on infant and toddler development and the role of the adult in supporting optimal outcomes through routines, curriculum planning, and implementation. Candidates will examine the primary components of quality care and education.

#### **ECE 454 Creative Aesthetics**

*Prerequisites: ECE 312*

Focus on understanding the value of providing opportunities for infants and toddlers to engage in sensory art exploration as well as experimentation with culturally diverse music and dance. Emphasis is on creating experiences indoors and outdoors focusing on the aesthetic process of experiencing various rhythms, tones, textures and color.

#### **ECE 460 Program Administration**

Focus on administration of early childhood programs. Emphasis on working with boards, staff, parents and volunteers. Highlights include hiring, assessing, and supervising staff and volunteers. Attention to designing staff and volunteer professional development programs.

#### **ECE 461 Leadership and Supervision**

Emphasis on theories, principles and practical methods of leadership and supervision applicable to early childhood settings. Demonstrations of instructional, operational and organizational leadership. Focus on components of human resources related to staff recruitment, development and evaluation.

#### **ECE 462 Financial Mgmt & Resources**

Focus on financial policies and management of resources in early education settings. Emphasis on accounting fundamentals of preparing, recording and monitoring funds.

#### **ECE 464 Ethical and Legal Issues**

*Prerequisites: HED 220*

Focus on local, state and federal statutes and regulations in early education settings. Emphasis on ethical codes of conduct, including analysis of legal and ethical dilemmas and practice.

#### **ECE 465 Crisis Trauma and Abuse**

Emphasis on definition, factors, theories, and characteristics associated with abuse and family violence. Topics include examination and analysis of crisis, trauma and disaster preparedness, community response, legal rights, prevention and intervention strategies.

#### **ECE 466 Planning Physical Environments**

Guidelines on planning, designing and organizing physical learning environments for young children. Understanding, comparing, integrating theoretical frameworks on indoor and outdoor environments.

#### **ECE 490 Guided Study** (variable units)

An individual study course under the direction of a specified instructor. Requires prior approval of ECE lead faculty.

#### **ECE 650 The Early Childhood Teacher**

Examines the critical role of the early childhood teacher. Opportunities to reflect upon beliefs, analyze current role, recognize strengths and develop a plan to move forward that strengthens and supports their professional growth. Addresses NAEYC/NCATE Advanced Standard 5: Growing as a professional.

#### **ECE 651 Current Issues in ECE**

Focuses on current issues on early childhood. Particular attention paid to the transition to Kindergarten. Multiple perspectives considered. Addresses NAEYC/NCATE Advanced Standard 1: Promoting Child Development and Learning, Standard 2: Building Family and Community Relationships, Standard 4: Teaching and Learning and Standard 5: Growing as a professional.

#### **ECE 652 Cognition and the Young Child**

Deepen understanding of the capabilities of young children thinking skills. Focus is on current research. Opportunities to examine learning research in light of current educational reform efforts and develop practical application. Addresses NCATE/NAEYC Advanced Standard 1: Promoting child development and learning and Standard 5: Growing as a professional.

#### **ECE 653 Best ECE Teaching Practices**

Focus on research based effective teaching strategies for young children. Examines opportunities for integrating curriculum across content areas. Close attention paid to balancing standards and Developmentally Appropriate Practice (DAP). Addresses NCATE/NAEYC Advanced Standard 4, Teaching and Learning, Sub standard s 4B, 4c, and 4d.

### **ECO - Economics**

#### **ECO 100 Intro to Economics**

Overview of basic macroeconomic and micro-economic principles to help students understand how individuals, firms, and government make economic choices. The course discusses the concepts of equilibrium, national income accounting, inflation, unemployment, business cycle, monetary and fiscal policies, the industrial organization, international trade and international finance.

#### **ECO 203 Principles of Microeconomics**

In this course, students will study the price system, market structures, and consumer theory. Topics cov-

ered include supply and demand, price controls, public policy, the theory of the firm, cost and revenue concepts, forms of competition, elasticity, and efficient resource allocation, among others.

#### **ECO 204 Principles of Macroeconomics**

This course provides an examination of aggregate economic activity. It includes a study of aggregate supply and demand, the monetary and banking systems, aggregate economic accounting, inflation, unemployment, the business cycle, macroeconomic policy, and economic progress and stability, among other things.

#### **ECO 301 Intermediate Microeconomics**

*Prerequisites: ECO 203, ECO 204*

Building on the principles of microeconomics, this course covers the market and the equilibrium including the budget constraint, revealed preference and inter-temporal choice; the industrial organization and profit maximization; game theory; welfare economics; information technology and asymmetric information.

#### **ECO 302 Intermediate Macroeconomics**

*Prerequisites: ECO 204*

Building on the principles of macroeconomics, this course prepares students to analyze macroeconomic issues of the current time. Emphasis is placed on the measurement of income, prices and employment; monetary and fiscal policy; financial market; the public sector; international trade and international finance; and the current global issues.

#### **ECO 303 Data Analysis**

*Prerequisites: ECO 203, ECO 204*

This course prepares students for analysis of economic data found in secondary sources such as the World Bank, The International Monetary Fund (IMF), Organization of European Community for Development (OECD), and various U.S. government sources. Emphasis is placed on learning the basic tools of mathematical and statistical analysis with a goal to applying those tools to analyzing data for meaningful conclusion.

#### **ECO 304 Economic Growth**

*Prerequisites: ECO 203, ECO 204*

This course deals with theories and explanations of economic growth from the positive economics point of view. The framework of analysis derives from factor accumulation and productivity including physical and human capital and population, measurement of productivity, role of technology, efficiency, the open economy, distribution of income, and other factors such as culture, geography and natural resources.

#### **ECO 305 Business Economics**

*Prerequisites: ECO 203, ECO 204*

Building on the fundamental principles of macro- and microeconomics, this course addresses issues concerning markets and prices, fiscal and monetary policies, human resource issues, forecasting techniques used by businesses, and business decision making for profit maximization.

#### **ECO 401 Market Process Economics I**

This course provides a basic understanding of market process economics. Students will learn about the nature and importance of economics, capitalism, wealth and its role in human life, natural resources and the

environment, the division of labor and production, the dependence of the division of labor on capitalism, the price system and economic coordination, price controls, socialism, the institutions of private property, economic inequality, economic competition, and monopoly and the freedom of competition.

#### **ECO 402 Market Process Economics II**

This course is a continuation of ECO 401 and is designed to provide students further understanding of market process economics. Students will learn about the concept of productive activity, the productive role of businessmen and capitalists, money and spending, productionism and unemployment, the productivity theory of wages, alternative approaches to aggregate economic accounting, the role of saving in spending, Keynesian economics, and inflation.

#### **ECO 410 Seminar on Capitalism**

*Prerequisites: ECO 203, ECO 204*

This course provides a basic understanding of capitalism and market process economics. Students will learn about the nature and importance of capitalism, wealth and its role in human life, natural resources and the environment, the division of labor and production, the price system and economic coordination and price controls. Additionally, students will also be able to compare and contrast other economic systems.

#### **ECO 415 Labor Economics**

*Prerequisites: ECO 203, and ECO 204*

Students will engage in a detailed study of the labor market. Students will learn about the relation of the labor market to other markets. Students will study the demand for and supply of labor, the causes of unemployment, labor market discrimination, what influences the productivity of labor, the effects of labor unions, and the determinants of wages, among other topics.

#### **ECO 420 International Economics**

*Prerequisites: ECO 203, and ECO 204*

Students will apply what they have learned in previous economics courses to analyze the global economic environment. They will learn and apply the law of comparative advantage to understand how all people can gain from international trade. Trade agreements, such as GATT and NAFTA, will be discussed and analyzed. Students will learn about the currency markets and the different types of monetary systems.

#### **ECO 430 Economics and Philosophy**

Students will learn about the relationship between philosophy and economics. They will study the philosophical foundations of market process economics, as well as other economic ideas. They will learn about the link between ethics and economics, as well as about the important role businesses play in the economy. Students will study topics such as why businessmen should be honest, the nature of antitrust laws, the virtue of integrity, the nature of government and rights, among others.

#### **ECO 447 Money and Banking**

*Prerequisites: ECO 203, and ECO 204*

Students will study the U.S. monetary and financial systems. They will learn about the important role these systems play in facilitating the production of wealth in the economy. This class covers the principles of money; the Federal Reserve System; the determinants of interest rates, bond prices, and stock

prices; the different types of financial institutions; monetary theory; and monetary policy.

#### **ECO 490 Guided Study** (variable units)

This is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

#### **ECO 602 Global Context of Business**

State-of-the-art view of the macroeconomic and political contexts in which domestic and international businesses operate. It includes macroeconomic metrics and analysis of business cycles and policies; global trade and world financial and monetary systems; institutional analysis of government-firm relationships and sustainable development, the environment and social responsibility.

#### **ECO 607 Economics for Managerial Decis**

*Recommended: Prior completion of: BUS 500A*

In this course, students study the price system, market structure, and consumer theory as they apply to managers in a variety of decision-making environments. This course covers the use of mathematical and economic decision-making tools for determining optimal levels of output, resource usage, and capacity planning.

#### **ECO 630 Global Economic Geography**

*Prerequisites: ECO 607*

A survey of the global economy, this course examines how organizations identify and inventory resources in terms of manpower (demographics), industrial organization and development, sources of raw materials, and the current means of connectivity (e.g., language, as well as telecommunication and transportation infrastructures). It includes exposure to various sources of global economic information, such as the "Country and Industry Report," U.S. government reports, online computer information, and various private sources such as banks and credit card bureaus. Students compile reports that focus on country, region, and industry analysis of opportunity and prospects.

#### **ECO 631 Global Trade Policy & Procedur**

*Prerequisites: ECO 607*

An examination of the development and current status of U.S. and foreign trade policies and procedures, this course focuses on GATT, NAFTA, European Integration, and other emerging regional trading blocs. It examines the impact of trade and foreign operations caused by national and regional antitrust laws. It surveys the procedures necessary for government approval of importing and exporting, including the legal options available to facilitate and overcome difficulties and disputes in foreign trade.

#### **ECO 635 Economics for Executive Mgrs**

This course provides the executive with the tools necessary for decision-making in a variety of environments. Topics include elasticity, market structure, marginal analysis, monetary theory, the business cycle, exchange rates, international trade, among others. Emphasis will be on the applications of economic theory to strategic decision-making.

## **EDA - Educational Administration**

#### **EDA 601 Orientation and Advisory** (1.5 quarter units)

Builds a broad understanding of the Educational Administration program and its requirements, facilitates a permanent advisory relationship between faculty and students, and examines the role of the professional administrator and opportunities for advancement in the field. Must be the students first class (may be taken concurrently with another course). Grading is by S or U only.

#### **EDA 607 Induction Seminar**

*Prerequisites: Candidate must possess a valid preliminary administrative services credential.*

Developing and planning an individualized candidate professional induction plan. Identification of professional growth opportunities, including non-University work, and developing a plan for a field-based project aligned with candidate's needs and interests. Introduction to the mentoring process and selection of a mentor. Preparation of a current administrative portfolio. Grading is by S or U only. Course is eligible for an "IP" grade.

#### **EDA 608 Professional Dev. Seminar**

*Prerequisites: EDA 607*

Critical analysis of issues in creating and maintaining a vision of learning; developing and sustaining a teaching and learning culture; providing organizational management; demonstrating sensitivity to school, family, and community diversity; providing ethical leadership, and applying knowledge of the political, social, economic, legal, and cultural aspects of schooling. Grading is by S or U only. Course is eligible for an In Progress (IP) grade.

#### **EDA 609 Assessment Seminar**

*Prerequisites: Possession of a valid preliminary administrative services certificate, and EDA 607, and EDA 608*

Capstone course in the Professional Clear Administrative Services Credential program. Engages candidates in assessing progress in completing activities proposed in Induction Plan; evaluating completed professional development activities reviewing, refining, and completing plan for field-based project; and assessing and submitting administrative portfolio and its artifacts. Grading is by S or U only. Course is eligible for an "IP" grade.

#### **EDA 614 Introduction to Leadership**

The theories, principles, and concepts related to leadership, administration, and management applied to education. Application and implications of theory for the instructional leader and education-related manager.

#### **EDA 617 Philosophy and Leadership**

Foundational course for the Master's program. Connecting Plato, Aristotle, John Dewey and other philosophers to schools today as well as relating leadership scholars such as James MacGregor Burns, Peter Senge, and Thomas Sergiovanni to the continuum of thought in developing educational leadership studies.

#### **EDA 618 School Law and Policy**

Introductory course in educational law and ethics. Examination of education law, codes, case law, and

regulations and their school level applications. Focus on areas of school law likely to be used by beginning school administrators.

#### **EDA 619 School Resource Management**

Introduction to public school finance policies and practices, emphasizing site level finance. Exploration of federal, state, and local revenue sources, district and school budgeting, and financial management procedures. Introduction to public school budgeting and accounting procedures. Direction by practicing school administrators when investigating issues in public school finance.

#### **EDA 620B Degree Field Experience**

*Prerequisites: Prerequisite Students must have completed at least 3 of the following courses: EDA 623, EDA 624, EDA 614, EDA 626, EDA 618, EDA 619*  
Supervised application of theoretical concepts in practical settings. Candidates complete a portfolio of administrative activities demonstrating competency in areas identified in the California Professional Standards for Educational Leaders as sanctioned by the Commission on Teacher Credentialing for awarding of the preliminary administrative services credential. Stresses day-to-day administrative functions as well as policy analysis and implementation. This course may be taken concurrently with another class or scheduled in an open month. This course takes 3-12 months to complete. It must be completed within 12 months of being scheduled. This course must be completed in residence. All students pursuing a Preliminary Administrative Services Credential, unless approved for the Intern program, must complete EDA 620B. Grading is by S or U only. Course is eligible for an "IP" grade.

#### **EDA 620C Degree Field Experience**

*Prerequisites: Students must have completed at least 3 of the following courses: EDA 623, and/or EDA 624, and/or EDA 614, and/or EDA 626, and/or EDA 618, and/or EDA 619*  
Supervised application of theoretical concepts in practical settings. Candidates complete a portfolio of administrative activities demonstrating competency in those areas of school administration, educational or non-profit administration and leadership they intend to pursue. Course does not meet the requirements for the California Preliminary Administrative Services Credential. Candidates for the credential must take EDA 620B. Grading is by S or U only. Course is eligible for an "IP" grade.

#### **EDA 620I Intern Field Experience**

*Prerequisites: May only be taken by students approved for the internship program.*  
Internship practicum for Administrative Services Credential program. Practicum/field work of day-to-day administrative functions, policy analysis and implementation, collaboratively supervised by National University and the candidate's school district of employment for candidates holding an administrative position while completing course work. Grading is by S or U only. Course is eligible for an "IP" grade. Interns must remain in the course for 1 year.

#### **EDA 623 Instructional Leadership**

Theoretical and practical exploration of curriculum, instruction and accountability. The course will explore issues that have the potential to influence the planning, implementation and evaluation of curriculum and learning.

#### **EDA 624 Supervision of Instruction**

This course provides a theoretical and practical framework for supervising and evaluating instruction while modeling a personal code of ethics and developing professional leadership capacity. A variety of theoretical perspectives and skills for engaging in the practice of supervision of instruction, curriculum assessment, program quality, and standards-based instruction are presented. Emphasis is on instructional leadership that models personal and professional ethics, integrity, justice, and fairness, while expecting the same behaviors from others. Candidates focus on demonstrating skills in decision-making, problem solving, change management, planning, conflict management, and evaluation.

#### **EDA 625 Technology and Data Analysis**

Administrative perspective on using instructional technology. Methods of using technology to improve administrative functions, including generating and analyzing instructional data, using data to improve instruction, and analyzing legal and ethical issues surrounding educational technology.

#### **EDA 626 Community & Diversity**

Analysis of social and political forces impacting human resources leadership and school-community relations. Internal and external components of operation of personnel and school management functions. Needs of diverse communities cultural Pluralism, personnel issues, and personnel and community relationships related to state and federal laws and local policies. Collective bargaining's impact on human resources and community relationships.

#### **EDA 628 Summative Leadership Seminar**

Organizational development, mobilization of human and fiscal resources, restructuring, building a school environment that embraces diversity. Administrative tasks in schools and school districts. Schools as political systems focusing on the improvement of instruction. Knowledge drawn from other preliminary administrative services credential courses and from direct, practical experience.

#### **EDA 631 Shared Vision of Learning**

Facilitating the development, articulation, implementation, and stewardship of a vision of teaching and learning supported by the school community. For candidates in Santa Clara County Office/NU joint program only.

#### **EDA 632 Teaching and Learning Culture**

Advocating, nurturing, and sustaining a school culture supporting instruction, student learning, and staff professional development using state standards and accepted accountability systems. For candidates in Santa Clara County Office/NU joint program only.

#### **EDA 633 Mgmt for Teaching/Learn**

Managing operations and resources to ensure a safe, efficient, and effective learning environment that enhances student achievement. For candidates in Santa Clara County Office/NU joint program only.

#### **EDA 634 Diverse Families/Communities**

Examining and evaluating attitudes toward race, culture, ethnicity, sexual orientation, and individuals with disabilities. Learning how to work effectively with diverse families, caregivers, and community

members. For candidates in Santa Clara County Office/NU joint program only.

#### **EDA 635 Personal Ethics for Leadership**

Practicing and modeling a personal code of ethics, including protecting the rights and confidentiality of students, staff, families in a leadership capacity that includes shared decision-making, problem solving, and conflict management. For candidates in Santa Clara County Office/NU joint program only.

#### **EDA 636 Political and Social Influence**

Examining political, societal, economic, legal, and cultural influences on schools. Providing team leadership for effective communication with key school-community decision-makers. For candidates in Santa Clara County Office/NU joint program only.

#### **EDA 637 Action Research**

*Prerequisites: ILD 625*

Provides the knowledge, skills, and protocols to generate and evaluate research relevant to various areas of professional education. Students produce a major action research and writing project focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Class size is 10. Grading is H, S, or U nly. Course is eligible for In Progress (IP) grade.

#### **EDA 640 Introduction to H.E. Admin.**

Overview of the basic aspects of higher education including issues, policies, operations, financial management, strategic planning, enrollment, student services, and regional accreditation. A brief examination of the history and functions of colleges and universities in the United States and the world as well as an introduction to educational philosophy, curriculum and instruction provide the candidate a foundation of understanding of the role of the academe in today's society.

#### **EDA 641 Leading and Managing Change**

*Prerequisites: EDA 640*

This course examines theory and practice regarding resistance to and acceptance of change initiatives, including the impact on organizational culture. Learn to initiate and implement change in organizations through problem-solving experiences and exercises.

#### **EDA 642 Policy & Accountability**

*Prerequisites: EDA 640*

This course familiarizes students with assessment, policy-making, and accountability in higher education. Practical and theoretical approaches are explored. Power influences will be identified and examine, both inside and outside institutions including university hierarchy, state, and federal entities. Student learning and assessment's impact on the present and future of higher education will be explored, including the roles of state and regional accreditors.

#### **EDA 643 Community Development in HE**

*Prerequisites: EDA 640*

This course is an examination of the literature on theories related to interaction with the cultures found within a higher education community and the com-



munity in which the institution sits. Strategies for effective communication with various entities within the organization such as students, faculty, staff, and administration are gained, as well as engaging with the external community—local, state, and regional.

#### **EDA 644 Higher Education Law/Politics**

*Prerequisites: EDA 640*

This course examines the legal aspects of higher education, sources of law and authority presented; impact on, interaction with, and implications of the administration of higher education are discussed. The course provides an overview of the legal issues that arise in public and private college and universities and the policy implications of those issues. Pertinent federal and California statutes and case law will inform students of the legal rights and responsibilities of higher education students, faculty, and the administration.

#### **EDA 645 Managing Finances & Operations**

*Prerequisites: EDA 640*

This course provides a survey of how higher educational institutions are funded: private, non-profit/private, and public. Trends in higher education finance will be examined. Students will engage in case studies of institutions in financial crises and examine solutions to these crises.

#### **EDA 646 Strategic Planning & Analysis**

*Prerequisites: EDA 640*

This course will examine the processes of institution-wide planning that examines internal and external variables. An analysis of all relevant data provides a crucial element in these processes. Data include those pertaining to student learning and learning assessment.

#### **EDA 647 Curriculum & Instruction in HE**

*Prerequisites: EDA 640*

This course examines trends in curriculum and “andragogy” as they apply to higher education programs. This examination includes an in-depth analysis of modes of delivery such as online, onsite, and hybrid methods.

#### **EDA 648 Student Svcs & Enrollment Mgt**

Overview of Student Services and Enrollment Management in Higher Education institutions. Practical advice and theoretical frameworks to inform planning and problem solving are explored. Professional practice is summarized in the areas of students, human resources, interpersonal dynamics, skills and competencies, and services offered.

#### **EDA 650 Ethics and School Leadership**

Introduces connection between leadership and ethics. Study of traditional ethical frameworks as presented by early Greek writers, past and present philosophers and theologians, non-believers, and leadership scholars. Consideration of long-range implications of leadership activities through case study analysis.

#### **EDA 651 Ethics & Philosophy of Leaders**

This course examines ethical school leadership through the lens of educational and leadership philosophies. Candidates will create a working philosophy that will guide their practice.

#### **EDA 663 Community Leadership**

*Prerequisites: ISL 661, LED 604, ISL 662, EDA 623, EDA 624, EDA 618, ISL 660, LED 605, EDA 680*

Explores community leadership, outreach and partnerships through the lens of diversity and pluralism (of students, school personnel, the community, and society). Cultural competence is essential in working with diversity in present-day school environments. The course examines nonprofit models and community organizing that succeeds in supporting and enhancing schools and their surrounding communities.

#### **EDA 680 Charter School Leadership**

Leadership skills necessary to establish and sustain a charter school; understanding the role the community in the charter school environment, the application process, and preparing to open and operate a charter school. Role that a Charter School leader plays in the daily operation and his/her relationship to the educational community. How to analyze and present data, and demonstrate strategies for developing and planning staff and community development.

#### **EDA 684 Resource Mgt in Charter School**

Overview of resource management in a charter school. Resources that will be discussed are time, personnel, facilities, and financial. How to plan for the best use of the resources available. Content learned in EDA 618, 619, and 626 will be expanded in this course and applied to charter schools.

#### **EDA 690 Guided Study** (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

#### **EDA 694 Thesis**

*Prerequisites: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course.*

This course is a supervised experience culminating in the completion of a thesis. Focuses on an educational administration research topic. Employs more advanced research methodologies than EDA 637 (Action Research) and is recommended for those considering future doctoral work. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of “IP” will be posted then the maximum length of time is 10 additional months. Grading is by H, S, or U only.

#### **EDA 695 Educational Project**

An opportunity for students to gain practical experience in designing, implementing and evaluating programs in an area of interest pertinent to their professional development as school administrators.

### **EDT - Educational and Instructional Technology**

#### **EDT 600A Technology Foundations**

Exploration of four theoretical constructs: learning theory, project design and management, assessment and evaluation, and the integration and application

of digital tools. As a foundational course for EDT, students conduct scholarly research and develop technical skills while constructing and contributing in an online learning community.

#### **EDT 601 Instructional Design**

*Prerequisites: EDT 600A*

Overview and application of the instructional design (ID) process. Topics include learning theories and how they relate to ID, design of needs assessment, analysis of subject matter content, development of effective learning objectives, design of instructional strategies, online collaboration, integration of online delivery systems, and assessment and evaluation strategies.

#### **EDT 603 Advanced Instructional Design**

*Prerequisites: EDT 601*

Adds practical understanding to the knowledge gained in EDT601 by having students design a prototype for a web-based training course. Focuses on working with subject matter experts throughout the ID process, analyzing an education/training problem, developing effective instructional materials, and implementing a web-based instructional solution and evaluating its effectiveness.

#### **EDT 605 Education Theory & Technology**

This course provides a comprehensive view of curricular issues facing teachers and instructors as the role of technology stimulates change in teaching methodology within the classroom instructional setting. Topics focus on cognition and learning and using technology to support constructivist learning, building technology-supported learning communities, student-directed research projects, and using collaborative communication tools both among students and between students and their mentors.

#### **EDT 607 Media Based Learning Objects**

*Prerequisites: EDT 600A, EDT 601, and EDT 605*

Learners experience exploration and creation of media-based learning objects for onsite and online courses. Pedagogical foundations in digital media authoring tools invite learners to research, plan, create, and evaluate reusable learning objects in classroom curriculum. Special focus is given to creating shared content libraries and rich media for educational products.

#### **EDT 608 Technology in the Classroom**

Comprehensive overview of technology use in an educational environment. Includes hands-on practice of word processing, presentations, spreadsheet, and database management. Topics include: introduction to Internet, integrating technology into teaching and learning, technology management, and strategies for integration of technology into the curriculum. Complies with the requirements for a California Teaching Credential.

#### **EDT 609 Developing Online Courseware**

*Prerequisites: EDT 600A, EDT 601, EDT 605, and EDT 607*

Learners explore and employ a wide range of online technologies to design and deliver course content for distance education. Working directly with learner management systems, learners map the path from learning and instructional theory, instructional design, and technological implementation to solid curriculum development, content creation, and engaging course facilitation.

### **EDT 610 Teaching Online**

This comprehensive course covers principles and strategies for conducting online lessons in a variety of online teaching environments including hybrid courses, with a primary focus on how teaching strategies have evolved in order to fit the new medium of online learning. Students survey theories and applications of online learning and teaching. Special focus is given on the use of the Internet for implementing distance education systems for adult learners. The course covers hands-on tools such as web page design authoring tools and videoconferencing technology. Career paths in the arena of online teaching will also be investigated.

### **EDT 611 Current Training Issues**

*Prerequisites: Completion of all core requirements.*

A topical seminar exploring the most current issues in instructional technology design and training. Topics include new developments in web-based authoring tools, international standards or emerging training/educational approaches based on enhanced information technology, recent research in the influence of technology on learning, cognitive research on learning and delivery methods.

### **EDT 612 Meaningful Learning w/ Tech.**

Focus on integrating technology and constructing meaningful learning in P-16 classrooms and the workplace. Students apply traditional learning theories to technology-based methods and techniques, use technology as a communication tool, and design lesson-based web projects. Contemporary issues involving the Internet, research skills, and information literacy skills will also be addressed. Students must have a familiarity with Word Processing, Spreadsheet, Desktop Publishing, and Internet Search skill.

### **EDT 613 Simulations & Virtual Reality**

*Recommended: Prior completion of: EDT 600A and EDT 601 and EDT 605 and EDT 607 and EDT 609 and EDT 631*

Simulations & Virtual Reality explores the role of multi-user virtual environments and simulations (MUVES) in education. Using Second Life, students will identify and use the pedagogical methods, virtual tools and content resources for creating and teaching in a virtual reality.

### **EDT 615 Performance Technology**

*Prerequisites: EDT 611 and completion of all core requirements.*

Human Performance Technology takes instructional technologies and incorporates a range of interventions drawn from disciplines: behavioral psychology, instructional systems design, organizational development, and human resources management. HPT stresses a rigorous interdisciplinary analysis of performance levels, identifies causes for the performance gap, and offers a range of interventions to improve performance.

### **EDT 616 Video Games as Learning Tools**

*Prerequisites: EDT 611 and completion of all core requirements*

Introduces students to game pedagogy and to mainstream, entertainment-based games to enhance learning. The overall goal is to increase games literacy and through hands-on exploration, demonstrate how video games can be effective learning tools. Students

apply this knowledge to integrate a video game into training or into standards-based K-12 curriculum.

### **EDT 623 Web-based Instruction**

*Prerequisites: EDT 615 and completion of all core requirements.*

An overview of key concepts and principles that drive the design of effective web-based instruction, including evaluation, instructional approaches, learning sequences, interactive learning, assessment, collaboration, learner motivation, technical requirements, and supplemental learning options. Hands-on experience with design/editing systems including HTML and DHTML utilizing Dreamweaver.

### **EDT 631 Media and Instruction**

*Prerequisites: EDT 600A*

Comprehensive overview of visual learning techniques, skills, methods, and theories to support and to enhance learning. Application of various digital media including video, audio, and graphics for communicating and for creating digital assets in an educational or in a training context.

### **EDT 632 Technology and Leadership**

*Prerequisites: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631 and completion of all core requirements.*

Information technology issues, networking, and the convergence of media (telecommunications, voice, video, and data) will be contextualized through the lens of educational leadership. Future technology leaders will address current issues such as network security, digital ethics, budgets, and the total cost of ownership as it pertains to hardware and software.

### **EDT 633 Assessment & Accountability**

*Prerequisites: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631 and completion of all core requirements.*

Data management in a digital environment is dependent upon technology systems and infrastructure. This course presents a systems approach to understanding issues with the delivery and management of data focusing on accountability, evaluation, and assessment. Summative and formative assessment strategies and techniques will be explored.

### **EDT 655 Issues & Trends in Ed. Tech**

A survey of a wide range of state-of-the-art issues and trends that have impacted the field of educational technology at the local, state, national and international level. Also addresses the basic principles of information literacy skills and the ethical use of the Internet.

### **EDT 660 Multimedia & Interactive Tech.**

An overview of the use of multimedia and interactive technologies in the educational environment, focusing on design and production of multimedia products. Students will develop media literacy via exposure to web-based conferencing, art programs, PowerPoint, Dreamweaver, image scanning and editing, as well as video and sound digitization.

### **EDT 671 Curriculum for Online Learning**

A comprehensive course on how to design curriculum that will be implemented in an online teaching environment. Students use an online course management and authoring system to design a course for use in K-16 or

for corporate, government, or military education.

### **EDT 693 Instructional Eval. & Devl.**

*Prerequisites: EDT 600A, EDT 601, EDT 605, and EDT 607, EDT 609, EDT 631, and All 4 of the required elective courses*

An exploration and application of alternative theories and strategies for evaluating the effectiveness of instructional programs. Applies usability framework, instruments, approaches to student outcomes and assessment, and continuous quality improvement strategies as they apply to the design and improvement of instructional systems. Capstone prospectus developed. Course is eligible for an "IP" grade.

### **EDT 695 Capstone Project**

*Prerequisites: EDT 693 and All core and elective classes.*

EDT 695 is the final class in the MS in Educational and Instructional Technology program. Under the supervision of a faculty member, students complete a Capstone Project and accompanying report. This course is two months long. Students meet weekly via voice/web with a faculty supervisor. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

## **EES - Earth and Environmental Science**

### **EES 103 Fundamentals of Geology**

Introduction to the major geological processes which create and transform materials and landforms throughout the planet. Geotectonic processes, geomorphology, unifying themes such as plate tectonics, sea form spreading and athenosphere convection cells; and degradation-aggradation processes.

### **EES 103A Fundamentals of Geology Lab (1.5 quarter units)**

*Prerequisites: EES 103*

This laboratory course will complement the student's knowledge of geology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

### **EES 301 Earth & Planetary Sciences**

Covers the geological make-ups and processes that resulted in the present Earth topography. It also examines energy reserves, pollution, ecology, and mineral resources.

### **EES 322 Oceanography**

Examination of the interactions between oceanographic, geological and astronomical processes on the physical and living components of the world's oceans. Includes interactions between the ocean and the atmosphere and how these interactions affect currents, weather and biological activity.

### **EES 335 Environmental Science**

A study of man's relationship to the environment and the effects on it. Examines plant and animal community structure, renewable and nonrenewable resources and environmental degradation with emphasis on what is needed for a sustainable society.

### **EES 336 Natural Resource Conservation**

An overview of the distribution and uses of world natural resources and the application of economic concepts to the management of specific renewable resources. Examines specific resources such as soil, water, grasslands, forests, marine habitats, fish and game populations and energy resources.

### **EES 337 Environ Law & Sustainability**

Investigation of the relationship of laws, national and world policy, and human society's promotion of a sustainable society.

### **EES 338 Energy Resources**

*Prerequisites: EES 335*

Examines renewable and non-renewable energy sources. Investigates available world resources, market, trends, and technology. Evaluates energy conservation and practical alternatives, social, cultural and economic impacts, environmental aspects of power generation, air pollution, acid rain, ozone depletion, and global warming.

### **EES 340 Water Resources**

*Prerequisites: EES 335*

Examines the critical issues of water and water resources for human sustenance. Investigates the conservation of water and water resources in the U.S. and around the world. Discusses the environmental, economic, and social implications of current issues in water quality, water pollution, and water resource regulation.

### **EES 491A Capstone: Environ Study 1**

Seminar classes analyze different approaches, modes of inquiry, and methodologies associated with environmental issues. Students select a topic for further original research, producing a "capstone" paper based on a field-based or agency-based project.

### **EES 491B Capstone: Environ Study 2**

Seminar classes analyze different approaches, modes of inquiry, and methodologies associated with environmental issues. Students select a topic for further original research, producing a "capstone" paper based on a field-based or agency-based project. Topic chosen should be different from that chose in SCI 491A. The seminar topic chosen in SCI491B should be different than the one selected in SCI491A.

### **EES 492 Intern/Project: Env Sci Policy**

Practical "hands-on" work experience with a private or public environmental agency at regional, state or federal levels. Faculty supervisor works with agency manager/supervisor and student in designing a specific project or work plan. A final summative paper is required at the end of the internship. Course is eligible for an "IP" grade.

## **EGR - Engineering**

### **EGR 219 Intro to Graphics and Auto CAD**

*Prerequisites: MTH 215*

Introduction to the latest version of Auto CAD software for two- and three-dimensional modeling, engineering graphics and technical drawings.

### **EGR 220 Engineering Mathematics**

*Prerequisites: MTH 215*

An examination of the major mathematical tools for engineers and scientists.

### **EGR 225 Statics & Strength of Material**

*Prerequisites: EGR 220*

Introduction to the key topics in strength of materials with focus on applications, problem solving and design of structural members, mechanical devices, and engineering systems.

### **EGR 230 Electrical Circuits & Systems**

*Prerequisites: MTH 215*

A study of fundamentals of direct and alternating current, basic circuit theory, three-phase circuits, transformers, electrical generators, and motors.

### **EGR 240 Electronic Circuits**

*Prerequisites: EGR 230*

*Corequisites: EGR 240L*

Analysis and design of analog electronic circuits which are used in communications, computers and instrumentation. Provide fundamentals and analysis of non-linear, active components such as diodes, transistors (both bipolar and MOSFET), OP-AMP, rectifiers, amplifiers etc. Use modern simulation tools such as PSpice for the design, analyses, and performance evaluations of electronic circuits.

### **EGR 240L Electronic Circuits Lab (1.5 quarter units)**

*Corequisites: EGR 240*

This course offers lab experiments for students to implement, test, analyze, simulate and design electronic circuits such as rectifiers, amplifiers etc. using modern simulation and design tools.

### **EGR 310 Engineering Economics**

*Prerequisites: MTH 215*

Economic Analysis for decision making with emphasis on rate of return, net present value, benefit-cost and multi-objective evaluation methods. Cost estimation and alternative analysis.

### **EGR 316 Legal Aspects of Engineering**

Course focuses on basic principles and new developments in the legal aspects of architectural, engineering and construction processes. Coverage includes contractor licensing, professional design services, liability, intellectual property, and competitive bidding.

### **EGR 320 Scientific Problem Solving**

*Prerequisites: EGR 220, or CSC 208*

The scientific approach to problem solving through analysis and design are presented using modern computer science and engineering examples. Critical thinking and communication skills will be used to interpret and present results from real-world case studies where computers were used to solve scientific problems.

### **EGR 320L Scientific Problem Solving-LAB (1.5 quarter units)**

*Prerequisites: EGR 320, or CSC 208*

Using hands-on computer tools, the scientific approach to problem solving through analysis and design is applied in this laboratory course. Results from these hands-on activities will be interpreted and presented both on an individual basis and in a team

environment. Critical thinking and communication skills will be used to interpret and present results of scientific investigations.

### **EGR 324 Linear Systems and Signals**

*Prerequisites: CSC 208, or MTH 220, EGR 230*

Introduction to fundamental concepts, analysis and applications of continuous-time and discrete-time signals and linear systems. Course contents include time-domain and frequency-domain characterization of signals and systems, Fourier Series and Fourier Transform, basic sampling and filtering concepts, the Laplace Transform, and the Z Transform etc. The course will be supplemented with MATLAB based exercises.

### **EGR 324L Linear Systems and Signals Lab (1.5 quarter units)**

*Corequisites: EGR 324*

This lab course provides a collection of hands-on experiments for supporting the lectures of EGR320. The MATLAB, LABVIEW and NI equipment based experiments are designed to enable students to understand the theory behind signals and systems as well as validate the theory with real-world examples. The lab will cover time-domain and frequency-domain characterization of signals and systems, transforms, filtering and sampling.

### **EGR 340 Embedded Systems**

Exploration of design and interfacing of microcontroller based embedded systems. It covers various aspects of 8051 C and assembly language programming and interfacing. The course examines the architecture of the 8051 microcontroller along with a study of the I/O ports, addressing modes, interrupt routines, timings and the serial data communication in 8051.

### **EGR 340L Embedded Systems Lab (1.5 quarter units)**

*Corequisites: EGR 340*

This lab course provides a collection of experiments for supporting the lectures. The labs are designed to familiarize students with various aspects of hardware and software for microcontroller applications such as interfacing with various devices, programming I/O ports and interrupts and working with sensors.

### **EGR 440 Project Management Fundamental**

This course focuses on project management concepts and definitions, network scheduling techniques, strategic planning, risk management, cost control, and project implementation.

### **EGR 486A Engineering Senior Project I**

*Prerequisites: Completion of 10 BSCET core courses.* A substantive project that demonstrates a synthesis of learning accumulated in each major. This is the first part of a two-part Engineering Senior Project sequence. Students will be working in teams of two to four students and doing research leading to preliminary development of the final project product.

### **EGR 486B Engineering Senior Project II**

*Prerequisites: EGR 486A*

Two-month course, meets once a week. A continuation of EGR 486A. In this second part of the Engineering Senior Project, students finalize the project, prepare the final project paper and present project results to faculty and outside experts.

### **EGR 496A Senior Capstone Project I**

*Prerequisites: EGR 440 and satisfactory completion of courses as specified by Lead faculty*

A culminating experience for BSMDE majors involving a substantive project that demonstrates a synthesis of learning accumulated in program studies. This is the first part of a two-part Engineering Senior Project sequence. Students will be working in teams of 204 students and doing research leading to preliminary development of the final project product.

### **EGR 496B Senior Capstone Project II**

*Prerequisites: EGR 496A*

A continuation of EGR 496A. In this second part of the Engineering Senior Project, students continue the project; prepare an interim project paper and present project results and plans.

## **ENE - Environmental Engineering**

### **ENE 605 Air Pollution Control**

Air quality management with an emphasis on the sources of air pollution, including the effects on humankind, plants, and animals. Study of federal, state, and local regulatory requirements and air pollution law. Design of air pollution control equipment will be done.

### **ENE 607 Solid & Hazardous Waste Remedi**

*Prerequisites: CHE 101, or CHE 101A*

Understanding of solid waste; its characterization, production, storage, collection and transportation. Transportation, monitoring, storage, minimization, treatment and disposal. Exploration of toxicology from multiple functional levels, measuring toxicity and assessing risk, respiratory toxicology, and toxic wastes and remediation technologies.

### **ENE 608 Site Remediation**

Introduction to the issues relevant to the investigation and management of contaminated sites, emphasizing problem diagnosis / characterization and the development of site restoration / corrective action clean up programs. Includes methods for the development site restoration tasks, methods for evaluating the progress of corrective action programs.

### **ENE 609A Research Project I**

*Prerequisites: Satisfactory completion of 70% of core course requirements with a GPA of 3.0 or better*

First part of the master's research project. It focuses on the research and selection of an appropriate topic on one of the research or applications of environmental engineering. Students develop the project and utilize skills previously acquired in their respective core curriculum. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

### **ENE 609B Research Project II**

*Prerequisites: ENE 609A*

Continuation of ENE 609A. Students complete a detailed analysis and design of the project. Two-month, one session per week course. Students formally present their final product to a review panel for evaluation and grading. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

### **ENE 610 Microbiological Processes**

*Prerequisites: BIO 203, and BIO 203A*

An introduction to the design, analysis and implementation of microbiology and biological treatments is given with emphasis on biology of microorganisms and general bacteriology microbiology of aerobic and anaerobic bacteria. Water sampling techniques, related treatment on nitrogen, and phosphorous in the environmental lab in modern workplace are studied.

### **ENE 611 Water Treatment Processes**

*Prerequisites: CSC 208, and CSC 220 or permission from lead faculty*

Introduction to hydraulics, and hydrology concept, focus on the basic water, and wastewater Processes on physical, chemical, and biological treatment. Address the current pollution prevention procedures outlined by the EPA for industry that include source reduction, recycling / reuse treatment.

## **ENG - English**

### **ENG 013 Strategies for Writing**

This course provides the tools and practice students need to write successful college-level essays. It emphasizes the development of clear and logical writing through a focus on the basics of sentences, paragraphs, and essays. (This course is considered developmental in nature and does not award collegiate credit). Grading is by S or U only.

### **ENG 100 Effective College English I** (3 quarter units)

*Prerequisites: Satisfactory performance on Accu-placer*

The first of a two-course sequence designed to provide incoming students with the expository and argumentative writing and critical thinking skills required for college course work. Emphasizing essay-length compositions, the course covers critical reading and analysis, thesis formation and essay organization and basic research and revision techniques.

### **ENG 101 Effective College English II** (3 quarter units)

*Prerequisites: ENG 100*

The second of a two-course sequence designed to provide incoming students with expository and argumentative writing skills.

### **ENG 201 Fiction Writing I**

*Prerequisites: LIT 100*

An introductory course in writing short fiction. Students will focus on the basic elements of fiction writing and write their own original work. Students will also analyze published work and discuss each other's writing in a traditional workshop format.

### **ENG 202 Poetry Writing I**

*Prerequisites: LIT 100*

An introductory level poetry workshop. Students will compose their own original poems and study the basics of the craft of poetry along with a general historical overview of the history of poetry and its developments.

### **ENG 203 Screenwriting I**

*Prerequisites: LIT 100, or ART 315*

An introduction to the writing of feature-length screenplays. Students will learn the elements, formatting, and conventions of successful screenplays, and will learn to produce complete plots and scenes.

### **ENG 240 Advanced Composition**

*Prerequisites: ENG 100, and ENG 101*

An advanced course in expository and argumentative writing that continues the work of Effective College English. While ENG 100 and ENG 101 focus on essay formulation and research, Advanced Composition emphasizes textual analysis. Students continue to practice the construction of arguments based on analytical reasoning, critical thinking and research skills.

### **ENG 300 English Practicum & Portfolio**

Students observe, study, and discuss a range of activities and experiences common in English/Language Arts classrooms in public middle and secondary schools, and review the requirements of the Single Subject Matter Preparation program portfolio. Requires 31.5 hour observation in public schools. Grading is by H, S, or U only.

### **ENG 301 Fiction Writing II**

*Prerequisites: ENG 201*

An intermediate course in writing fiction. Students will build on principles learned in ENG201, focusing on developing compelling and original fiction. Students will also discuss the importance of revision, and engage in thorough critiques of each other's original work.

### **ENG 302 Poetry Writing II**

*Prerequisites: ENG 202*

An intermediate workshop in poetry. Students will compose their own original poems and continue the study of the craft of poetry, focusing on the modern tradition.

### **ENG 303 Screenwriting II**

*Prerequisites: ENG 203*

Building on the skills learned in ENG 203, students will refine their critical ability to analyze and evaluate screenplays, and their visual storytelling skills, in order to produce an effective first act of a full-length screenplay.

### **ENG 310 English Grammar**

*Prerequisites: ENG 101*

Analysis of Modern English structure using the methods of traditional grammar. Topics studied: parts of speech, grammatical functions, phrase, clause, and sentence types, and nominal and verbal categories. Nature and usefulness of prescriptive rules of grammar. How to teach traditional grammar as presented in the secondary English curriculum. Instruction will encourage students to demonstrate critical understanding of traditional grammar, of contemporary syntactic analysis, and of the strengths and weaknesses of those systems in secondary education.

### **ENG 333 Written Business Communication**

*Prerequisites: ENG 100, and ENG 101*

A continuation of the kinds of expository writing that began in ENG 100/101. This more advanced course stresses applications and models in business communications: letters, memos, sales, research and marketing reports.

**ENG 334A Technical Writing**

*Prerequisites: ENG 100, and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)*

A workshop to help students whose careers will involve communicating technical information clearly. Students are encouraged to practice on professional models in their own disciplines while learning those attributes common to all effective technical writing.

**ENG 350 Fundamentals of Linguistics**

*Prerequisites: ENG 100, and ENG 101*

An introduction to contemporary linguistics. Covers the phonology, morphology and syntax of the English language with an emphasis on language acquisition as related to the developmental stages of childhood. The course is especially designed for students intending to teach elementary school students.

**ENG 352 Origins of English**

*Prerequisites: ENG 100, and ENG 101*

Examines the origins of language both within a person and within culture. Covers language acquisition and the history of the English language through its own developmental stages, including the evolution of standard American English and its major dialect communities.

**ENG 375 Nature Writing**

*Prerequisites: ENG 100, and ENG 101*

An advanced course for students interested in using writing as a means of exploring the natural world. This course surveys nature writing in its various forms (essays, articles, poetry, journals, etc.) as well as effective nature writing strategies.

**ENG 401 Fiction Workshop**

*Prerequisites: ENG 301*

An advanced course in writing fiction. Students will analyze sophisticated principles of fiction writing, evaluating different strategies for successful fiction, including non-traditional approaches. Students will write and revise advanced level original work, and provide rigorous feedback for their peers in a workshop setting.

**ENG 402 Poetry Workshop**

*Prerequisites: ENG 302*

In a workshop setting, students will build on the skills learned in ENG 202 and 302 to produce a significant collection of original poems.

**ENG 403 Screenwriting Workshop**

*Prerequisites: ENG 303*

In a workshop setting, students will build on the skills learned in ENG 203 and 303 to draft and revise an effective full-length screenplay.

**ENG 490 Guided Study (variable units)**

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

**ENG 600 Seminar in Literary Theory**

Historical and current issues in literary criticism and theory with particular attention to developments of the last fifty years. Emphasizes both reading and writing literary criticism in order to develop vocabulary and skills necessary to participate in scholarly literary debate.

**ENG 610 Multicultural Literature**

Examines core concepts of race, ethnicity, culture, and multiculturalism from the standpoint of recent developments in American literary canon formation. Students will synthesize current multicultural literary theories with a corpus of significant literary texts.

**ENG 620A Literary Period or Movement I**

Advanced, historically oriented study of a literary period, such as English Medieval, Romantic, or Victorian literature, or a movement, such as The Beat Generation. Variable topic selected by the instructor. (May not duplicate content of ENG 620B.)

**ENG 620B Literary Period or Movement II**

Advanced, historically oriented study of a literary period, such as American Romanticism, or of a movement such as American Modernism, the Harlem Renaissance, or the Lost Generation. Variable topic selected by the instructor. (May not duplicate content of ENG 620A.)

**ENG 640 Seminar in Poetry**

Advanced study of the history and practice of poetry. Close reading of a major poet or school of poetry, poetic forms and theories.

**ENG 655 Composition Pedagogy**

Prepares the students for the practical and theoretical challenges of teaching English composition and other writing courses. Topics include process theory, cognitive studies, visual analysis, discourse studies, and best practices.

**ENG 656 History of Rhetoric**

Classical rhetoric focuses on the teachings of the major figures of ancient rhetoric, such as the sophists, Plato, Aristotle, Cicero, and Quintillion. Students will study the classical texts which form the base of modern studies in rhetoric and composition. The course also glosses major shifts through Medieval, Renaissance, and Enlightenment rhetoric.

**ENG 657 Modern Rhetoric**

Modern Rhetoric introduces students to the contemporary study of rhetoric. The course covers major figures such as Kenneth Burke, Lloyd Bitzer, and Stephen Toulmin. The course introduces a wide range of academic interests in contemporary rhetoric; in particular, students will practice reading texts rhetorically through major theories of rhetoric.

**ENG 659 Rhetoric, Aesthetics & Logic**

This course is an examination of rhetoric, poetics, and aesthetics as the bases of the principal theoretical foundations of the field whose focus is the study of writing.

**ENG 660 Seminar in Literary Hypermedia**

History and current practice of literary hypermedia. Through reading primary stand-alone and Web-based hypermedia installations, the course examines hypermedia as a specific literary genre.

**ENG 663 Capstone Project in Rhet Crit**

*Prerequisites: ENG 656, ENG 657, ENG 655, ENG 671, or ENG 668*

Writing the Master's thesis or capstone project.

Taken as the last course in the M.A. English with an Emphasis in Rhetoric program. Exceptions may be made if within two courses of program completion, with approval of the lead faculty. Students study published models of rhetorical criticism spanning a wide variety of critical objects. They hone critical tools that they in turn apply to a substantial, original project. Working closely with the capstone instructor and peers, students take this project from inception to final form: a work of professional-quality rhetorical criticism.

**ENG 665 Film Theory**

An overview of film theory designed to give students the critical tools necessary to describe and evaluate various aspects of cinema art. This course introduces concepts from a variety of approaches, including deconstruction, existentialism, Marxism, phenomenology, and psychoanalysis.

**ENG 666 Film History: The Silents**

A survey of films produced before the advent of recorded sound, this course focuses on the early national cinemas of France, Germany, the Soviet Union and the United States; attention is directed to concepts of visual narratology, montage and the conventions of acting, set design, lighting and movement.

**ENG 667 Film History: American Film**

This course offers an in-depth study of the development of cinema in the United States that takes a broad overview of American film making. Topics include film genre and the relationship of film to art, politics, religion and society. Additionally, the course considers Hollywood's treatment of ethnic groups, women, and systems of class structure.

**ENG 668 Film Genre Studies**

Film Genre Studies is a content-variable course that may be repeated for credit. Each iteration of the course focuses on a specific genre of film in an international- or American-historical context, including the Western, the Epic, the Biblical Epic, Film Noir, the Crime Story, Science-Fiction Adventure, Agit-prop, or other film genres. This is an intensive study of the conventions, artists, and styles associated with specific genres and the historical circumstances in which the genre appeared.

**ENG 669 World Film**

World Film is a content-variable course that may be repeated for credit. Each iteration of this course is a study of the film tradition of a specific nation or group of nations other than the United States. Students in this course will engage in an intensive study of the elements of filmmaking and theory, as well as the contrasting visual styles of directors, artists, and themes prominent in the particular tradition or traditions surveyed. Trans-cultural and transcendental film categories, universals values, and the fundamental principles of film art are also important topics of discussion.

**ENG 670 Comparative Literary Studies**

Analysis of literary texts across national and linguistic as well as temporal, cultural, and disciplinary lines.

**ENG 671 Pictures that Speak**

An advanced study into the relationship between text

and image (17th-century emblem books, contemporary comix, graphic novels, etc.), gesture and image (stage drama, silent film, etc.), and sound and image (“talking” pictures, television, the Internet), this course focuses on the ways in which various media through history have expressed the relationship of spoken discourse and visual representation.

#### **ENG 680A Seminar in a Theme I**

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by instructor. Examples of themes are: the gothic, utopia/distopia, vampires, the road, and gender in literature.

#### **ENG 680B Seminar in a Theme II**

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by instructor. Examples of themes are: the dark gothic, meta-fiction, the home, and war in literature.

#### **ENG 685 Great Directors: American**

This seminar in great American directors is a content-variable course that may be repeated for credit. Each iteration of this course is a comprehensive study of the artistic achievements of an American director. Students will engage in detailed interpretations and analyses of the techniques and concepts employed by a particular director, paying special attention to literary works as they relate to the filmmaking efforts of the director studied.

#### **ENG 686 Great Directors: International**

This seminar in great international directors is a content-variable course that may be repeated for credit. Each iteration of this course is a comprehensive study of the canon of work of a specific director, excluding American directors. Students will engage in detailed interpretations and analyses of the techniques and concepts employed by a particular international director, paying special attention to literary works as they relate to the filmmaking efforts of the director studied.

#### **ENG 689 Research and Methodology**

This course introduces students to graduate level research practices and methodologies in English Studies. Students gain the necessary skills and knowledge required to research and write scholarly articles for peer reviewed journals specific to English Studies.

#### **ENG 690A Major Author Seminar I**

A critical study of the work of a single author, such as Jane Austen, Walt Whitman, Charles Dickens, William Faulkner, Jack London. Special attention given to biography, culture, and literary context.

#### **ENG 690B Major Author Seminar II**

A critical study of the work of a single author, such as Shakespeare, George Eliot, Garcia Lorca, Ernest Hemingway, James Baldwin. Special attention given to biography, culture, and literary context.

#### **ENG 698 Film Studies Capstone Course**

*Prerequisites: A total of seven core courses and two elective courses as described in the Degree Requirements for the Program must be completed before enrolling in the Capstone course.*

Degree candidates will select one of their written projects from a course in the M.A. in Film Studies

Program to revise and expand as their capstone project. The duration of this course is two months.

#### **ENG 699 English Capstone Course**

Writing the Master’s thesis or capstone project. Taken as the last course in the M.A. English program. Exceptions may be made if within two courses of program completion, with approval of the lead faculty. Grading is by S or U only. Course is eligible for an “IP” grade.

### **ENM - Engineering Management**

#### **ENM 600 Engineering Mgmt Concepts**

Designed to equip the students with all skills and management related topics covered in a graduate course in engineering management including portable management skills, management concepts, quality, product development, human resource management, communication, critical path networks and management of supply system and inventory control.

#### **ENM 601 Project Management Principles**

Focus on fundamentals of engineering project management and tools, in particular, Microsoft Project and provides guidelines for what project managers need to have in order to succeed. Introduction to project negotiation, project manager selection and project auditing and terminating.

#### **ENM 602 Risk, Contracts, and Legal Iss**

Focus on risks, contracts and legal issues related to project management. Covers materials on theories of risk management, cost estimation, pricing competitive bids, risk allocation, and incentive contract design, evaluation of threats and opportunities, and portfolio management.

#### **ENM 603 Operation Management**

*Prerequisites: ENM 600*

Examination of design and management of internal capacity as it applies to all organizations. It addresses how all operations and behavior components fit together and how to identify and resolve the right problem. Topics covered include, problem identification and resolution, process design, applications of technology and knowledge management.

#### **ENM 604 Quality Management**

Overview on theories of total quality management required for a successful organization. In addition, key Global Trends, Costs of Poor Quality, and Ethical Dilemmas will be discussed. The concepts related to Six Sigma, Benchmarking, SPC, quality tools, and ISO 9000-2000 will be discussed.

#### **ENM 605 Infrastructure Management**

Focus on project management aspects related to infrastructure management. This course presents the principles and techniques of project management, beginning with the conceptual phase by the owner, through coordination of design and construction, to successful project completion.

#### **ENM 607A Capstone Course I**

*Prerequisites: All core classes in program.*

Focus on the application of engineering processes

learned through this program. Working in teams or as individuals under the guidance of their assigned faculty advisor, students select a research topic, and gather data. The duration of this course is one month. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

#### **ENM 607B Capstone Course II**

*Prerequisites: ENM 607A*

Continuation of ENM 607A project course. Specific focus is on the analysis of the data collected including problem solutions. Students present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. The duration is two months. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

### **ETL - e-Teaching and Learning**

#### **ETL 680 Introduction to e-Teaching**

Traces the evolution of online learning to its current state. Course content includes the legal, ethical and behavioral issues as well as the professional standards required for the delivery of exemplary online instruction.

#### **ETL 682 Active Teaching and Learning**

Explores the characteristics of the effective online teacher, the distinguishing features of online learners, and how these two elements converge in the design and development of active, student-centered lessons, courses, and multiple assessments in the online learning environment.

#### **ETL 684 Differentiated Online Instruct**

Examines the strategies required for adapting instruction and assessment to the individual needs of diverse learners in a wide spectrum of educational environments. Course content focuses on the application of current effective online practices for increasing the instructors’ competency in responding appropriately to students’ diverse learning needs.

#### **ETL 686 Designing Instr Materials**

*Prerequisites: ETL 680, ETL 682, ETL 684*

Design and develop effective instructional materials for use in online courses. Create a community who collaboratively produce engaging interactive online products.

### **EXC - Special Education**

#### **EXC 603 Typical/Atypical Dev Spec Need**

*Prerequisites: Permission of lead faculty*

Overview of typical and atypical development from birth to five including major theories, principles, concepts, and current research and practice dealing with the impact of delays, disabilities or chronic health impairments of the young child.

#### **EXC 621 Intro Students w/Autism Spect**

This course includes history, terms, law, rights of parents, and issues regarding service and programs. Students will develop understanding of successful teaching environment for students with ASD.

**EXC 622 Assess & Behavioral App in Aut**

Course focuses on empirical bases for assessment and treatment. Overview of ABA approach w/in overall treatment paradigm for autism. Includes schools, agencies & professionals in discussion.

**EXC 623 Intervention/Instr. w/Aut.**

Provides student with relevant strategies for younger (emphasis on communication) and older students (emphasis on inclusion & Life Skills). Interventions are taught according to success in environment.

**EXC 624 Autism Collab w/Parents & Fam.**

Strategies to build supportive relationships with families. Develops knowledge and skills for sensitive communication. Helps to assist families in managing short and long term issues.

**EXC 639 Childhood and Adolescence**

This course prepares teachers, service providers and community mental health professionals to apply developmental theories and research to the understanding of social learning and behavior challenges of children and adolescents. The course focuses on the developmental process and addresses differences between normal development and developmental differences from early childhood/preschool through adolescence and young adulthood.

**EXC 655A Professional Induction Seminar (3 quarter units)**

The first course in the Level II credential program. An Individual Induction Plan, a culminating activity project, a candidate planning guide and electronic portfolio activities are initiated. Grading is S or U only.

**EXC 655B Exit Seminar (1.5 quarter units)**

The last course in the Level II Credential program. Presentation of the electronic portfolio to the University Supervisor and District Support Provider and submission of the culminating activity project, initiated in EXC655A, are included. Grading is S or U only.

**EXC 656 Best Pract. Stud Spec Needs**

This course is designed to assist you in developing an understanding of the philosophical, political, legal, and fiscal variables including cultural and linguistic diversity that impact contemporary issues, trends, and practices in the field of special education. Basic principles of professional behavior with respect to pupils, peers, administrators, teachers, parents, families and community agencies will be reviewed.

**EXC 657 Comm. Resources & Transition**

A comprehensive course designed to equip educators with the ability to plan and implement successful transitional life experiences for students with disabilities. Emphasis on collaboration with other educational and community agencies involved in the transition process.

**EXC 658 Adv. Spc. Mild/Moderate**

An advanced course in skills needed for effective collaboration, curriculum design and modification and assessment processes for students with mild/moderate disabilities.

**EXC 659 Adv. Spc. Moderate/Severe**

Advanced methods to ensure that candidates are instructional leaders. Eff. communication skills and transdisciplinary relationships with families, caregivers and paraprofessionals stressed.

**FIN - Finance****FIN 310 Business Finance**

*Prerequisites: ACC 201*

This course is a survey of the basic principles and concepts used in the financial management of a business enterprise addressed from both theoretical and practical standpoints. Topics include money and capital markets, financial management of working capital, capital budgeting and fixed asset management, cost of capital, and short-term and long-term financing by means of debt and equity capital.

**FIN 440 Financial Institutions**

*Prerequisites: FIN 310*

An examination of the nature and role of financial institutions in the economy, topics include money markets and capital markets, the Federal Reserve System and monetary policy, the commercial banking system, thrift institutions, insurance companies, pension funds, investment companies, and other major financial institutions.

**FIN 442 Investments**

*Prerequisites: FIN 310, and FIN 440*

A survey of principles and practices in the field of investments, the course covers the valuation of corporate securities of multinational and domestic corporations, portfolio theory, and the measurement of portfolio performance. Emphasizes the role of return and risk in valuing stocks, bonds, options, and in constructing portfolios.

**FIN 443 Working Capital Management**

*Prerequisites: FIN 310*

A course emphasizing the management of current assets and current liabilities, it covers planning a firm's overall level of liquidity, stressing cash management and credit policies. Also discussed are selected topics such as bank relations, factoring, and secured inventory financing.

**FIN 444 Risk Management & Insurance**

*Prerequisites: FIN 310*

An analysis of the risk management problems in the business enterprise, the course emphasizes methodology for risk analysis, insurance principles and practices, techniques for risk and loss control, insurance underwriting, and rating. It also includes product liability, property damage, and bodily injury in business situations.

**FIN 446 International Financial Mgmt**

*Prerequisites: FIN 310*

An examination of the international aspects of corporate finance and investing, the course covers balance of payments, foreign exchange with emphasis on exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international banking.

**FIN 447 Financial Planning**

*Prerequisites: FIN 310, and FIN 442*

The course is an overview of the broad spectrum of financial planning, including activities such as producing a comprehensive plan to meet the client's needs and goals for sound financial management, gathering of client information, analyzing client objectives, and using communication skills essential to obtaining quantitative and qualitative client data. It also acquaints students with the importance of retirement and estate planning and tax management.

**FIN 448 Seminar in Finance**

*Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443, FIN 446*

This is a capstone course for students specializing in the area of finance. It exposes students to a wide range of finance related topics, including issues affecting the current financial environment of business firms. The course integrates material from previous courses taken in the finance concentration and introduces the topics of capital budgeting and the process of obtaining long-term funds.

**FIN 449 Analysis of Financial Statements**

*Prerequisites: FIN 310*

An examination of U.S. accounting principles, the course emphasizes the analysis and interpretation of financial statements for management and investment purposes. Students evaluate financial statements of actual publicly traded firms. Course material is applicable to credit policy, investment analysis, and other operating and financial policy decisions.

**FIN 450 Bank Management**

*Prerequisites: FIN 310*

Financial decision making, organization and structure of banks and their industry are examined. Topics covered include managing financial assets, deposit acquisition, capital management, bank lending policies and procedures and the investment function in the bank. International banking service is also covered.

**FIN 451 Real Estate Finance**

*Prerequisites: FIN 310*

Forms of ownership and investment in real estate are examined. In particular, the course includes discussion of markets and methods of financing real property. The impacts of federal taxation on financing residential and commercial real estates are also discussed. Real estate finance topics are covered both from the perspective of borrowers and lenders.

**FIN 453 Finance and Banking**

*Prerequisites: FIN 310*

Overview the banking system, and the role of money and interest rates in the economy. Topics include: today's financial and monetary controversies, role of banking system in the economy; banking regulations; financial instruments and their purposes; asset pricing, the determination and behavior of interest rates; the monetary base and the money supply framework; the role of the Federal Reserve system in the determination of money supply, interest rates, and economic goals; the effect of money and credit on output, employment, and inflation.

**FIN 454 Capital Structure & Financing**

*Prerequisites:* FIN 310

Overview of the factors that affect capital structure decisions. Topics include: risk and return, corporate strategy, capital structure choices, economics, regulatory, and industry effect on capital structure, raising capital and financial distress and bankruptcy.

**FIN 455 Valuation of a Corporation**

*Prerequisites:* FIN 310

Valuation is designed to explain the theories of valuing a corporation. Topics include: foundations of value, core valuation techniques, how to create value, estimating continuing value, valuing multinational companies, and cross-border and emerging markets valuation.

**FIN 456 Financial Project (Capstone)**

*Prerequisites:* FIN 310, FIN 440, FIN 442, FIN 443, FIN 444, FIN 446, FIN 447, FIN 449, FIN 453, FIN 454, FIN 455

This capstone course exposes students to a wide range of finance related topics, including issues affecting the current financial environment of business firms. The course integrates material from previous courses and covers topics such as corporate finance, short and long-term investment, risk management, financial domestics and international markets and institutions and other related subjects. The subject matters will be covered through series of cases or research projects.

**FIN 501 Finance Fundamentals** (3 quarter units)

*Prerequisites:* ACC 501, or ACC 201

This course is an introduction to finance for students with knowledge of accounting fundamentals but with no previous exposure to the subject of finance. Topics in this two-week course include security markets, time value of money, short-term and long-term financing, and working capital management. Grading is S or U only.

**FIN 600 Finance for Non-Financial Mgrs**

This course examines the financial and accounting reports that aid managers in making business decisions. In doing so, this course covers issues such as long- and short-term budgeting, key financial statements, the role of the outside auditor, reporting financial information, and valuation of assets and equities.

**FIN 609A Seminar in Financial Management**

*Prerequisites:* FIN 310, or FIN 501

A study of corporate financial management, through case studies and/or term projects, this course covers issues such as sources of long-term financing, cost of capital, capital budgeting, dividend policy, mergers and acquisitions, bankruptcy and reorganization, the globalization of finance, ethical standards, information technology, and financial strategy.

**FIN 610 Topics in Financial Management**

*Prerequisites:* FIN 609A

This course extends and expands the materials covered in FIN609A. The topics covered in this course include strategic financing decisions such as capital structure and dividend policy decisions; tactical financing decisions such as initial public offerings, financial restructuring, and lease financing; short-term financial management such as cash, inventory, and receivables management; and special topics such as

risk management, bankruptcy, reorganization and liquidation, corporate mergers, and multinational financial management.

**FIN 630 Financial Institutions**

*Prerequisites:* FIN 609A

This course is an examination of the financial policies and practices of commercial banks, savings and loan associations, pension funds, insurance companies, and other major financial management institutions. It discusses securities and uses of funds, their cost and return, and government regulation of the financial sector.

**FIN 631 Security Analysis & Portfolio**

*Prerequisites:* FIN 609A

This course is an analysis leading to the appraisal and pricing of securities. It discusses the income generating ability of securities, forecasts of trends in the stock and bond markets, fundamental and technical analysis, application of Modern Portfolio Theory (MPT), analysis of active and passive investment strategies, and measurement of portfolio performance.

**FIN 632 Managing Financial Resources**

*Prerequisites:* FIN 609A

An instruction on how to deploy available capital resources to gain maximum advantage, students study capital budgeting policies and procedures, formulation of growth and diversification policies, appraisal of income and risk, and establishment of decision-making guidelines.

**FIN 633 Financing Capital Requirements**

*Prerequisites:* FIN 609A

A discussion of how to establish capital structure policies and determine the best methods for raising required capital, the course covers formulation of debt, dividend and equity policies, selection of appropriate financing vehicle, and selection of capital market

**FIN 635 International Finance**

*Prerequisites:* FIN 609A

An examination of the international aspects of corporate finance and investing, this course covers the international balance of payments and foreign exchange. It emphasizes exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international portfolio management.

**FIN 641 Adv. Security Analysis & Port.**

*Prerequisites:* FIN 609A, and FIN 631

An in-depth look at several of the advanced topics surveyed in FIN 631, this course includes bond portfolio management strategies, bond betas and their portfolio impact, option valuation models and hedging, practical use of portfolio insurance and hedging, problems with model-dependent hedging, and the use of futures contracts and their objectives. It covers problems faced by corporate and professional investment managers in their effort to hedge portfolio risks and improve portfolio returns.

**FIN 650 Global Financing for Trade**

An examination of the basic financial problems facing an internationally oriented company, this course

includes the structure and operations of the international financial system, foreign exchange rates, foreign exchange risks and their management, international sources of funds, international cash management, and basic instruments of international financial transactions (e.g., letters of credit, foreign currency contracts, foreign currency accounts, and banking facilities). Note: Students specializing in financial management may not take this course.

**FIN 651 Commercial Bank Management**

This course is a detailed analysis of the functional areas of banking including the management of deposits, cash, loans, and other asset accounts. Current problem areas in banking such as liquidity, capital adequacy, and problem loans are explored, as well as bank investment accounts and their relationship to profitability and liquidity.

**FIN 652 Real Estate Finance**

*Prerequisites:* FIN 609A

This course presents Real Estate Finance and Investment issues from a portfolio perspective. It provides a complete analysis of real estate partnerships, secondary mortgage markets, adjustable rate mortgages. It also includes the applied topics of corporate real estate, including lease versus own analysis, sale and leaseback decisions, and the role of real estate in corporate restructuring.

**FIN 653 Fin. Engineering & Derivatives**

This course provides an introduction to futures and options markets and outlines the different ways in which they can be used. It covers futures and forward contracts, pricing of forward and futures, hedging techniques, swaps, options markets, trading strategies, option pricing models, volatility smiles, and a detailed treatment of hedge parameters such as delta, gamma, and vega. Also discussed is portfolio insurance, value-at-risk measure, multi-step binomial trees to value American options, interest rate options, and other exotic options.

**FIN 654 Cases in Financial Studies**

Reflecting the fact the Finance has gone through dramatic changes in the last 20 years, this case study course will expose students to the revolutionary transformation in markets and organization we have seen the financial industry milieu.

**FIN 655 Finance Research Project**

*Prerequisites:* FIN 609A, and minimum of 36 quarter units of core courses

Students, under the guidance of their assigned faculty advisor, clarify topics, identify sources from which data will be gathered, and complete and present their research in written form. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

**FIN 670 Finance & Accounting for EXECs**

This course covers major topics in finance and accounting, with emphasis on current theory and concepts rather than on procedure. Topics include financial statement interpretation and analysis, internal control structure, operating and capital budgeting, capital structure theory, and issues in finance and accounting for U.S. companies with foreign operations



### **FIN 671 Credit Management**

*Prerequisites: FIN 609A*

This course is an analysis of credit policy leading to the development of strategic and higher level technical skills appropriate for credit managers. The course will also analyze specific topics like the role of credit in the economy, credit management functions, retail credit, types of consumer credit, regulation of consumer credit, the consumer credit investigation, decision making in credit operation, responsibilities of the credit manager, international trade credit and collection policies and practices.

### **FIN 673 Valuation of a Corporation**

*Prerequisites: FIN 609A*

Valuation is designed to explain the theories of valuing a corporation. Topics include: foundations of value, core valuation techniques, how to create value, estimating continuing value, valuing multinational companies, and cross-border and emerging markets valuation.

### **FIN 674 Managing Financial Institution**

*Prerequisites: FIN 609A*

This course presents an overview of Financial System, Financial Markets, and Commercial Banking in the 1990s to the 21st century in the US and global setting. It covers asset and liability management problems for depository institutions including management issues, and performance analysis of non-depository entities. In addition, emphasis is placed on interest rates and interest rate risk management. International Bond Markets and new Issue Procedures in the Bond Market, digital money, and alternative electronic payment systems will also be discussed.

### **FIN 675 World Economy, Trade & Finance**

*Prerequisites: FIN 609A*

This course emphasizes microeconomic concepts related to managerial decision-making. Students will learn to analyze the global business environment of industrialized and developing countries, and to think strategically, using micro and macroeconomics principles. Markets, consumers, producers, trade, distribution, welfare, tariffs, non-tariffs barriers, and monetary and macroeconomics issues of development and transitions will be discussed.

### **FIN 676 International Banking**

*Prerequisites: FIN 609A*

This course examines both the theory and the practice of international banking. It covers the creation of credit and credit rationing; internationalization of banking, the risks and benefits from financial innovation, central banking, bank regulation, deposit protection, capital adequacy and free banking, and selective institutional aspects of international banking. It also reviews the principle of Islamic Banking.

### **FIN 677 Financial Derivatives**

*Prerequisites: FIN 609A*

This course presents and analyzes derivatives, such as forwards, futures, swaps, and options. It compares major types of derivatives, shows how they are used to achieve various hedging and speculating objectives, introduces a framework for pricing derivatives, and studies several applications of derivative-pricing techniques outside derivative markets. Topics also include traditional and exotic derivatives, market risk, credit issuer risk, stressed correlation materials, fat tails, and case studies in corporate finance.

### **FIN 690 Guided Study** (variable units)

*Prerequisites: FIN 609A*

This course is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

## **FSC - Forensic Science**

### **FSC 620 Advanced Criminalistics**

This class surveys physical evidence with an introduction to the operation of a forensic science laboratory and an overview of many of the analytical tools used in the criminalistics laboratory. Principles of chain of custody; and role of forensic scientist as expert witness.

### **FSC 621 Digital Evidence**

This course will provide broad perspective on theory, technique and practice of digital evidence investigation. Different types of digital related crime, including fraud, stalking, identity theft, and internet related crimes. Chain of custody and current legal issues on digital evidence.

### **FSC 622 Law and Criminal Procedure**

This course is an examination of the foundation for understanding Constitutional laws. The course will cover various sections of the Constitution and how law enforcement officials may obtain evidence, and conduct a search and seizure.

### **FSC 623 Fingerprint Analysis**

Introduction to basic principles and techniques of fingerprints as applied to crime scenes, forensic evidence, identification, and court presentation. Methods of recognition, proper collection of known and latent fingerprints, processing, classification and comparison. Courtroom presentations will be discussed.

### **FSC 630 Forensic Pathology I**

Forensic terminology, anatomy, and physiology of the human body with emphasis on the understanding of the underlying pathology of sudden, unexpected deaths encountered in forensics, Sudden Infant Death Syndrome (SIDS), methods personal identification and different types of injuries with their characteristic features and mechanisms of death.

### **FSC 631 Major Case Investigation**

A study of investigative techniques that are utilized in felony crimes of violence and crimes against property, including homicide, rape, arson, assault and battery, robbery, burglary and grand theft. Examines the completion of such cases from initial crime scene through investigation and adjunction.

### **FSC 632 Trace Evidence**

The principles and methods of the macroscopic examinations and the microscopic, chemical, and instrumental analysis of trace and patterned evidence. Hair, fibers, glass, soil, paint, GSR, arson, explosives, fingerprint, and other patterned evidence will be covered in this class. The principles of chain of custody will be studied.

### **FSC 633 Advanced Forensic Toxicology**

A comprehensive study of general principles and fundamentals of forensic toxicology, poisons, action, toxicity, and samples required for toxicological analysis with methods of collection, preservation and analysis. Details of the methods employed for analysis, such as color test, micro diffusion, Chromatography, mass spectrometry, GC-MS, radioimmunoassay (RIA).

### **FSC 634 Forensic Serology and DNA**

Forensic identification, analysis, and comparison of the biological evidentiary samples. Electrophoresis, DNA extraction and purification procedures. Polymerase chain reaction (PCR), and methods of genetics and DNA analysis and detection. Casework training and students will get hands-on experience.

### **FSC 635 Forensic Anthropology**

The study of the application of the methods and techniques of skeletal remains identification and physical anthropology to medicolegal problems. This course presents the protocol of forensic anthropology when analyzing human remains. Assessment of human or non-human; time since death and cause of death.

### **FSC 642 Forensic Pathology II**

*Prerequisites: FSC 630*

The scientific techniques used in Medicolegal investigations of regional injuries and death, firearm injuries transportation injuries, physical injuries, trauma and disease, child abuse, sexual assaults, diagnosis of rape, pregnancy, abortion and delivery. Infanticide, asphyxial and drug deaths. Forensic medical evidence and records for the court.

### **FSC 643 Forensic Psychology**

An examination of the nomenclature of mental disorders, diminished capacity, and insanity defenses, involuntary commitment, mental competency to stand trial, mentally disordered sex offenders, psychological and psychiatric testing and assessment of criminal offenders.

### **FSC 647 Crime Scene Investigation**

A comprehensive study of the techniques and procedures used for approaching and protecting the crime scene, survey and documentation, detailed search of the scene, initial evidence collection and packaging, processing the scene for latent prints and maintaining the chain-of-custody. The legal and scientific principles of crime scene searches and seizures.

### **FSC 648 Forensic Photography**

This principles and techniques of film and digital photography as applied to crime scenes, forensic evidence, identification, and court presentation. Emphasis is on single lens reflex film or digital camera operation with various types of lighting. Legal aspects of forensic photography and courtroom presentations.

### **FSC 651 Topics in Forensic Sciences**

A project-based course where students work under close faculty guidance and supervision on particular topics of interest. Grading is by H, S, or U only.

### **FSC 654 Criminal Profiling**

This course is designed to help students acquire skills and knowledge in criminal investigation analysis. Introduces students to the various techniques

used by criminologists and behavioral scientists to profile individuals that typically commit violent crimes. Includes study of victimology and crime scene analysis.

#### **FSC 661 Internship in Forensic Science** (1.5 quarter units)

An internship for students looking for field experience in the law enforcement field. Students receive academic guidance from forensic science faculty and supervision at the field placement site. The internship requires students to work a minimum of 300 hours under faculty and field supervision. Students must write an in-depth research paper on their experiences during the placement. This paper is coordinated and supported by the students' faculty advisor and field supervisor. Units are arranged and determined based on assignment and the number of hours at the placement site. Grading is H, S, or U only.

#### **FSC 662 Supervised Research Project**

*Prerequisites: Satisfactory completion of 8 FSC core courses.*

Students select a viable topic in forensic science to research. Students meet with their instructor once a week for two months. Students will also be able to get guidance from the forensic lead faculty and other forensic staff throughout the entire process of the research. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

#### **FSC 690 Guided Study** (1.5 quarter units)

Individual study under direction of the instructor. Requires prior approval of appropriate academic department. Grading is H, S, or U only.

### **GER - Gerontology**

#### **GER 310 Healthy Aging**

Focuses on the historical and cross-cultural, physiological, psychological, sociological, economic and political aspects of aging. Retirement patterns, living environments, chronic disease and the role of health care professionals will be explored.

### **GLS - Global Studies**

#### **GLS 150 Global Issues and Trends**

Cultivate students' understanding of "the global" as a complex web of local events and their sense of themselves as "global citizens", whose everyday decisions are inextricably linked to larger social, political, and economic forces and structures. Investigate global issues to enable students to develop competencies that enhance their abilities to make informed decisions throughout their lives about how their actions and/or inactions fit into the broader global context.

#### **GLS 310 Global Communications**

*Prerequisites: ENG 240*

Investigate variables that enable and inhibit clear global communications. Such global variables are due to differences in culture as well as differences in infrastructure. Students learn to communicate clearly with multiple audiences as they analyze the technological, social, political and economic forces impacting communications in the digital age.

#### **GLS 330 Film in a Global Context**

*Prerequisites: ENG 240*

Examines how international cinema represents various aspects of societies and cultures outside the U.S. Representative films of Asia, Africa, Europe, Latin America, Australia and Oceania, and Canada may be studied.

#### **GLS 410 Gender and Global Society**

*Prerequisites: ENG 240*

Examines how people experience genders and sexuality in global society. Explores how gender and sexuality relate to other categories of social identity and difference including race and social class. Analyzes media representations of gender roles and stereotypes.

#### **GLS 420 Ecological Revolutions**

*Prerequisites: ENG 240*

Examines the relationships between humans and the natural environment over the last 500 years. Topics include conceptions of nature, the use of resources in different societies, the consequences of various forms of economic organization (particularly capitalism) on the environment, and the impact of technological change on the world's ecology.

#### **GLS 430 The Global Economy**

*Prerequisites: ENG 240*

Examines changes associated with globalization over the last 500 years, including changes in technology, urbanization, finance, markets, lending, the internationalization of production, the organization of work, and power relations among nations and world cultures. Investigates both theories of and popular responses to the new global economy.

#### **GLS 440 Study Abroad**

*Prerequisites: HIS 320*

Students travel to a foreign country with roughly a third of the class devoted to study prior to travel, a third to directed travel and study in the chosen country, and a third to analyzing experiences abroad. Any visas, passports, immunizations, or other travel requirements are the students' responsibilities.

#### **GLS 499 Seminar and Portfolio Project**

(Capstone course. To be taken as the final course in the major.) Students complete a final portfolio including one original research paper, another essay integrating central concerns of the program, and several papers representing students' best coursework. The portfolio is posted on a website of the student's design. Ideally taken as final course in the major. Grading is S or U only.

### **GMB - Global Master of Business Administration**

#### **GMB 601S Estadísticas para Negocios**

Es un examen de la complejidad creciente de los negocios en la resolución de problemas que enfrentan en la actualidad los gerentes y ejecutivos. El curso cubre la importancia que los aspectos estadísticos y presupuestal tienen en el proceso de toma de decisiones en los negocios, así como los principios y pasos a seguir en la planeación e investigación dentro de la organización. Dentro del contexto de este curso,

los estudiantes proponen el estudio de una situación existente en una organización, e identifican un asesor académico con conocimiento del tema en cuestión

#### **GMB 602S Administración Estratégica**

*Prerequisites: Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en GMB 602S, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el GMB 696S.*

Es un estudio a fondo de las funciones gerenciales en la adaptación de las organizaciones al ambiente global. El curso enfatiza las características del entorno que hacen crítica la administración estratégica en el éxito de las organizaciones, incluyendo la evaluación de las fortalezas y debilidades organizacionales, la identificación de oportunidades y amenazas, la optimización de respuesta a eventos no planeados, y el análisis estratégico en entornos turbulentos. Analiza también los entornos socio-culturales, políticos, económicos, éticos, tecnológicos y de regulación que tienen impacto en los negocios de un entorno multicultural. El curso pone especial énfasis en el impacto del Tratado de libre comercio con Norteamérica (TLC) y el GATT (hoy OMC) en la administración estratégica de las empresas. Explora las oportunidades globales de negocio que surgen de las nuevas tecnologías, tanto para pequeñas como para grandes empresas.

#### **GMB 620S Negocios Electrónicos**

Es una introducción y panorama general de las transacciones de negocios a través de Internet, desde una perspectiva gerencial. El curso sirve como base del programa de Negocios Electrónicos y plantea estrategias para negocios cibernéticos, Mercadotecnia Electrónica, leyes prevalientes en cibernética, Mercadotecnia por Internet, Infraestructura cibernética y seguridad, aplicaciones de negocios vía Internet, así como modelos relevantes de negocios vía Internet.

#### **GMB 631S Mercadotecnia Global**

Un estudio de planificación y organización estratégicas para la mercadotecnia internacional al investigar los mercados globales, realizar mercadotecnia de productos de consumo, productos industriales y servicios en el mercado mundial. Investiga el esfuerzo de publicidad y promoción internacionales, la venta personal y la administración de personal, la fijación de precios, el sistema de distribución, la mecánica y logística del comercio de exportación, los requerimientos financieros para la mercadotecnia internacional y la coordinación y control de las operaciones globales. También trata acerca del efecto de los convenios comerciales sobre los negocios internacionales.

#### **GMB 672S Administración del Riesgo Glob**

Este curso presenta teorías de la administración de riesgos para negocios internacionales así como situaciones que permitirán al estudiante aplicar estos conceptos e integrarlos a sus experiencias profesionales, y las de sus compañeros de clase. Al desarrollar planes de acción alternativos, se anima al estudiante a que analice una amplia gama de posibles riesgos relacionados, y que evalúe las repercusiones a corto y largo plazo de las posibles decisiones en la administración de riesgos.

### **GMB 673S Alianzas Estratégicas Globales**

Este curso utiliza teorías económicas y estratégicas para analizar el comportamiento competitivo de las organizaciones. Se pretende que el estudiante sea capaz de evaluar las decisiones estratégicas tomadas por las organizaciones en el ambiente competitivo dinámico del comercio internacional. El curso examina los impactos que las decisiones comerciales tienen en la supervivencia y rentabilidad de una organización. El ambiente competitivo se analiza en términos de factores culturales, económicos, sociales, político-legales y tecnológicos.

### **GMB 674S Estrategias Competitivas Globales**

Utiliza las teorías estratégicas y económicas para analizar el comportamiento competitivo de las organizaciones. Capacita al estudiante en la valoración de las opciones estratégicas implementadas por las organizaciones en el entorno dinámico y competitivo de los negocios globales. El curso examina también el impacto de las opciones de negocios en la supervivencia y rentabilidad de una organización, mediante la toma de decisiones utilizando programas de simulación o equivalentes. El entorno competitivo es analizado en función de los factores culturales, económicos, sociales, legales, políticos y tecnológicos.

### **GMB 682S Contabilidad Gerencial**

El enfoque de este curso es el contenido, análisis e interpretación de la información financiera y contable utilizada por ejecutivos en la toma de decisiones estratégicas necesarias, para lograr las metas de la organización. El curso incluye también temas de contabilidad internacional y el impacto ético de los mismos.

### **GMB 683S Administración Financiera Global**

Este curso es una introducción al marco conceptual dentro del cual se analizan las decisiones financieras más importantes de las corporaciones multinacionales. Incluye la Balanza de pagos internacional, la determinación del tipo de cambio, el riesgo cambiario, las coberturas cambiarias y el arbitraje de intereses, los mercados internacionales y la administración de la cartera internacional.

### **GMB 689S Liderazgo y Negociaciones**

El curso examina la naturaleza y proceso del liderazgo, así como el desarrollo de estrategias de negociación en el ambiente ejecutivo. Investiga las teorías de liderazgo, negociaciones, regateo y solución de conflictos. Enfatiza el estudio de casos y la solución de problemas utilizando modelos éticos de negocios.

### **GMB 696S Proyecto MBA**

*Prerequisites: haber completado todos los cursos fundamentales*

Trabajando en equipos o en forma individual, y bajo la tutela de un asesor académico, los estudiantes clarifican los temas de investigación e identifican las fuentes y recursos necesarios para recopilar datos e información, a fin de preparar su proyecto final de grado. Posteriormente, los estudiantes recopilan datos, desarrollan y presentan su investigación en forma escrita a la organización-cliente (cuando aplica), y al instructor para ser evaluada.

## **ENGLISH DESCRIPTIONS**

### **GMB 689S Leadership and Negotiations**

This course examines the nature and process of leadership and developing negotiation strategies in executive environments. It surveys theories of leadership, negotiations, bargaining and conflict resolution. The course emphasizes case studies and problem solving employing ethical business models.

### **GMB 620S Electronic Business**

Introduction and overview of Internet enabled business transactions from a managerial perspective. The course serves as foundation for the E-Business program and addresses E-Business strategies, Cyberlaw, Internet marketing, Internet infrastructure and security, E-Business applications and highly relevant emerging Internet business models.

### **GMB 601S Statistics for Business**

An examination of the increasing complexity of business problem-solving confronting today's managers, this course covers the role statistics and forecasting play in the business decision-making process, as well as the principles and steps involved in planning and conducting business research. Within the context of this course, students propose to study a situation that exists within an organizational setting and identify a faculty research advisor with knowledge in the focus area.

### **GMB 631S Global Marketing**

A study of strategic planning and organizing for international marketing, researching global markets, marketing consumer products, industrial products, and services in the world market, the course explores the international advertising and promotion effort, personal selling and personnel management, pricing, distribution systems, export trade mechanics and logistics, financial requirements for international marketing, and coordinating and controlling global operations. It also discusses the effect of trade agreements on international business.

### **GMB 673S Global Strategic Alliances**

This course examines new market opportunities, competitive threats and diffusion of business models associated with international business. Students develop the ability to evaluate the strategic use of alliances within broad competitive strategies. The formation of strategic alliances as a tool among multinational and international organizations is discussed in order to maximize the efficient and effective allocation of resources in pursuit of competitive advantage.

### **GMB 682S Managerial Accounting**

The focus of this course is on the content, analysis, and interpretation of the financial and managerial accounting information used by managers in making the strategic decisions necessary to achieve organizational goals. The course also includes international accounting issues and the ethical impacts of such issues.

### **GMB 672S Global Risk Management**

This course presents theories of risk management in international business and situations that will allow students to apply these concepts and integrate them with their own experiences and those of classmates.

In developing alternative potential action plans, the student is encouraged to analyze a wide range of risk related situations and to evaluate short-term and long-term ramifications of decisions in risk management.

### **GMB 683S Global Financial Management**

This course introduces students to the conceptual framework within which the key financial decisions of multinational corporations can be analyzed. It covers the international balance of payments, foreign exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international portfolio management.

### **GMB 674S Global Competitive Strategies**

This course uses economic and strategy theories to analyze the competitive behavior of organizations. It is intended to enable the student to assess the strategic choices made by organizations in the dynamic competitive environment of international business. The course examines the impacts that business choices have on the survival and profitability of an organization. The competitive environment is analyzed in terms of cultural, economic, societal, political-legal, and technological factors.

### **GMB 602S Strategic Decision-Making**

(A capstone course for MBA students To enroll in GMB 602S, MBA students must first complete at least 30 quarter units of the BA program requirements, other than GMB 696S.) An in-depth study of general management functions as organizations adapt to the global environment, this course emphasizes environmental characteristics that make strategic management critical to organizational success, including assessment of organizational strengths and weaknesses, identification of opportunities and threats, optimum response to unanticipated events, and strategic analysis in turbulent environments. It also analyzes the sociocultural, political, economic, ethical, technological, and regulatory environments that have an impact on businesses in multicultural settings. The course places special focus on the impact of NAFTA and WTO upon the strategic management of business enterprises. Explores global business opportunities provided through new technologies for both small firms and large corporations.

### **GMB 696S MBA Project**

(Prerequisites: Must have completed all core classes.) Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and present their research in written form to the client organization, if applicable, and to the instructor. Grading is by H, S, or U only. This course is two months in length.

## **HCA - Healthcare Administration**

### **HCA 100 U.S. Healthcare System**

Organization of U.S. healthcare delivery systems. Topics include health policy, professional organizations, healthcare delivery settings and public health agencies, professional roles, legal and regulatory issues, payment systems and health workforce.

**HCA 200 Health Organization Management**

Introduction to principles of leadership and effective management of teams. Emphasis on the leadership modes and styles best suited to IT deployment. Project management tools and techniques that result in the ability to create and follow a project management plan will be introduced.

**HCA 400 Foundations of HC Leadership**

*Recommended Preparation: Completion of all Coursework in Preparation for the Major*

Foundational introduction to the healthcare management profession. Examination of the theories, principles, and styles related to leadership, administration, and management as applied to healthcare organizations. Focuses on evolving trends in management, management and leadership theories, and skills in planning, organizing, decision-making, staffing, leading, communicating and motivating health care personnel.

**HCA 401 Intro to HA HR Management**

*Recommended: Prior completion of: all Coursework in Preparation for the Major*

Concepts of human resources in healthcare organizations, such as training, motivation and direction. Elements of employee selection, compensation, financial incentives, work standards, and leadership principles in healthcare organization considered.

**HCA 402 Intro to HA QA Management**

*Prerequisites: Completion of all Coursework in Preparation for the Major.*

Introduction to continuous quality improvement in healthcare. Includes evaluation and risk management methods. Introduces outcome measurement and case management fundamentals. Introduces team development, analytical statistics, and process knowledge themes.

**HCA 403 Intro to Health Economics**

*Recommended: Prior completion of: All Coursework in Preparation for the Major.(BSHA Majors)*

Introduction to the application of economics to decisions regarding the amount, organization, and distribution of healthcare services. Examine the structure, organization, activities, functions, and problems of healthcare from an economic perspective. Emphasis on management problems and policy issues in healthcare with regard to allocation of scarce resources.

**HCA 405 Basic HA Budgeting & Finance**

*Recommended: Prior completion of: all Coursework in Preparation for the Major (BSHA students).*

Fundamentals of healthcare financial management and budgeting, including financial organization of healthcare services, sources of operating revenues, management of working capital, and allocation, control, and analysis of resources.

**HCA 407 Intro to HC Planning and Eval**

*Recommended Preparation: Completion of all courses in Preparation for the Major*

*Recommended: Prior completion of: HSC 410 HCA 402 HCA 403 HCM 405*

Development of planning strategies in healthcare organizations. Examination of planning methods from needs assessment through program design. Emphasis on strategic planning strategies.

**HCA 409 Intro to HC Marketing**

*Recommended Preparation: Completion of all courses in Preparation for the Major*

*Recommended: Prior completion of: HCA 407*

Introduction to contemporary marketing theory, strategies, and implementation processes in healthcare organizations. Focus on identification of market opportunity, communication, planning and promotion, pricing decision-making, and development of distribution channels and service designs. Emphasis on community and not-for-profit marketing concepts.

**HCA 425 Healthcare Politics & Policy**

*Recommended: Prior completion of: all Coursework in Preparation for the Major (BSHA students).*

Consideration of healthcare policy and politics. Consideration of the role of federal, state and local government healthcare public policy impact on health services.

**HCA 450 Global Health Systems**

*Recommended: Prior completion of: all Coursework in Preparation for the Major (BSHA students).*

Examination of factors that impact global health systems; analysis of health care delivery systems and influential governmental, economic, social and political forces. Consideration of healthcare resource development and allocation.

**HCA 494A Healthcare Internship**

*Prerequisites: HSC 300, HSC 310, HCA 400, HCA 401, HCA 402, HCA 403, HSC 410, HSC 430, HCA 405, HCA 407, HCA 409, HCA 425, HCA 450, ODV 420*

Practical application of the knowledge and skills required for a healthcare administration professional in a healthcare agency. Students will be assigned to agencies according to their interests and the availability of an approved internship site. Two month requirement. Grading is by S/U only. Course is eligible for In Progress (IP) grade.

**HCA 600 U.S. Healthcare System**

US healthcare system overview, including terminology, components of healthcare delivery systems, financing, personnel, regulation, delivery and consumers. Consideration of the effects of public policy on services.

**HCA 605 Evidenced Based Healthcare**

This course is designed to give the student a fundamental understanding of evidence based healthcare and its impact on clinical trials. Emphasis will be placed on qualitative and quantitative measurements of evidence including cohort studies, healthcare technologies, outcome measurements randomized and non-randomized studies, data sets and trial outcomes.

**HCA 610 Health Policy**

Focuses on the development of public policy concerning medical care and public health and the relationship between public decisions and the market place. Using contemporary policy issues as case studies, examines the role science, ideology, culture, and history play in influencing the structure of and changes to a nation's health system.

**HCA 620 Health Organization Management**

Healthcare organization theories and structure,

including analyses of managerial functions, relationships, and operations for service delivery. Development of effective service delivery systems. Appreciation of external influences including community, financial institutions, socioeconomic environment, and regulatory agencies. Examination of professional roles, responsibilities, and accountability. Understanding of organizational mission, goals, objectives and priorities.

**HCA 622 Quality Appraisal & Evaluation**

Theoretical and practical frameworks to facilitate the continuous improvement of quality in healthcare organizations. Includes evaluation and risk management methods. Introduces multiple approaches, including outcome measurement and case management. Team development, analytical statistics, and process knowledge are central themes.

**HCA 624 Healthcare Planning & Marketin**

Strategic planning for healthcare organizations based on the analyses of secondary quantitative and qualitative data about technological, social, political, regulatory, and competitive aspects of the healthcare market. Marketing principles and tools for the development of a healthcare organization marketing plan.

**HCA 626 Healthcare Information Systems**

Effective data and information technology utilization to improve performance in healthcare organizations: including information systems, databases and analytical tools to structure, analyze and present information; legal and ethical issues affecting management of healthcare information.

**HCA 628 HA Human Resources Management**

Study of healthcare organization, training, motivation and direction of employees while maintaining high level productivity and morale. Includes selection, compensation, financial incentives, work standards, and leadership principles in healthcare organization.

**HCA 630 Healthcare Law & Ethics**

Legal, regulatory, and ethical dimensions of healthcare examined. Development and application of laws and regulations analyzed. Interpretation of uses of policy, law, and regulation changes and needs. Analysis of statutes and court decisions affecting healthcare. Ethical dimensions of healthcare organizations, their personnel and professionals considered.

**HCA 650 Medical Practice Management**

Management and operational theory and practice for contemporary medical group administration, with emphasis on managed care delivery systems.

**HCA 660 Health Economics**

Application of healthcare economics to decisions regarding the amount, organization, and distribution of healthcare services. Examine the structure, organization, activities, functions, and problems of healthcare from an economic perspective. Emphasis on management problems and policy issues in healthcare with regard to allocation of scarce resources.

**HCA 663 Healthcare Accounting/Finance**

Application of healthcare accounting and finance theories to decisions in healthcare environments. Emphasis on management problems and policy is-

sues regarding allocation of resources, payments systems, capital investments and budgeting.

### **HCA 670 Healthcare Leadership**

Concepts of leadership related to current healthcare organizations. Communications - including public relations - team building, negotiation, and conflict resolution considered. Strategic aspects such as vision, viewpoint, and mission included. Managing uncertainty emphasized.

### **HCA 691 Healthcare Internship**

*Prerequisites:* HCA 600, COH 602, HCA 610, HCA 620, HCA 622, COH 606, HCA 624, HCA 626, HCA 628, HCA 630, HCA 660, HCA 663, COH 611, HCA 670, and permission by instructor

Minimum of 120 hours of structured work experience in a healthcare organization under the direct supervision of one or more experienced healthcare managers. Grading is by S or U only. Course is eligible for an "IP" grade.

### **HCA 692 Healthcare Capstone**

*Prerequisites:* HCA 691 or permission by instructor.

Two-month capstone project focused on a relevant problem in healthcare administration theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to healthcare administration.

## **HCM - Hospitality and Casino Management**

### **HCM 200 Basic Accounting**

Foundation course in the accounting processes applicable to the hotel, resort, or casino environment. Students will be introduced to the generally accepted accounting principles (GAAP) and legal requirements of financial reporting in the hospitality and casino industries.

### **HCM 210 Intro to Gaming Law**

*Prerequisites:* HCM 200

Introduction to the various state and federal laws and regulations which pertain to the operation of gaming casinos in the hospitality industry. Additionally, this course provides essential background information to provide the student a broad introduction to the variety of laws in the United States.

### **HCM 220 Intro to Casino Marketing**

*Prerequisites:* HCM 200

Examination of the application of the traditional marketing functions to the areas of the hospitality and casino industries. Students will develop the fundamental skills required in the use of marketing tools.

### **HCM 230 Hospitality Staffing**

*Prerequisites:* HCM 200

Introduction to the management of personnel, including the recruitment, selection, and evaluation of employees in the hospitality industry. Additionally, this course provides the foundation for the development of employee motivation and teambuilding skills.

### **HCM 240 Hospitality Diversity**

*Prerequisites:* HCM 200

Introduction to the increasing cultural diversity

found in both the consumer and employee populations. Additionally, this course provides students with a supervisory perspective on employee issues regarding cultural awareness.

### **HCM 250 Tribal Community Dev**

*Prerequisites:* HCM 200

Foundation course in Native American community and economic development. Issues regarding positive and negative impacts of casinos on the lives of tribal members, as well as on the community relations with the non-tribal community will be discussed.

### **HCM 400 Princ of Hosp & Casino Acct**

This course encompasses financial reporting systems, internal controls, managerial reporting and federal and state regulations that impact the accounting in a hotel, resort or casino environment. Students will gain hands-on experience in complying with GAAP and legal requirements of financial reporting in the hospitality and casino industries.

### **HCM 401 Intro to Casino Management**

This course is an overview of the Native American Casino management trival gaming operations. It includes the history of Tribal Government Gaming, a description of gaming component and their inter-relationship to the hospitality industry. This course also shows the industry's growth opportunities and identifies the potential for employment success. The study of casino departments and procedures is linked to an analysis of successful casino management and leadership practices.

### **HCM 402 Service in the Casino Industry**

This course is a study of the casino resort industry with special focus on customer service issues in the development of a leisure industry. Overview of the customer service skills required in various casino operations, including establishing teamwork, developing employee motivation, and creating customer service actions. Ways to achieve outstanding customer service through time management, stress reduction and sensitivity development.

### **HCM 405 Casino Operations Management**

This course provides an overview of a manager's responsibilities behind the scenes in the gaming industry. Operations management is an important discipline that carefully manages the processes and products that provide services. Managers need to understand how resort and casino industries function on an operational basis in order to better identify opportunities for creating efficiencies in their processes and related activities.

### **HCM 410 Hospitality and Gaming Law**

This course will examine the role that differing state and federal laws and regulations will play in the operation of hotels, resorts and casinos. The limitations and exceptions to these laws they apply to Tribal Lands will be assessed. It provides the essential information that managers need to comply with the law and to develop preventative tactics to avoid lawsuits.

### **HCM 415 Gaming Rules and Regulations**

This course is an examination of casino operations including the basic mathematics of probability, expected value, and the house percentages. Based on

the Minimum Internal Control System (MICS) negotiated through the compact and the Indian Gaming Regulation Act (IGRA) the course will review compliance issues in table games and video/slot operations as well as all areas related to rules and gaming procedures and examines concepts to protect game integrity, tribal assets and establish internal controls. Methods of scam detection and internal control systems employed by the casino will be illustrated.

### **HCM 420 Hospitality and Casino Mkt**

This course will examine the application of the traditional marketing functions to the areas of the hospitality and casino industries. Students will develop plans for the use of convention and promotional events as marketing tools.

### **HCM 425 Management of Gaming Revenues**

This course is a practical study in cash cage operations, including drop team operations, count room and basic principles of revenue audit. This includes the understanding and application of title 31 requirements and the practice of generation Suspicious Activity Reporting. The practical aspect of this course includes the proper counting, balancing and recording of cash, checks, credits, token chips and slot tickets.

### **HCM 430 Prin of Hosp & Casino Staffing**

This course addresses the planning for the management of personnel, including the recruitment, selection, and evaluation of employees in the hospitality industry. Job analyses and descriptions developed and government regulations examined.

### **HCM 435 Casino Security/Surveillance**

This course introduces the concepts and training in the field of security/safety, security techniques and video surveillance. It covers the basic security principles in Casinos: "To observe and report", the laws and powers of arrest, detainment, search and seizure, patrol procedures, report writing, field note taking, security systems and investigative techniques. It further explains the basic function and set-up of surveillance equipment and operational surveillance procedures to provide fairness of the games and game protection. Examples of scams, cheats and fraud illustrate the importance of security and surveillance in the protection of tribal assets.

### **HCM 440 Cultural Diversity & Hosp Mgt**

This course is designed to discuss the importance of cultural awareness and sensitivity in effective human resources management practices in the hospitality industry. The course examines the increasing cultural diversity found in both the consumer and employee populations and how managers can address different cultural needs of the relevant populations.

### **HCM 445 Player Development Program**

This course is a practical study that increases the understanding and furthers the implementation of an effective Player Rating System with the purpose of developing a loyal player development program. This course connects the various marketing efforts of a tribal casino with the responsible development of gaming guests. It analyzes and shows the advantages and disadvantages of comps and promotions. The student will also gain a better appreciation of the role of Gaming Information Technology towards building an individualized and appropriate Player development program.

### **HCM 450 Native Am Tribal Comm Developm**

This course is an introduction to the issues and concepts of the Native American community and economic development. Discussion of the positive and negative impacts of casinos on the lives of tribal members, as well as on the community relations with the non-tribal community will be examined.

### **HCM 480 Casino Internship**

This course is on-the-job learning experience which matches individual HCM students with working mentors in a major casino. This will provide an in depth application to the entire range of Casino operations, exclusive of the table games and slots departments. These operations are divided into the following departments: Administration, Finance, Cash Operations, Security, Food & Beverage, Retail Stores, entertainment, Guest Services or Customer Service, Marketing and Human Resources. Over the course of the work experience, students will gain valuable hands-on experience as they rotate through these departments. Weekly mentoring provides extra depth and background. Students are expected to put this learning to use in actual casino operations under the supervision of a trained gaming professional. At the end of each module, the student will write a short paper describing the learning achieved during the module.

### **HCM 490 Capstone Project**

The capstone course is designed to be the culminating work of the Bachelor's degree in Hospitality and Casino Management. Under the guidance of the instructor, students will design a project to demonstrate their mastery of the core components of the program, various managerial approaches and frameworks. Students will include scholarly research, attention to ethical frameworks, and critical analysis in their project. A professional presentation of 10-15 minutes of the student's project is required.

## **HED - Health Education**

### **HED 110 First Aid and CPR**

Focus is on how to recognize and act in an emergency. Strategies to maintain life until professional help arrives will be included. The 2005 national guidelines for breathing and cardiac emergency including CPR, choking and using an automated external defibrillator (AED) will be discussed. A National Safety Council completion card for CPR and First Aid will be available at successful completion of the course.

### **HED 212 Nutrition and Fitness**

Focus is on how nutrition relates to health. The function of nutrients including micro nutrients will be discussed. Provides a basic understanding of nutrition and fitness as it relates to health promotion and health education.

### **HED 220 Health, Nutrition and Safety**

Focus on the eight components for coordinated health for young children in out-of-home care. Health, physical education, health and nutrition services, health promotion for the staff, counseling and psychological services, a safe healthy environment, and family involvement, and community resources and personnel will be addressed. Attention will be di-

rected towards children with special needs and challenging behaviors as well as legal and ethical issues in the field of early childhood.

### **HED 308 Mental and Emotional Health**

*Recommended: Prior completion of: COH 318*

Exploration of emotional wellbeing and mental health issues including stress, anxiety, depression, grief, self-abuse/ suicide, eating disorders, anger and oppositional defiance disorders. Resiliency, health choices, and lifestyle factors effecting overall health and well-being along with identification, intervention, and referral strategies will be examined.

### **HED 311 Health Literacy**

Examine health literacy crisis in the United States and around the world, the issues and challenges of low health literacy, and populations at risk for low literacy. Address effective strategies to meet the challenges of low health literacy and of cultural and linguistically diverse populations.

### **HED 351 Coordinated School Health**

*Prerequisites: COH 100*

*Recommended: Prior completion of: COH 321*

Focus on the components of a coordinated school health program and the relationship between school-based health and community health programs. Components and effectiveness of exemplary programs: roles of parents, schools, the school nurse, and the community; and evidence-based strategies to improve children's health will be explored.

### **HED 414 Violence & Bullying Prevention**

Focus on the nature, extent, causes and consequences, and remedies to forms of school violence, bullying, harassment, and cyber-intimidation. Discuss the personal, social, and legal ramifications and requirements for providing a safe, inclusive school environment. Explore preventative strategies and conflict-resolution techniques educators can utilize when issues occur.

## **HIS - History**

### **HIS 220A United States History I**

*Prerequisites: ENG 100, and ENG 101*

Survey of American history from pre-colonial times through Reconstruction. Explores economic, political, social and cultural factors that shaped the origins of the nation, including the Revolution, the Constitution and the Civil War. Special attention is paid to issues of race, class, gender and ethnicity. Includes study of the Constitution.

### **HIS 220B United States History II**

*Prerequisites: ENG 100, and ENG 101*

Survey of American history from Reconstruction to the present. Explores economic, political, social, and cultural factors that shaped the development of the nation, including industrialization, America's emergence as a world power and the challenges of the late 20th century. Pays special attention to issues of race, class, gender and ethnicity.

### **HIS 233 World Civilizations I**

*Prerequisites: ENG 100, and ENG 101*

Discusses how distinctive cultures, economies and

societies of the world developed from prehistoric times to the European conquest of the Americas (ca. 1500 C.E.). Explores issues of gender, class, personal identity, war, religion, urban life, and ecology pertaining to the history of civilizations in Asia, Africa, the Americas, and Europe.

### **HIS 234 World Civilizations II**

*Prerequisites: ENG 100, and ENG 101*

Discusses how the cultures, economies, and societies of the world developed since 1500 C.E. Explores issues of class and class conflict, personal and cultural identity, race, work, industrial development, colonialism, ecology, and political and economic life pertaining to the history of civilizations in Asia, Africa, the Americas, and Europe.

### **HIS 300 Roots of Western Civilization**

*Prerequisites: ENG 100, and ENG 101*

Explores social, material, cultural, and intellectual bases of European civilization and relates them to major Afro-Eurasian civilizations. Examines hunting-gathering and early agricultural societies; ancient Mesopotamia, Egypt, and Judea; classical Greece and Rome; rise of Christianity; nomadic invasions of Europe; Byzantine and Islamic influences; and Europe's medieval synthesis.

### **HIS 320 Culture of Global Capitalism**

*Prerequisites: ENG 100, ENG 101*

Places contemporary cultural, economic and technological issues in a global and historical perspective. Examines the ways that capitalism, culture, and technology have interacted over the past 500 years to shape the places, peoples and societies that have come into existence in the modern world.

### **HIS 325 Modern World Migration**

*Prerequisites: ENG 100, ENG 101*

Human migration is the story of individual lives enmeshed in larger historical issues of identity, culture, work, social institutions and various forms of coercion. Explores how work and migration have intersected in the last 500 years to shape the world in which we live today.

### **HIS 339 The Middle East, 600-1600 C.E.**

*Prerequisites: ENG 100, ENG 101*

Examines the Middle East from before the rise of Islam to the Muslim conquest of Constantinople. Includes the life style of the desert nomad, Muhammad and founding of the Islamic state, its expansion through the Middle East and beyond, and the various non-Arab dynasties and empires that took over.

### **HIS 341 History Through Theater**

*Prerequisites: ENG 100, ENG 101*

Explores history through the complex medium of theater. Focuses on a variety of dramatic and theatrical techniques, including readers' theater, role-playing debates, improvisation and formal dramatizations. Scripts historical literature into performance. Studies various plays in order to gain a broader understanding of key historical issues in diverse cultures.

### **HIS 342 History of Modern Middle East**

*Prerequisites: ENG 100, ENG 101*

Investigates roots of present-day events in Modern Middle East since 1600 CE. Surveys history of the

region, pre-modern empires, European colonization, and renaissance of Middle East culture in the 18th and 19th century, movement toward independent states, and emergence of Pan-Arabism and Islamist ideologies of the 20th century.

### **HIS 345 Latin American Studies**

*Prerequisites: ENG 100, ENG 101*

Introduction to Latin American history and culture focusing on diversity of Latin American societies and their multicultural heritage. Topics include colonialism and indigenous societies, growth of plantation and mining economies, enslavement of Africans, struggle for independence, distribution of political power, recurrence of popular rebellion, and artistic and cultural life.

### **HIS 346 Chinese History and Culture I**

*Prerequisites: ENG 100, ENG 101*

A historical overview of Chinese civilization from its Neolithic origins to the founding of the Ming Dynasty. The foundations of Chinese civilization and the core of Chinese culture will be elucidated through a focus on key aspects of governance, economy, foreign relations, literature and the arts, and their development during this period.

### **HIS 348 Asian Studies**

*Prerequisites: ENG 100, ENG 101*

Overview of contemporary Asian history and culture focusing on the diversity of Asian societies. Includes distribution of political power, ideological and structural stratification between East and West, impact of "Orientalism" in global context, impact of imperialism, effects of sexual and religious stratification, and discussion of political and religious differences.

### **HIS 349 African Studies**

*Prerequisites: ENG 100, ENG 101*

Survey of major themes, issues, and personalities in African history since 1500. Topics include: kingdoms and empires, population movements, spread of Islam, slave trade era, abolition of slave trade, European imperialism, impact of colonialism, religious and cultural movements, nationalism and pan-Africanism, ethnicity and identity in modern Africa.

### **HIS 355 Chinese History and Culture II**

*Prerequisites: ENG 100, ENG 101*

An overview from the Ming Dynasty to the founding of the People's Republic of China in 1949. These six centuries witnessed challenges that radically altered the nation. We will examine key components of this process and its influence on Chinese society, economy, culture, politics and foreign relations.

### **HIS 360 American Colonial Experience**

*Prerequisites: ENG 100, ENG 101, and HIS 220A*

Examines the various peoples and the economic, environmental, cultural, and political forces that shaped American development from the period before Europeans settled through the American Revolution. It evaluates key ecological changes after 1500 and the shaping of North American colonial society by mercantilism, merchant capitalism, and the slave trade.

### **HIS 361 Making and Sundering of Union**

*Prerequisites: ENG 100, ENG 101, and HIS 220A*

Examines development of American society from

the early national period through the Civil War (1783- 1865), including framing of Constitution, westward expansion, economic development, slavery, sectional conflict, as well as an evaluation of the social, political, and military problems faced by the contending sides in the Civil War.

### **HIS 362 U.S. Between Wars, 1865-1917**

*Prerequisites: ENG 100, ENG 101, and HIS 220B*

Examines transformation of America and expansion of American influence after the Civil War through World War I. Includes reconstruction; demographic and economic expansion; industrialization and its consequences for labor and social relations; mass immigration; growth of American imperialism; socialist, populist, and progressive movements; and World War I and Wilsonianism.

### **HIS 363 U.S. Since World War I**

*Prerequisites: ENG 100, ENG 101, and HIS 220B*

Examines social, economic, cultural, and political contours of modern America from 1920 to the present, including Great Depression, social dimensions of World War II, affluence and anxieties of 1950s, political and social movements of 1960s, and challenges of structuring a new global political economy in the 1970s and after.

### **HIS 370 History of the American S/W**

*Prerequisites: ENG 100, ENG 101*

Examines what has attracted people to the Southwest over the last thousand years and how people have changed and enriched the region through diverse cultural, social and economic contributions. Places race relations, immigration, environmental concerns, resource use, cultural beliefs, gender roles, public order and working life into historical perspective.

### **HIS 375 Nevada History, Gov't and Cons**

*Prerequisites: ENG 100, ENG 101*

Through an historical and literary approach, this course examines the history of the state of Nevada from the Native peoples to the present. Includes a component on Nevada Constitution required for graduation from all Nevada colleges and universities.

### **HIS 400 Historical Theories & Methods**

*Prerequisites: ENG 240*

Investigates the important methodologies and theories of history that buttress contemporary historical scholarship. Includes introduction to historiography; examines transformation of the historical profession over last 150 years and philosophical foundations of historical practice today; explores writings of historian, their historical assumptions, and theoretical framework of their interpretations.

### **HIS 410 California History**

*Prerequisites: ENG 100, ENG 101*

Through an historical and literary approach, this course examines the interaction of the hopes and dreams of the peoples of California from the arrival of the first peoples to the post-World War II boom. May involve work in oral history.

### **HIS 420 The Civil War**

*Prerequisites: ENG 100, ENG 101*

An examination of the dynamic convergence of economic, geopolitical and racial factors that contribut-

ed to the most explosive conflict in U.S. history. Focuses on the consequences of the war for subsequent American historical development.

### **HIS 431 The Ancient World**

*Prerequisites: ENG 100, ENG 101, and HIS 233*

Examines ancient world history from 10,000 B.C.E. to 500 B.C.E., including Neolithic revolution; rise of settled agriculture; complex societies and organized states in North Africa, Southwest Asia, South and East Asia, Mesoamerica, and South America; rise and decline of great powers in those areas; formation of Aegean civilization in Greece.

### **HIS 432 The Classical World**

*Prerequisites: ENG 100, ENG 101, and HIS 233*

Examines religious, political and philosophical innovations of classical period (500 B.C.E. to 500 C.E.) in Mediterranean region, China, and India; rise and fall of Greek, Roman, Han, Mauryan and Gupta empires; rise of important regional states like Meroë, Angkor, Teotihuacán, and Maya city-states in Mesoamerica.

### **HIS 433 The Post-Classical World**

*Prerequisites: ENG 100, ENG 101, and HIS 233*

Examines expansion and collapse of Byzantium; nomadic invasions of Europe and development of feudalism; rise of militant Christianity; diffusion of militant Islam; spread of Indian classical culture; Chinese reunification, commercial revolution, and cultural revival; Japanese feudalism; development of African states; civilizations of Mesoamerica; settlement of Polynesians throughout Pacific.

### **HIS 434 Modern World, 1500 to Present**

*Prerequisites: ENG 100, ENG 101, and HIS 234*

Examines colonial expansion of Europe; Islamic empires of Asia; regional powers in Eurasia; revolutions in the Atlantic world; the Industrial Revolution; the new imperialism; revolutions in Eurasia and Latin America after 1900; global wars and their consequences; national liberation and decolonization; the Cold War; post-Cold War realignments.

### **HIS 490 Guided Study (variable units)**

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### **HIS 499 Capstone Research Project**

*Prerequisites: ENG 240 or equivalent, HIS 400, and completion of 31.5 quarter units of core courses in the major*

This seminar is the capstone course for the history major. The objective of the capstone course is to produce a paper that is exemplified by extensive research, critical thought, and intellectual engagement. The project should excite students and deepen their historical understanding. As a "senior project," it will combine primary sources with secondary interpretations in an original and interesting way.

### **HIS 600 Seminar in History and Theory**

Critical examination of the major methodological and philosophical foundations of modern historical research and writing.

**HIS 618A Seminar in Modern Europe I***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on early-modern European history (ca. 1500-1789). Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

**HIS 618B Seminar in Modern Europe II***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature in modern European history since the French Revolution of 1789. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

**HIS 620A Seminar in US History I***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on American history through the Civil War. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, and diplomatic history.

**HIS 620B Seminar in US History II***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on U.S. history since the Civil War. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, and diplomatic history.

**HIS 630 Seminar in World History***Prerequisites: HIS 600*

Critical examination of major themes and topics as well as advanced research in the current scholarly literature in the field of world history. Emphasizes the re-conceptualizations needed to research and write world history. Subject areas may include, but are not limited to, political, economic, intellectual, cultural, social, and environmental history.

**HIS 640 Seminar in Comparative History***Prerequisites: HIS 600*

Critical examination of major themes and topics as well as advanced research in the current scholarly literature in the field of comparative history. Highlights the interdisciplinary nature of comparative history. Subject areas may include, but are not limited to, political, economic, intellectual, cultural, social, and environmental history.

**HIS 645A Special Topics in History I***Prerequisites: HIS 600*

Advanced research in the current scholarly literature on a special topic in history. Variable topic chosen by the instructor. Possible topics include the history of work, imperialism, migration, gender, war, technology, family, or religion. (May not duplicate content of HIS 645B, HIS 649A or HIS 649B).

**HIS 645B Special Topics in History II***Prerequisites: HIS 600*

Advanced research in the current scholarly literature

on a special topic in history. Variable topic chosen by the instructor. Possible topics include the history of work, imperialism, migration, gender, war, technology, family, or religion. (May not duplicate content of HIS 645A, HIS 649A or HIS 649B).

**HIS 649A Seminar in a Period/Movement I***Prerequisites: HIS 600*

Advanced research in the current scholarly literature on a period or movement in history. Variable topic chosen by the instructor. Possible topics: Renaissance, antebellum U.S., Age of Empires, Nazi Germany, civil rights, labor, environmental or national liberation movements. (May not duplicate content of HIS 645A, HIS 645B or HIS 649B).

**HIS 649B Seminar in a Period/Movement I***Prerequisites: HIS 600*

Advanced research in the current scholarly literature on a period or movement in history. Variable topic chosen by the instructor. Possible topics: Renaissance, antebellum U.S., Age of Empires, Nazi Germany, civil rights, labor, environmental or national liberation movements. (May not duplicate content of HIS 645A, HIS 645B or HIS 649A).

**HIS 658 Seminar in Modern China***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on Chinese history since the establishment of the Qing dynasty (ca. 1615 C.E.). Areas may include, but are not limited to, political, military, economic, intellectual, cultural, social, environmental and diplomatic history.

**HIS 668 Seminar in Modern Middle East***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on Middle Eastern history since ca. 1450 C.E. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

**HIS 678 Seminar in Modern Africa***Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly debates on African history since ca. 1600. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

**HIS 688 Seminar in Latin America**

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on Latin American history since ca. 1500. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

**HIS 692 Methods and Sources***Prerequisites: HIS 600, and HIS 695*

Assessment and implementation of effective primary-source research strategies. Also includes assessment and implementation of methodologies for interpreting a wide variety of primary sources critically and professionally. Grading is H, S, or U only.

**HIS 695 Directed Research Methods***Prerequisites: HIS 600, HIS 618A, or HIS 618B, HIS 620A, or HIS 620B, HIS 630*

Directed research on a historical topic chosen by the student in consultation with the instructor and the student's thesis project advisor. Involves successful completion of a research prospectus (proposal).

**HIS 696 History and Applied Media***Prerequisites: HIS 600, HIS 695*

Directed application of new media technologies to a historical topic chosen by the student in consultation with the instructor and the student's thesis project advisor. Involves successful completion of a historical digital storytelling prospectus (proposal).

**HIS 697 Guided Thesis/Project Research***Prerequisites: HIS 600, HIS 692 and HIS 695*

Instructor-guided advanced research on students' specific Thesis or Multimedia Project topics. May be repeated. Grading is by H, S or U only.

**HIS 698 Media/Technology Project***Prerequisites: HIS 695, and HIS 696, Select four classes from the following: HIS 618A, or HIS 618B, HIS 620A, or HIS 620B, HIS 630, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678, HIS 688*

Two-month-long course. Required of all non-thesis history M.A. students as their last course. Culminates in the creation of a substantial, original multimedia website on a historical topic of personal interest involving the critical evaluation of primary sources and relevant secondary materials and interpretations and the writing of a well-developed commentary. Grading is on a H, S, or U basis only. Course if IP grade eligible.

**HIS 699 Thesis***Prerequisites: HIS 695 Select four classes from the following: HIS 618A, or HIS 618B, HIS 620A, or HIS 620B, HIS 630, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678, HIS 688*

Two-month long course. Required of all thesis history M.A. students as last course in program. Culminates in the research and writing of a substantial, original work on a historical topic of personal interest involving the critical examination and evaluation of primary sources as well as appropriate secondary materials and interpretations. At the end of the course, the student is issued an IP (In Progress) grade until a completed thesis is evaluated by the course instructor and the faculty advisor. Grading is H, S, or U only.

**HOS - Hospitality****HOS 200 Introduction to Hospitality**

Overview of the major segments of the hospitality industry. The structure and the operations of the industry are discussed in addition to career possibilities, industry trends to include lodging, gaming, food and beverage, and travel and tourism operations.

**HOS 220 Intercultural Competence**

Overview of the study of communication and culture within the hospitality industry. Specifically, the



ways that culture influences our communication and the development of both professional and personal relationships with people from different cultural backgrounds.

### **HOS 230 Emotional Intelligence**

Examination of concepts and practical applications of emotional intelligence. This course will focus on how to assess basic skills in emotional intelligence, how to develop strategies to improve and enhance basic skill levels, and techniques that facilitate dealing with others of varying emotional backgrounds and competency levels.

### **HOS 240 Hospitality Services Mgmt.**

Examination of concepts and practical applications of emotional intelligence. This course will focus on how to assess basic skills in emotional intelligence, how to develop strategies to improve and enhance basic skill levels, and techniques that facilitate dealing with others of varying emotional backgrounds and competency levels.

### **HOS 250 Exceptional Customer Service**

Exploration into the value of building relationships with customers and most importantly, developing a customer-focused philosophy. Create a foundation in customer loyalty. Develop service standards and track their effectiveness. Gain new insights and strategies from the leaders of customer service theory.

## **HRM - Human Resource Management**

### **HRM 200 Intro to Basic Human Resources**

Introductory overview of basic human resource management activities. Various functions of human resource management are explored including planning, staffing, training, compensation, motivation, employee development, benefits, performance evaluation, discipline, health and safety issues, employer-employee relationships, and compliance with employment laws.

### **HRM 210 Staffing and Development**

*Prerequisites: HRM 200*

Exploration of the basic aspects of the human resource planning process, including recruitment, selection, retention, and development of employees. Special attention is given to the strategic direction of an organization in assessing its human resource needs.

### **HRM 220 Compensating Employees**

*Prerequisites: HRM 200*

Overview of the fundamentals of wage and salary programs. Benefit programs and related employee incentive programs are explored. Linking performance to monetary and non-monetary rewards will be reviewed. Utilizing HR technology to increase efficiency in pay and benefits administration, as well as aligning HR with organizational activities will be highlighted.

### **HRM 230 Legal Aspects of Basic HRM**

*Prerequisites: HRM 200*

Introduction to the wide spectrum of legal concerns that human resource managers face in the workplace. Emphasis on employment discrimination laws as they relate to the employer-employee relationship.

EEO methods of liability prevention are examined. Integrated into the course are aspects of ethical considerations for HR managers.

### **HRM 409B Survey in HRM & OD**

The course provides an overview of human resources management and organizational development activities including employment, interviewing, career systems, compensation, benefits, training, organizational change, performance evaluation, discipline and employee assistance, labor relations, affirmative action and equal employment opportunity considerations, and health and safety.

### **HRM 432 Recruit, Selection, Promo, Ret**

This course is designed to explore all aspects of reviewing the strategic direction of an organization and how it relates to assessing and filling jobs, from initial hiring through subsequent placement, promotion, and retention. It will include techniques for determining staffing needs, recruiting, screening, assigning, evaluating, assessing, and promoting. An exploration of options for employee development and retention in changing economy is provided. Also reviewed are special concerns regarding regulations, employee attitudes, and union representation.

### **HRM 433 Pay & Benefit Admin, & HR Tech**

This course reviews the fundamentals of wage and salary programs, including the development of job descriptions, performing job evaluations, conducting salary surveys, adjusting pay structures, considering area differentials, and relating pay to performance. Benefit programs and related employee incentive and service programs are also covered. Ways to link performance to both monetary and non-monetary rewards will be reviewed, including profit sharing, bonus plans, stock options, awards and special rewards for managerial personnel. Legislative restraints and tax treatments are discussed and behavioral theories are highlighted as they apply in this area. The incorporation of technology as it relates to Human Resource Management Systems that increases efficiency in pay, benefits administration, and aligning HR with organizational activities are also covered. The synthesis of pay, benefits administration and HR technology integrates the selection, development and administration of practical programs and systems for attracting, motivating, and retaining human resources.

### **HRM 439 Legal, Reg, & Labor Relation C**

An introduction to the wide spectrum of legal and regulatory concerns that human resources managers face in the workplace (EEO laws, affirmative action, compliance requirements, prevention of employment-related liability). The course ties in the development, aims, structure and function of labor and employer organizations, examines the relationship of labor and management, and bargaining and resolution of employer-employee issues.

### **HRM 630 Legal, Ethical & Safety Issues**

A comprehensive analysis of the laws and regulations, both federal and state, that impact human resources management. The course emphasizes equal employment opportunity affirmative action, health and safety, privacy of information and methods of liability prevention in employment matters. Integrated into the course are aspects of ethical considerations as related to Human Resources Management, includ-

ing employer use of power, organizational business practices, and safety concerns.

### **HRM 633A Seminar in Employee Relations,**

The course provides students with both the day-to-day realm of common and complex issues related to human behavior in the workplace as it relates to employee relations, and an examination of relationships among unions, workers, management at the government. The course assesses legal restraints (i.e., negotiation, contract administration, decertification) and preparations and techniques for dealing with negotiations, strikes, and lock outs, as well as grievance handling and arbitration.

### **HRM 637 Workforce Plan, Dev & Outsource**

A comparison and evaluation of planning, organizing, directing and monitoring of human resources planning processes, including recruiting, selecting, placing and integrating individuals within organizations. A key aspect of the course is the selection process (testing and assessment of skills and traits that influence work performance), employee orientation and integration (employee development and career planning), and aspects of performance management. The course also covers current trends in employee outsourcing.

### **HRM 660 Theory & Practice of HRM**

A comprehensive management/practitioner-level overview and appraisal of current practices, trends, and applied theory in the era of strategic alignment between employees, jobs, systems, technology, policies, procedures, training, and organizational development. Students will evaluate and analyze theory as it relates to practical application in the workplace.

### **HRM 667 Compensation & Benefits**

This course provides an overview of the latest technology as it applies to the human resources function and its impact of human resource management administration and organizational development. The course also integrates and assesses fundamental aspects of wage, salary, benefit administration, and employee rewards and incentives as they are becoming increasingly supported by automated systems.

### **HRM 669 Research Sem in HRM Corp Strat**

This course is focused on a selected combination of published empirical research and current topics in corporate strategy and human resource management. Articles for evaluation, comparison, and analysis will be drawn from journals and popular press in several fields, including economics, the behavioral sciences, management science, business administration, and elsewhere as they relate to the field of Human Resource Management. Faculty will guide students through written review of research and current practices, and seminar discussions in order assist the HRM Professional serve as a consultant to company management.

### **HRM 670 Project/Thesis**

The project course offers an opportunity to work individually or with a team under the guidance of an assigned faculty member. Students clarify research topics and identify data sources in preparation for the project. Students gather data and present their research in both written and oral form to faculty and classmates. This course lasts two months and encom-

passes integrating critical components and learning experience into a deliverable that meets academic guidelines for program completion and may be applicable to the workplace to build a student's portfolio. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

## HSC - Health Science

### HSC 300 Legal/Ethical Issues & Hlth Pr

Focuses on legal and ethical concepts, principles of ethics and law and use in resolving ethical conflicts and dilemmas in health care. Scope of practice, informed consent, employee and patient rights and responsibilities, patient abuse, and the influence of finance and corporate culture will be explored. Sample cases will be analyzed.

### HSC 310 Issues & Trends in Healthcare

A history of the U.S. health care delivery system will be explored to understand the current issues and trends. The changing roles of the components of the system as well as technical, economic, political, and social forces effecting change will be discussed. Inpatient, outpatient, and long term care will be explored.

### HSC 330 Health Education & Promotion

Focuses on health education, health promotion and clinical preventive services. Strategies for counseling and education, health education theories and practices, and development of learner-centered instructional strategies will be explored. The cost-effectiveness of clinical preventive services will be discussed.

### HSC 400 Mgmt for Health Professionals

Focuses on planning, organizing, decision-making, staffing, leading or directing, communication and motivating health care personnel. Evolving trends in management, classic management theories, budget preparation and justification, training design and labor union contracts are explored.

### HSC 410 Informatics for Health Profs

Focuses on the role of informatics in contemporary health care. Wireless and mobile computing, maintaining data integrity, information security and confidentiality and HIPAA, telehealth, and electronic health records (EHR) will be explored.

### HSC 420 Healthcare Research

Focuses on reading and conducting research in health and human performance. Research approaches and procedures will be explored. Examples of various research methods and techniques will be discussed. A research proposal will be developed.

### HSC 430 Case and Outcomes Management

Focuses on case and outcomes management application to clinical practice. The case management and outcomes management processes, barriers, utilization review, legal and financial aspects of each and evidence-based healthcare will be explored.

### HSC 440 Allied Health Capstone Project

*Prerequisites: Completion of the major requirements*

This two-month capstone project undertaken by al-

lied health students when they have completed the core courses in the program provides an opportunity for the student to complete the outcomes management project proposal developed in HSC 430. Results will be reported orally and in written form. Students will also design and participate in a collaborative service learning experience in a community, ambulatory, home or health care setting. Students will complete the portfolio of their work from core courses and revise as needed to create an impressive final portfolio that can be used. Grading is H, S, or U only.

## HSE - Homeland Security and Emergency Management

### HSE 401 Domestic Security Management

A survey course reviewing the history, current practices, and trends in the management of domestic disaster operations. The course discusses the responsibilities different levels of government (federal, state, and local) and agencies have with respect to domestic disasters and their relationships with the private sector.

### HSE 420 Information Security

A survey of one of the fastest growing international crime problems. Cyber-terrorism has been quick to emerge as an enormous threat to national security and economy. This course exposes the students to the domestic, local, national and international effects of cyber-terrorism. It provides information on the categorizations of computer criminals based on the purposes and spheres of their activities

### HSE 430 Border-Transportation Security

A study of the substantial vulnerability of the nation's land borders, ports, inland waterways and airports to underwater and aviation related attack. This course educates students regarding operations underwater and at airports and enhances the knowledge necessary to identify, prevent, respond to, and recover from major catastrophes at our nation's borders and ports.

### HSE 440 Crisis Management

A study of incident assessment and methods that determine to what degree a crisis is unfolding and then develop a strategy to manage the consequences of the crisis. This course provides students with the knowledge of how local, state, and federal agencies come together and interact in different crisis scenarios.

### HSE 444 Disaster Management

This course discusses the management areas of policy, planning, coordination, response, response management, and recovery during emergencies and/or disasters; focusing on defining and analyzing the role of managers in critical situations of an unusual or severe nature resulting in injury, loss of life and/or severe property damage.

### HSE 470 Legal Issues of Security

A study of criminal and civil liability issues concerning government and private entities while preventing acts of terrorism, or during the recovery process after a critical incident. Exposes students to new congress-

sional laws that apply specifically to homeland and domestic security. Delves into the protection of individual rights explaining the legal background and methods to avoid the pitfalls of liability. Covers legal issues in First, Fourth, Fifth and Eighth Amendments, and how the U.S. Constitution can be applicable to both government and private entities and the responsibilities of each.

### HSE 475 Interviewing and Interrogation

Provides students with proven techniques which apply to both accusatory and non-accusatory interviews. Students develop skills in preparing for the interview and interrogation with emphasis on planning and strategies. Provides a basic format and fundamentals of specialized interviewing and interrogation methods for those who have little or no experience in this phase of an investigation. Studies one of the most specialized and difficult phases of law enforcement or security investigation-interrogation.

### HSE 490 Supervised Senior Project

*Prerequisites: Students must have fulfilled all General Education, Core Courses, and Elective Courses requirements prior to beginning this course.*

For the supervised senior project, a two month course is undertaken by students upon completion of all core courses in the program. Students select a committee and a viable topic related to domestic security to research, and present the completed project to the committee, other faculty, and peers in an open forum. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

## HTM - Healthcare Information Technology

### HTM 200 Health Information Systems

Development of IT systems in health care and public health. Introduction to health IT standards, health-related data structures, health information exchange, software applications; enterprise architecture in health care and public health organizations.

### HTM 200L Health Information Systems Lab

*Prerequisites: HTM 200*

Health information laboratory where vendor systems are introduced and compared. Students will work with simulated systems or real systems with simulated data; experience threats to security and appreciate the need for standards, high levels of usability, and how errors can occur.

### HTM 210 Healthcare Workflow Processes

Fundamentals of health workflow process analysis and redesign as a necessary component of complete practice automation; includes topics of process validation and change management.

### HTM 212 Electronic Health Records

Lecture and laboratory to introduce, select, configure and assess electronic health record (EHR) systems that meet the specific needs of small to medium sized healthcare providers and the introduction of Meaningful Use.

### HTM 214 Quality Improvement

Introduces the concepts of health IT and practice workflow redesign as instruments of quality improvement. How to establish a culture that supports increased qual-

ity and safety. Presents approaches to assessing patient safety issues and implementing quality management and reporting through electronic systems.

#### **HTM 290 EHR Implementation Project** (1.5 quarter units)

*Prerequisites:* HCA 100, COH 150, ITM 210, HTM 200, COH 250, HTM 200L, ITM 230, HTM 210, HTM 212, HTM 214, HCA 200 and MUL 200

Students will work in teams to plan and assess an EHR implementation. Focus on the importance of communication and group cohesion.

#### **HTM 310 Health Informatics**

Innovative and best practice technology applications to support human health by individuals, professionals, care delivery organizations, and communities. Internet-based health resources, smart phone/mHealth applications, telehealth, and health-related social networks. Systems, standards, and policies to connect people and technologies securely across healthcare ecosystems.

#### **HTM 460 Health IT Virtual Simulation**

*Prerequisites:* HSC 410

Laboratory-based course where administrative and clinical health information systems and technologies are introduced and practiced. Students will gain experience with simulated health information systems or real systems with simulated data.

#### **HTM 520 Health Information Exchange**

Health data standards, sources, representation, terminologies, vocabularies and ontologies to support interoperability of information within and between health care organizations. Health information security practices, privacy, confidentiality, and management of patient rights. Clinical data and process modeling for medical decision making. Policy development and documentation for exchange of health information.

#### **HTM 552 EHR Meaningful Use**

Introduces electronic health record (EHR) and communication systems including the application of Meaningful Use criteria to optimize quality and effectiveness of patient care and improve care coordination. Explore care delivery innovations across multiple care settings and specialties using a patient-centric model.

#### **HTM 605 Healthcare Info Technologies**

This course is designed to give the student a fundamental knowledge of evolving healthcare informatics and wireless healthcare delivery. Emphasis will be placed on the synergy between information systems and medical services with a focus on the improvement of medical standards and reduction of healthcare cost. Students will receive a comprehensive view of new and evolving e health and the rapid changes in healthcare delivery models due to the rapid improvement in healthcare information delivery. Informatics, e health and wireless response to the growing healthcare disease and delivery market will be explored.

#### **HTM 660 System Management and Planning**

Healthcare information technology lifecycle management and strategic planning; organization and management of informatics support staff and other

healthcare professionals to optimize the value from health information technology implementation.

#### **HTM 680 Health Informatics Case Study**

*Prerequisites:* HCA 600, HTM 660, CIS 601, HTM 520, HTM 552, COH 611, HCA 622, HCA 626

Health informatics case study requiring analysis and synthesis of complex human, financial, and technical resources for the strategic use of information technology in a healthcare organization. Students study best practice case studies and make recommendations considering organizational dynamics and technical and market knowledge in a simulated healthcare environment.

#### **HTM 692 Health Informatics Capstone**

*Prerequisites:* HTM 680, HCA 600, HTM 520, HTM 660, HCA 622, COH 611, HCA 626, HTM 552, CIS 601

Two-month capstone project focused on a relevant problem in health informatics theory or practice. Planning and completion of either a data-based research project or other scholarship or creative activity. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

### **HUB - Human Behavior**

#### **HUB 301 Behavioral Science**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

A study of the application of human behavior and behavioral science principles to the practice of management.

#### **HUB 400 Group Structure & Dynamics**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

An analysis of behavior, perspectives and practices as applied to group dynamics. Focus on approaches and skills in group dynamics as they relate to performance and enhancement of cooperative/collaborative effectiveness. Uses practice through role-playing of effective techniques in dealing with a variety of cooperative/collaborative situations.

#### **HUB 401 Conflict Resolution**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

A focus on the process of negotiation and conflict resolution. Gives special attention to conflict within and between persons in organizations and industry. Emphasizes application of techniques to conflict resolution situations via role-playing.

#### **HUB 410 Psychology for Managers**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

A survey of psychological concepts applied to organizational settings. Emphasizes motivation, communication, leadership, and personal development.

#### **HUB 420 Human Communication**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

A study of the theoretical and practical aspects of interpersonal and group communication.

#### **HUB 440 Organizational Development**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

A study of human relations and its relationship to organizational effectiveness through planned change and technological development.

#### **HUB 441 Research Design and Analysis**

*Prerequisites:* ENG 100, ENG 101, MTH 210, and PSY 100

An evaluation of research in psychology and the behavioral sciences. Includes work on research methods and design, and the application and interpretation of basic statistics.

#### **HUB 490 Guided Study** (1.5 - 4.5 quarter units)

Individual study under the direction of an instructor. Requires prior approval of appropriate academic department.

#### **HUB 500 Cross-Cultural Dynamics**

*Prerequisites:* ENG 100, ENG 101, and PSY 100

A curriculum-wide elective that studies the psycho-socio-cultural aspects of human differences and the enhancement of interpersonal/ intercultural communication skills. Increases the knowledge and understanding of differences in people and perspectives, enhances learning and performance in multicultural environments and fosters interactive diversity as a socio-cultural imperative and behavioral norm.

#### **HUB 601A Organizational Behavior**

An in-depth study of various types of organizational structures, both formal and informal, with special emphasis on behavior of people within those structures.

#### **HUB 601B Communication for Managers**

An analysis of interpersonal communications as related to organizational effectiveness. Covers the practical application of communication theory to work-related situations.

#### **HUB 601D Creative Leadership**

A study of the qualities of leadership required today and in the future. Emphasizes historical as well as contemporary leaders

#### **HUB 639 Issues in Sexuality**

An examination of the personal, interpersonal and social dimensions of human sexuality. Covers topics such as anatomy and physiology of human sexuality, contemporary American sexual behavior, sexual myths, sex-role socialization, sexual dysfunctions and sexual-social issues.

#### **HUB 641 Stages of Adult Development**

An examination of the adult stages of human biological, psychological and social development. Discusses classical as well as contemporary theories.

#### **HUB 642 Theories of Behavior Change**

A survey of social psychological theories of behavior change and resistance to change.

#### **HUB 646 Personal and Pro. Ethics**

A study of normative judgments as applied to contemporary human problems such as the uses of power, business practices and the right to live and to die. Examines varied ethical systems using a case study format

#### **HUB 648 Personal Growth & Comm.**

An examination of the meaning and importance of personal growth and human communication in human life and relationships. Development of critical communication skills, self-awareness and self-un-

Understanding to enhance personal and professional relationships. Presents a variety of models and methodologies in the exploration of physical, mental, emotional, social and spiritual growth.

### **HUB 650 Behavioral Research**

Behavioral research is a way to examine and understand individual and social behavior through measurement and interpretation. This course investigates the theoretical principles that underlie behavioral research and the application of current research techniques. The course forms the foundation for practical application of behavioral science and continued study in the human behavior and is essential to completing the capstone course in the program (Integrative Project in Human Behavior, HUB 680).

### **HUB 660 Assessment in Organizations**

*Prerequisites:* HUB 650

As study of the organizational assessments of human attributes (abilities, personality and vocational interests) and their role in behavioral determinants in school, work and interpersonal settings. Methodological issues encountered in the assessment of psychological traits (construct validity) and the developmental etiology will be covered. The course reviews the literature in organizational assessment, career development and personnel psychology applied to work. Topics include job analysis, performance appraisal, testing and assessment, employee selection, equal opportunity guidelines, development and evaluation of training programs.

### **HUB 670 Research Applications**

*Prerequisites:* HUB 650

The application of research methods and statistical techniques to a variety of research problems. The student will use these methods and techniques to address hypothetical and real research issues. The student will have developed a research proposal for the capstone project in HUB650 (a prerequisite for the course) and will apply the material learned in this course to further develop and refine the proposal.

### **HUB 680 Integrative Project**

*Prerequisites:* HUB 650, HUB 670

The capstone project is an empirical study that integrates theoretical and applied concepts and results in a 20-30 page paper (APA style). The student will be required to develop a project proposal during HUB 650 and HUB 670 that can then be completed during the capstone course. This course may not be taken as an independent study.

### **HUB 690 Guided Study (1.5 quarter units)**

An individual study under direction of the instructor. Requires prior approval of appropriate academic department. Grading is by H, S, or U only.

## **HUM - Humanities**

### **HUM 490 Guided Study (variable units)**

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### **HUM 501 Global Civic Culture**

*Prerequisites:* ENG 100, and ENG 101

Covers the relationship between knowledge and the interdependence of people and focuses on citizenship, change and the challenges of migration/immigration patterns, cultural shifts and transnational positioning in our global economy. Provides a framework for global citizenship, community-building, economic development, social responsibility and service.

## **IBU - International Business**

### **IBU 540 International Experience**

Tour foreign location and experience the business, economic, political, legal, and cultural environment of a host country. Development of thorough knowledge of foreign business environment through combination of pre-departure study, on-site lectures and presentations by host country experts and business executives, post-tour analysis and reflection.

### **IBU 653 Global Bus. & Strat. Planning**

Based on a review of main theories and current trends, this course examines strategic alternatives and choices available to multinational companies in world markets. Emphasis is placed upon applied strategic analysis based on case studies involving multinational companies and settings.

## **IHC - Integrative Health Coaching**

### **IHC 600 Intro to Complementary Healing**

Introduction to complementary and healing practices and opportunities to explore these practices. The cultural context of healing traditions and specific practices such as Chinese medicine, energy healing, mind-body healing, healing environments, spirituality and healing, naturopathy, homeopathy, manual therapies, and integrative nutrition will be examined.

### **IHC 610 Self as Coach**

Provides students with an opportunity for self-exploration and related self-work leading to personal growth and development. Students will examine their core beliefs, personal style, roles, defensive strategies, projections, etc. This exploration will enhance their coaching presence in their role as a health coach.

### **IHC 615 Fundamentals of Health Coaching**

Coaching fundamentals, including: coaching models, relationships, contexts, principles and practices. Students will demonstrate learning through reading of primary texts, virtual discussions of ideas presented in readings and related websites, and application of material via written work. Students will relate past experiences to their future role as health coach.

### **IHC 620 The Coaching Relationship**

Focus on health coaching as a transformational journey. Emphasis on understanding change from a transformative learning and adult development perspective. Topics include: theoretical perspectives on the change process, decision making, co-creating a plan of action, uncovering blocks, handling resistance, establishing a plan for accountability, developing holistic interventions for optimal health.

### **IHC 630 Advanced Health Coaching Seminar**

Opportunity to explore advanced topics in health coaching. Students will demonstrate learning through assignments including: reading of primary texts, virtual discussions and application of learned material via written work. Students will acquire a depth of knowledge and understanding of ways to serve their clients as health coach.

### **IHC 632 Practicum in Health Coaching**

Preparation to operate as competent professional health coaches. Students develop their coaching competencies by completing a minimum of 50 hours of coaching in a healthcare environment. Supervision by the course instructor, who has knowledge of and experience in coaching best practices.

### **IHC 635 Multiple Intelligences in Heal**

Provides student with a clear understanding of and appreciation for emotional social intelligence. Students will craft an individual emotional competency development plan. They will leave the course with a depth of knowledge concerning emotional and social intelligence and the ways in which they can develop these competencies in themselves and in their coaching clients.

### **IHC 640 Independent Study**

Opportunity to focus on a health coaching topic of interest. Students propose an area for study with faculty guidance and determine a topic. The outcome is a project focused research paper which results in the development of a coaching application, tool or training method.

## **IHM - Integrative Health Management**

### **IHM 600 Integrative Stress Management**

Examination of an integrative approach to stress, types of stressors, physiology of stress, stress and disease and theoretical models of disease. Stress emotions of anger and fear, journaling, expressive art therapy, humor therapy will be explored. Discussion of diaphragmatic breathing, meditation, hatha yoga, imagery, visualization and music therapy. Massage therapy, Tai Chi, and progressive muscular relation will be explored.

### **IHM 605 Healing Environments**

Our environments not only express who we are but also impact how we feel. They support our body, mind, and spirit. This course examines the definition, history of, and barriers to creating healing environments, describes elements of healing environments, discusses philosophies of healing spaces, natural elements utilized to create them, explores elements of healing relationships, and the importance of education and knowledge.

### **IHM 615 Nutrition and Fitness**

Leading a healthy, balanced life is dependent on many variables. Two important variables include a nutritious diet and daily physical activity. There are many elements to consider when developing a nutritious diet and creating a lifestyle in which movement and activity are integral to our day. Understanding these elements helps us make informed choices about how we nourish our body, mind, and spirit.

### **IHM 625 Energy Medicine**

Examination of an integrative approach to energy medicine to balance the mind, body, and spirit. Energy testing, the meridians, chakras, aura, electrics, Celtic weave, and the basic grid will be explored. A discussion of five rhythms, triple warmer, radiant circuits and strategies for health and wellness, nature of pain, energy techniques to relieve pain, creating an electromagnetic environment that supports health, maintaining optimum health will be explored.

### **IHM 630 Spirituality, Health & Healing**

This course will examine an integrative approach to spirituality, health, and healing. The characteristics of spirituality, spirituality and the care provider and spiritual rituals will be explored. Next, there will be a discussion of providing spiritual care, spiritual assessment, therapeutic interventions, and healing environments. Lastly, the spiritual dimension in end-of-life care, and spiritual considerations of children and the aging individual will be explored.

### **IHM 632 Chinese Medicine**

This course will examine an integrative approach to Chinese medicine, provide an understanding of the history, fundamental concepts and theories as well as its philosophical and cultural basis. Diagnosis in Chinese medicine, acupuncture and Tui Na (therapeutic bodywork), will be explored. Traditional Chinese pharmacotherapy and Chinese dietetics will be described. Lastly, qi gong, tai ji quan, and areas for future research will be explored.

### **IHM 635 Ayurveda**

Ayurvedic medicine is an ancient healing system that is between 3,500 and 5,000 years old. Translated as the "science of life," Ayurveda believes that everything has specific elemental qualities as well as a specific constitution based on the relationship between three vital energies or doshas. This course will examine Ayurveda, including its origins, the role of doshas, the disease process, the importance of life-style regimens, and treatments of disease.

### **IHM 640 Legal and Ethical Issues**

Legal and ethical issues related to the provision of complementary and alternative care are complex and evolving. Examination of biomedicine, regulation of medicine, scope of practice, and credentialing processes. Exploration of malpractice, liability, informed consent, and making referrals. Review of the disciplinary process, legal authority in medicine, and issues related to healing. Discussion of access to treatment, third-party reimbursement, and dietary supplement regulation.

## **ILD - Instructional Leadership**

### **ILD 603 Curr Align & Eval for School A**

School administrator's perspective of instructional theory, curriculum development and methods for aligning course content to articulated goals and evaluation procedures. Student understanding of course content will be developed through class discussions, curriculum projects, presentations and reflective analysis.

### **ILD 610 Introductory Health Ed: K-12**

Coordinated school health programs, health problems and issues are addressed at developmentally appropriate grade levels (K-12) using the Health Framework for California Public Schools content areas and California Health Standards. Legal responsibilities of teachers related to student health and safety, effective communication with parents and site-based and community resources, research-based school health programs, life skills and positive behaviors, needs of special populations, and evaluation of health web sites will be discussed.

### **ILD 620 Coordinated School Health Prog**

An advanced health education course focusing on coordinated school health, comprehensive school health programs, and how to plan, implement, coordinate, and evaluate a health education curriculum within a comprehensive school health system. A comprehensive school health system includes health and physical education, health services, nutrition services, psychological and counseling services, a safe and healthy environment, and health promotion for staff, parents, and community. Meets the CTC requirements for advanced health education for the professional clear credential.

### **ILD 625 Educational Research**

An introductory educational research course designed to provide knowledge, skills, and dispositions required for students to understand and demonstrate knowledge of quantitative, qualitative and action research. Emphasis is on the knowledge and skills required of a competent consumer and producer of educational research. The course requires that students utilize a high level of library skills and computer technology to locate relevant research and literature. (Scheduled for two months and meets once a week.)

## **ILR - Information Literacy**

### **ILR 260 Information Literacy**

*Prerequisites: ENG 100, and ENG 101*

A cross-disciplinary course that teaches effective report and research paper writing through the use of key computer technologies. The course includes Internet research, MLA and APA style formats, computer technologies, spreadsheets and the application of multimedia software and graphics for report presentation. ILR 260 offers refinement in the use of the microcomputer for effective report writing and presentation.

## **ISL - Innovative School Leadership**

### **ISL 660 Financial and Information Mgt**

*Prerequisites: ISL 661*

Introduction to public school and non-profit finance policies and practices, emphasizing financial and information management. Exploration of federal, state, and local revenue sources, district and school budgeting, and financial management procedures for both schools and non-profit organizations. Introduction to budgeting and accounting procedures.

### **ISL 661 Leadership Global Seminar**

Examine competencies for leadership in globalization including emerging and future trends for business

and education. Develop cultural sophistication and awareness in order to prepare leaders for increasing globalization. Ideally, students will engage in an international experience as part of this course and (when international travel may be unavailable) may also participate in diverse models of education and cultural experiences within the U.S. which will provide for understanding and learning about populations that may not be considered mainstream or widely known.

### **ISL 662 Decision Making Organizations**

*Prerequisites: ISL 661*

Analyze decision making frameworks in order to surface and develop ethical leadership and improve decision making skills. Learn to frame the dynamics and system forces that shape the community and political environment in order to engage others in decisions impacting them. This course uses an experiential approach in order for students to learn in an active and experimental format.

## **ITM - Information Technology Management**

### **ITM 200 Computer Hardware & Software**

This course provides an in-depth look at the hardware components of a personal computer with the focus on proper installation and administration throughout the course. Students learn to identify, install and configure various computer hardware components as well as basic computer and configuration concepts. This course also provides students with an understanding of basic hardware component features of a personal computer; how hardware and software work together; installation, maintenance and support of various hardware components. These components include: various types of processor chips, motherboards, supporting I/O devices, memory modules, floppy drives, hard drives, SCSI drives and mass storage device installation and maintenance considerations, peripherals support, multi-media devices, supporting modems, basic network terminology, concepts and topology designs, troubleshooting and maintenance fundamentals and considerations, purchasing and building considerations of a personal computer.

### **ITM 205 Office Productivity Software**

This course provides a thorough understanding of the Microsoft Office tools through task-oriented project-based applications built around business themes. A solid framework is provided to develop critical thinking, analysis, problem solving, and information and resource management skills through task-oriented and project-based activities.

### **ITM 210 Introduction to IT**

This course provides an introduction to Information Technology (IT) infrastructure concepts and applications in an integrated information system environment. This course focuses on understanding the importance of IT for various types of IT applications within an organization. Topics include: overview of hardware, software, data resources, telecommunications and networks. The course provides an overview of "what" IT is and how to apply IT in various organizations.

### **ITM 230 Computer Network Overview**

This course emphasizes the network operational concepts and implementation. It provides students with an understanding of network basics and emerg-

ing local area network technologies. Topics include: integration of hardware and software components, network architecture, protocols, interconnection of networks using bridges and routers, network links using cable modems and DSL and IEEE 802 network access standards. TCP/IP will also be reviewed within the context of networking protocols.

### **ITM 320 Information Technology Management**

*Prerequisites: ITM 210*

An integrated perspective on how to manage, plan and integrate information technology resources. Provides an overview of the concepts of managing information technologies and covers the topics of information technologies planning, information forecasting and information processing. Project management concepts and processes are also reviewed and applied to specific information technology initiatives and tasks related to (1) Desktop technology, processing and administration, (2) network information technology, processing and administration and (3) database systems technology, processing and administration.

### **ITM 330 Desktop Apps & IT Processing**

This course provides the solid framework into the concepts and actual implementation of Window 2000/XP. Topics include understanding of the desktop processing of information to support organizational decision-making and strategic planning. Introduces the client server architecture and focuses on the desktop role as the client connected to database systems and network systems that are required to meet and support the real-world projects and various IT initiatives. Hands-on labs are included.

### **ITM 340 IT Clients Using MS Windows**

This course provides the solid framework into the concepts and actual implementation of Windows XP. Topics include understanding of the desktop processing of information to support organizational decision-making and strategic planning. This course introduces the client server architecture and focuses on the desktop role as the client connected to database systems and network systems that are required to meet and support the real-world projects and various IT initiatives. Hands-on labs are included.

### **ITM 345 IT Servers Using Linux**

This course provides a solid framework into the concepts, installation, and configuration of server Operating System (OS). Topics include understanding of the desktop environments used in the server environment. This course describes ways of exploring and understanding of the OS. It demonstrates the system administration tasks and how they are used to provide support for multiple users. This course also describes issues related to security and shows how to automate tasks through shell scripting.

### **ITM 350 Desktop Application Support**

*Prerequisites: ITM 205*

This course provides an overview of the role of desktop support in the Information Technology environment. The emphasis of this course is to provide hands-on learning experience for support of desktop operating system and applications.

### **ITM 410 Computer Network Tech Overview**

Emphasizes the network operational concepts and implementation. Provides a basic understanding of

network basics and emerging local area network technologies. Includes topics such as integration of hardware and software components, network architecture, protocols, interconnection of networks using bridges and routers, network links using cable modems and DSL and IEEE 802 network access standards. TCP/IP will also be reviewed within the context of networking protocols.

### **ITM 420 Local Area Networks**

Network management principles, practices and technologies for managing networks, systems, applications and services. This course reviews the latest computer network technologies, such as ATM, Gigabit, Ethernet, and Fiber Optic connections. This course builds on LAN basics from ITM 230, including how to implement LAN solutions such as FDDI, Fiber Channel and Gigabit Ethernet and WAN technology such as Switched Multi-Megabit Data Service and Frame Relay. This course also covers integrated high-performance router and switch technologies.

### **ITM 430 Wide Area Networks**

*Prerequisites: ITM 420*

Overview of the management tools necessary to understand the WAN hardware and software for client server architecture technology. This course focuses on the installation and management of the WAN and the connectivity to other systems and networks. The emphasis of this course is on hands-on learning: how to install, configure and implement the network.

### **ITM 434 Wireless LAN Administration**

Fundamental concepts of wireless network administration. The focus is on 802.11 standard wireless solutions including: fundamentals of 802.11 WLANs; radio frequency fundamentals; antennas; RF math and system operating margin; RF power output regulations; wireless LAN operation; 802.11 analyses and troubleshooting; and site surveying. This course provides the basic preparation for the Certified Wireless Network Administration (CWNA) exam.

### **ITM 435 Wireless LAN Security**

*Prerequisites: ITM 434*

Fundamental concepts of wireless network security. The focus is on 802.11 standard wireless solutions including: learning how to defend against the latest hacking techniques, implement the latest wireless LAN security solutions, and understand the impact of new solutions. This course provides the basic preparation for the Certified Wireless Security Professional (CWSP) exam.

### **ITM 440 Database Concepts & Data Model**

An introduction to the concepts of data modeling and relational databases. Covers the methodologies for building a logical model, techniques for organizing and designing relational databases and practical approaches to transform logical models to a stable relational database. Introduces fundamental database and application development concepts and techniques. Given database design and application requirements, students design, construct and test a personal computer database and associated application components.

### **ITM 450 DB Processing & Administration**

*Prerequisites: ITM 440*

This course will provide students with the knowledge and skills necessary to install configure and ad-

minister Database Management Systems. Topics included in this course are conceptual understanding of data storage architecture, creation and management of files, groups, databases, tables, queries, locking options, indexes and data views.

### **ITM 470 Information Security Management**

This course covers the managerial aspects of information security on computer networks. Security is becoming of utmost importance. This course prepares the student to manage from start to end all aspects of securing a network. This course is divided into six sections covering various aspects of planning and implementing security policies. It starts with defining what security is, it talks about the security triad, CIA, followed by security management practices. Security models and architectures followed by business continuity planning and disaster recovery are discussed. This course includes laws, investigations, ethics, and operation security.

### **ITM 475 Information Security Technology**

*Prerequisites: ITM 470*

This course covers the technical aspects of information security for computer systems and networks. This course helps students understand the technologies used to design secure information systems and networks. This course is divided into six sections covering various technologies pertaining to information security. With the understanding of what security is, this course discusses access control mechanisms, methods of attack, and secure protocols. It includes how to secure telecommunications networks and the Internet. Cryptography is discussed to provide privacy and secrecy. It emphasizes physical security followed by application and system development security. This course together with ITM 470 help students prepare for the Certified Information Systems Security Professional (CISSP) exam.

### **ITM 490A Info Technology Project I**

*Prerequisites: 10 of the core ITM courses must be successfully completed.*

A capstone project for information technology application. Students work on an original and significant project that integrates concepts, principles and tools that are taught throughout the program. Grading is H, S, or U only.

### **ITM 490B Info Technology Project II**

*Prerequisites: ITM 490A*

Two-month course, meets once a week. A capstone project for information technology application. Students complete their projects and present their original and significant projects to a panel of academic and business professionals. Grading is H, S, or U only.

## **JJS - Juvenile Justice**

### **JJS 601 Field Experience & Orientation (1.5 quarter units)**

By observation and interview the student will get an understanding of the roles of the teacher in an incarceration facility, mental health facility, alternative education setting or a non-public school. They will examine the differences and similarities between the missions and goals of interacting and coordinating agencies.

### **JJS 602 Creating Alliances in Alt. Ed**

*Prerequisites: JJS 601*

Students will examine the Individuals with Disabilities and Education Act and how it relates to students who are incarcerated or out of the regular education program. Students will also develop a network amongst various coordinating agencies involved with students in out of school placements. Students will learn how to predict delinquent youth behavior and interventions that might mitigate the problem. EXC633 is equivalent to JJS602.

### **JJS 603 Role of Profess in Alt Ed**

*Prerequisites: JJS 601*

In this course candidates will examine relevant educational and mental health practices that can be utilized by professionals in alternative ed settings looking for practical methods in working with difficult students.

### **JJS 604 Mgmt. of Behaviors**

*Prerequisites: JJS 601*

This course will prepare professionals in the juvenile justice system and alternative school placements to work with students with behavior problems in a variety of settings, including public schools, alternative schools, residential treatment centers and incarcerated youth confined by the juvenile justice system.

### **JJS 605 Prof Ethics in Juv Justice Sys**

*Prerequisites: JJS 601*

This course will prepare professionals in the juvenile justice system to examine the ethical problems associated with working in the area of special education within a juvenile justice system, or in a variety of settings, including public schools, alternative schools, residential treatment centers and incarcerated youth confined by the juvenile justice system.

### **JJS 606 Delinquency & Gang Impact**

*Prerequisites: JJS 601*

In this course students will examine accurate analysis of gangs in America in its social context and investigate the effectiveness of current interventions.

### **JJS 625 Advanced Research Methods**

Student will enhance their writing and research skills focusing in the area of juvenile justice. Students will clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates.

### **JJS 690 Capstone Project**

*Recommended: Prior completion of: All 7 other core JJS classes.*

A two-month course required for all JJS candidates. Culminates the research and writing of a substantial original work on a juvenile justice pre-approved project of personal interest involving critical examination and evaluation of primary and secondary sources with faculty supervision and guidance. All projects must include a lens towards exceptional populations. Grading is by H, S, or U only. Course is eligible for In Progress grade.

## **JRN - Journalism**

### **JRN 300 Multimedia Journalism Skills**

*Prerequisites: ENG 100, and ENG 101*

This class covers the organization of news stories and their preparation for newspaper, online, TV and radio formats and the fundamentals of news journalism, including standards of objectivity, fairness and accuracy. The course focuses on how journalists report the material they ultimately need for their finished stories and provides students with the opportunity to understand what counts as news and how to write focused news stories on deadline. Students learn to identify the structure and basic ingredients of news and master different types of leads and such style conventions as the inverted pyramid, the nut-graph and other non-fiction storytelling techniques.

### **JRN 301 Copy Editing**

*Prerequisites: ENG 100, and ENG 101*

This course provides an introduction to copyediting and includes the roles and responsibilities of a copy editor on a daily newspaper, which go beyond being able to spot grammatical and spelling errors in copy. Students learn how a copy editor approaches a news story and how to edit that story for clarity, sense and organization, as well as for spelling, grammar and style, and fairness. Students will edit copy and write headlines and cutlines, as well as learn the basics of layout and design.

### **JRN 305 The Art of the Interview**

*Prerequisites: ENG 100, and ENG 101*

This course focuses on numerous aspects of interviewing for print, radio and television journalism and the variety of ways in which professional interviewers go about their work. It also includes an historical perspective of the development of interview techniques for various news media. Students will learn how to select an interview subject, prepare for an interview, conduct the interview and write an article based on their interview.

### **JRN 310 Convergent Journalism**

*Prerequisites: ENG 100, ENG 101, and COM 100, or COM 220*

This course covers the technological and organizational convergence that has changed the operations and workflow of many news organizations and the ways in which news content is communicated across multiple media platforms. Students will acquire familiarity with the demands of each medium, create news stories for print, audio, video, and online media platforms and be able to move content fluidly from one media channel to another.

### **JRN 315 Field Production**

*Prerequisites: JRN 310*

Introduction to single-camera field production for video and the roles and responsibilities of the field production team. Hands-on practice of skills necessary for producing a taped remote video production such as news reports, informative programs, and dramatic scenes.

### **JRN 330 Investigative Reporting**

*Prerequisites: JRN 300, JRN 301, and JRN 305*

Investigative reporting extends beyond partisan claims and counter-claims to offer verifiable facts

that can be found in court documents, state or company reports. Such news stories require collecting enough evidence to allow an editorial judgment to be made about whether what people say is, in fact, true. Students will learn how to select an appropriate investigative topic, narrow the focus of a story from a broad subject to a suitable topic, and to conduct the "shoe-leather reporting" that is needed to discover a story's shape and weight. Students will come up with questions, determine whom they will need to interview, conduct the reporting, and then finish by writing an in-depth piece in several drafts that illuminates the chosen subject.

### **JRN 335 Beat Reporting**

*Prerequisites: JRN 300, JRN 301, and JRN 305, ENG 100, ENG 101*

Beat Reporting is an advanced course that focuses on adopting a news beat or coverage area by developing and cultivating sources, researching sources, conducting interviews, reporting objectively and writing tightly using the inverted pyramid as the primary style. The course will explore the traditional news beats including city hall, the police, the courts, the military, the environment, religion, education and health. In addition, students will investigate emerging beats such as personal finance, technology, and entertainment, and beats specific to regions of the country, such as aviation, space, and immigration.

### **JRN 340 Feature Writing**

*Prerequisites: JRN 300, JRN 301, and JRN 305, ENG 100, ENG 101*

Feature Writing is an advanced course that focuses on the art of writing features for newspapers, magazines, online publications and other media outlets. The course will teach students how to spot creative ideas for features and how to turn these ideas into stories that others will want to read, hear, or watch.

### **JRN 350 Youth and the News**

*Prerequisites: JRN 300, and JRN 310, ENG 100, ENG 101*

This course draws on a wide range of scholarly opinions and research, focusing on why young people are bored by conventional journalism, often find themselves disinterested in much print and broadcast news. The course will not only look at youth as consumers of media but also as producers of it by reviewing the prevalence, effectiveness, history and development of school journalism programs. In addition, the course investigates the adolescent as news reporter and citizen, a potentially active shaper of his or her own development. Additional questions include whether shifts in tastes may contribute to the generational decline in readers and viewers.

### **JRN 355 Writing at the Margins**

*Prerequisites: JRN 330, and JRN 335*

This course examines the social welfare beat, covering the segment of American society that relies on the government and private charities for basic survival. This beat is often challenging for reporters because of privacy considerations and fear of social stigma that can make authorities reluctant to allow interviews or access to the places where the poor live. Students focus on intractable social dilemmas such as welfare reform, homelessness, child abuse and neglect, drug dependency, and mental illness. Students plan and orchestrate projects on issues that

they wish to learn more about or delve into the charitable agencies that seek to bring assistance and attention to disenfranchised groups.

### **JRN 360 Freedom of the Press: A Journalist's Journey**

*Prerequisites: ENG 100, and ENG 101*

This course is a study of how movies portray journalists in popular culture, historically, and continuing to the present. Students will view, analyze, and discuss the role of journalists in a variety of films that dramatically illustrate the journalist as hero or villain, raise important First Amendment issues and show how corporate pressures impact journalists, the media and the public.

### **JRN 420 Journalism Ethics**

*Prerequisites: ENG 100, and ENG 101*

This course will examine how objectivity developed in American journalism and what criticisms exist against it. Students will consider real-life ethical scenarios that have faced newspaper journalists, TV reporters, established website journalists and blog authors. Students will discuss how they would have handled the situations and why. Discussions will also revolve around such issues as: the standard of objectivity and potential alternative systems and the influence of different journalistic formats on ethical choices.

### **JRN 421 Legal Issues in Journalism**

*Prerequisites: ENG 100, and ENG 101*

This course focuses on the legal aspects of journalism and the ways professional journalists exercise the rights of the press and free expression guaranteed them by the First Amendment to the U.S. Constitution. The class will provide students with both a theoretical understanding of the legal issues in journalism and practical knowledge of how to apply that understanding in the conduct of their professional work gathering and disseminating information. In addition students learn to manage the responsibilities that such rights entail and to respond to limits on those rights.

### **JRN 430 Reporting for TV News**

*Prerequisites: JRN 300, JRN 310, JRN 320, JRN 321, and JRN 335*

This course focuses on what it takes to successfully write and assemble reporter packages for broadcast news programs. The course includes shooting video for the package, deciding which video pieces to use and conducting interviews to get information and effective sound bites for the report. In addition to writing and reporting techniques, students will learn how to perform for TV news, including the manner of dress, speech and other factors that relate to trust, believability, and likeability.

### **JRN 431 Writing the TV News Script**

*Prerequisites: JRN 430*

This advanced course in broadcast journalism builds on skills developed in JRN 430 (Reporting for TV News). Students learn to distinguish between writing for print journalism and for broadcast. This course covers writing scripts that distinguish between the short, clear prose for print as opposed to writing for radio with its emphasis on spoken words, or TV, which requires weaving together words and visuals.

### **JRN 432 Video Journalism**

*Prerequisites: ENG 100, and ENG 101*

Focuses on what it takes to successfully write, produce scripts and do reports for video journalism, including news, documentaries, public affairs and interview programs and streaming media on the Internet.

### **JRN 495 Capstone Project in Journalism**

*Prerequisites: JRN 310, JRN 330, JRN 335, JRN 340, MUL 335, or JRN 430, JRN 431, JRN 315, and BRO 340*

In this capstone course, students apply the knowledge and skills gained in other courses by working in a journalistic environment, such as a newspaper, broadcast or web-based newsroom or multimedia facility. Students work with the program lead faculty in advance of the course to identify their area of interest and develop a proposal for either a journalism internship or a project. Students who choose journalism projects work on student-developed "in-house" projects that may include writing stories for the student newspaper, editing a blog, and composing stories for podcasts, multimedia or broadcast programs. During an internship, a student will work as an apprentice reporter, copy editor or other news-related role at a qualified news outlet. A qualified news outlet must have a memorandum of understanding with the School of Media and Communication and be approved by the Office of Academic Affairs that defines the organization's needs and the responsibilities of interns. All students assemble a capstone portfolio consisting of their best work from this and previous courses and a reflective essay on the internship or project. Grading is by H, S, or U only.

### **JRN 502 Essential Digital Competencies (1.5 quarter units)**

Guides students through online tutorials and DVD training in four technical areas of journalism: 1) digital video editing, 2) audio recording and editing, 3) interactive content creation on the Web and 4) image/photo editing. Students complete online tutorials or DVD training in each area in which they lack basic proficiency. Students must take tutorials or training unless they can demonstrate proficiency in one or more of the areas before the second week of class begins. Work demonstrating a student's proficiency must be received and approved by the instructor during the first week of course work to fulfill the "test-out" option. Grading is by S or U only.

### **JRN 600 The New News**

Transforms a journalist into a multimedia powerhouse who can produce news, features and associated products for a variety of audiences. Students gain familiarity with the demands of each medium, create news stories for print, audio, video and online media platforms, and learn to move fluidly from one medium to another.

### **JRN 605 Advanced Non-Fiction Writing**

Provides guided practice in short- and long-form feature writing for print and online media, as well as critical experience in composing feature scripts for radio, television, podcasts, slideshows and Web video.

### **JRN 610 Backpack Digital Audio & Video**

*Prerequisites: JRN 502*

Provides a thorough knowledge of video use in journalistic communication without a TV station's truck, studio or edit bay. It teaches students to work as vid-

eo journalists and communicate video news stories using a small digital camera and a laptop computer.

### **JRN 615 International Reporting**

Examines what international reporting has become and what lies ahead. It explains theories of international politics and how they relate to different types of reporting, while offering students practical advice on how to function as a foreign correspondent in the new hyper-technological universe.

### **JRN 620 Online Publishing**

Provides students guided practice in every stage of the print, broadcast and online production processes, with emphasis on the convergent and increasingly grassroots generalist.

### **JRN 630 Professional Editing**

Provides students guided practice in every stage of editing from the top edit, to the line edit, to proofreading. It offers ample opportunities for practice working in print, broadcast and online media.

### **JRN 640 Emerging News Business Models**

Examines the changing nature of the journalism business, covering the evolution of different business models, from monopoly newspapers to the current financial anarchy of the digital world. It analyzes changing social models for the distribution of information, and weighs how news is increasingly being transmuted into data.

### **JRN 650 Computer-Assisted Research**

Provides skills necessary for journalists to accomplish more sophisticated, analytical work involving database management, GIS mapping, statistical analysis and the development of Web applications. Computer-assisted reporting (CAR) is an emergent branch of investigative and watchdog journalism. CAR allows journalists to utilize various computer tools for improved news reporting.

### **JRN 655 Communication Law**

Examines the constitutional, philosophical and legal bases of free speech and what it means in daily life. The course considers the debate over words that threaten people in power, and how the powerful have tried to control the press.

### **JRN 656 Ethics in the New Media World**

Investigates the moral decision-making processes behind journalistic choices, and the principles on which these decisions are based. It examines not only what a journalist has a right to do but what is right to do. Students consider cases of ethical breaches, and discuss how to uphold sound standards during reporting.

### **JRN 660 Investigative Methods**

Takes students past the foundational skills of beat reporting to the more challenging field of specialty reporting, in which a journalist becomes an expert in a particular area and builds a body of work around it. Offers an overview of the most common types of specialties in journalism today.

### **JRN 670 Producing Enterprise Projects**

Defines and explores the concept of enterprise, a core component of journalism. News stories cover



crimes, meetings and other one-time events, but enterprise reporters and editors do the bigger-picture work of identifying trends, connecting the dots, investigating inconsistencies, analyzing personalities and asking the important questions.

#### **JRN 680 Capstone Project**

Reinforces the knowledge and skills gained in other courses by working in real-world media outlets. Students work with the program lead faculty in advance of the course to identify their area of interest and develop a proposal for either a journalism internship or a project. Grading is by H, S, or U only.

### **LAW - Law**

#### **LAW 200 Intro to Law & Legal Writing**

A lower division introductory course exploring the practical application of Civil Law and the various area of practice. The student will learn rudimentary legal research and be introduced to the form of legal writing referred to as "IRAC."

#### **LAW 304 Legal Aspects of Business I**

A survey of contracts, sales, agencies, personal property, commercial paper and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

#### **LAW 305 Legal Aspects of Business II**

*Prerequisites: LAW 304*

A sequential course to LAW 304. A survey of business organizations (partnerships, corporations, government regulations), property (real property and leasing, estates, community property), business torts, business crimes and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

#### **LAW 310 Litigation**

A broad-based overview of the various stages of the civil/criminal litigation process. Covers the complete litigation process starting from the initial filing of the criminal information and/or civil complaint, progressing through the client interview, motion and trial phase. Explores the process of court pleading and discovery, including interrogations, depositions and the voir dire process. Also covers heavy strategies and the role of the law office assistant. Students must demonstrate their legal knowledge and understanding of the material through the drafting of a civil complaint, accompanying forms, summons and depositions.

#### **LAW 400 Current Legal Issues**

This course will review contemporary issues including minority rights, abortion, free speech and criminal justice with a special emphasis on the affect these issues have on the business community

#### **LAW 402 The Art of Negotiation**

A workshop course for pre-legal and pre-professional students to develop the verbal and analytical skills needed to be effective negotiators in the practice of law and business. Examines general negotiating principles and uses practical student exercises.

#### **LAW 405 Analytical Reasoning**

The development of analytical reasoning through identification of critical issues in the legal, business and political environments, by analyzing historical and contemporary events, followed by the application of established rules of law, ethical standards and social models in developing oral and written arguments for and against specific positions.

#### **LAW 408 Legal Writing Research and Ora**

This class is devoted to learning the written and oral skills necessary for presentation of legal issues. Students will prepare and argue an appellate case in moot court format. Each student will prepare an appellate brief for one side of a case dealing with a controversial current legal issue. In team format students will then argue the issue presented before a panel of judges. To prepare for oral argument students will visit and discuss presentations made before the Trial Courts and the California Court of Appeal.

#### **LAW 410 Intro to Law & Legal Analysis**

An introduction to case brief writing and legal problem analysis. The classroom discussions employs the Socratic method used in law school classes.

#### **LAW 420 Advocacy**

A capstone course that requires students to participate in a mock trial. Students write trial briefs, create pre-trial discovery strategies, give oral arguments and examine witnesses in a simulated civil case.

#### **LAW 430 Constitutional Law**

A survey of the historic development of Constitutional Law in the United States. The student will learn the philosophical foundations of the Constitution and review how the political climate shaped landmark decisions throughout the history of the United States.

#### **LAW 440 Comparative International Law**

A survey of international law in (1) the civil environment including trade agreements and contracts, and alternative dispute resolution and (2) criminal law, including investigation and prosecution of human rights violation and the remedies for such violations.

#### **LAW 445 Administrative Law for Business**

An advanced survey of administrative law and procedure and manner in which the various state and federal agencies are a part of the integral workings of business operations, including, but not limited to, the areas of environmental operations, employee relations, consumer good regulations, occupational safety.

#### **LAW 455 Public Contracting**

A survey of public contract law and the differences from commercial contract law; including clear record keeping for audits, overseeing activities of sub-contractors, and the impact for violation and breach of contract.

#### **LAW 460 Law School Portfolio Project**

A preparatory course for the undergraduate student who is preparing to apply for admission to law school. The course will involve learning strategies and practice for those preparing to take the Law School Admissions Test. Additionally, students will prepare their dossier and personal statement for law school applications. Grading is by S or U only.

#### **LAW 470 Pre-Law Senior Project**

*Prerequisites: LAW 310, LAW 400, and LAW 408*

This course represents a culmination of the skills learned in previous research and writing courses. It consists of the preparation of a research document equivalent in form and content to an appellate brief. In the case of those students who have received an internship, this course will be assigned and the student graded on the writings produced during the internship, whether legal memorandum and/or briefs.

### **LED - Leadership**

#### **LED 400 Introduction to Leadership**

Examination of core issues in the practice of leadership. Identification of differing theories and styles of collaborative, integrative organizational leadership and comparison to authoritarian or management by edit within the organizational context.

#### **LED 410 Leading Diverse Groups & Teams**

Examination of the application of leadership theory to groups that are diverse in gender, ethnicity, education, and functional expertise. The role of the leader in establishing effective collaboration among members; the decision making process and power will also be examined.

#### **LED 420 Adaptive Leadership in Change**

Analysis of constant and continuous change in modern organizational environments. This class will provide students with the skills needed to recognize the potential impacts of change on their organizations, and to lead their organizations through the change process effectively. Students will develop skills in assessing organizational culture and learn to create the learning organization of the future.

#### **LED 430 Conflict/Negotiation for Leaders**

Effective conflict resolution, bargaining and negotiation are addressed in this course as methods for improving the organizational effectiveness in the long term. A special focus will be placed upon creation of win-win solutions to real life organizational situations. Conflict will be examined as both a necessary and challenging workplace phenomena.

#### **LED 440 Leadership Overview of Org. Func.**

Introduction to strategies for leadership to enhance the integration of functions into the overall mission and vision of the organization. Assessing the relationships between organizational structure and the impact on the culture and norms of the organization will be analyzed.

#### **LED 450 Advanced Group Dynamic Theory**

*Prerequisites: LED 400, and LED 410*

Advanced topics in understanding groups and team formation, hidden agenda items of team members and strategies to navigate difficult behavior or challenging groups. Experiential learning of group dynamics, examining multiple phenomena and the impact of leadership will be explored.

#### **LED 460 Ethics and Decision Making**

Examination of the many components that influence decision-making by leaders, including cultural relativism, legal responsibilities, prescriptive approach-

es and universal principles. The potential impact of decisions on the organization and transparency in the decision making process, ethical frameworks and hypothetical situations will be reviewed.

#### **LED 470 Classic Studies of Leadership**

The historical context of classic leadership studies will be examined including emotional intelligence, trait theories, personality studies and the emergence of leadership theory. Students will explore the research on leadership that has impacted the development of leadership studies and the understanding of power, authority and influence. This course will aid in preparing students for LED 480 and LED 490.

#### **LED 480 Research for Leaders**

*Prerequisites: LED 410, and LED 420*

This course should be taken toward the completion of the BSOL course work, as it allows the student to develop strategies in identifying and interpreting quality research. The study of leadership involves both qualitative and quantitative research which informs effective leadership in an ever-changing and global business environment.

#### **LED 490 Leadership Capstone Project**

*Prerequisites: Completion of six of the preceding courses*

The capstone course is designed to be the culminating work for the Bachelor's degree in Organizational Leadership. Under the guidance of the instructor, students will design a project to demonstrate their mastery of leadership theories, approaches and frameworks. Students will include scholarly research, attention to ethical frameworks, and critical analysis in their project. A professional presentation of 10-15 minutes of the student's project is required. Grading is H, S, or U only.

#### **LED 601 Ethics and Classic Theories**

Introduction to the classic theories, frameworks and ethics of leadership practice. Students identify and assess their own leadership philosophy, then analyze the relationship between it and selected theories of leadership. Students evaluate ethical decision making processes and assess the potential impact of leadership strategies on organizations.

#### **LED 602 Developing Groups and Teams**

The formation and development of groups through effective leadership is the focus of this course. Team communication styles and roles within teams are examined. Strategies that foster creativity in groups are discussed. The impact of technology on teams and communication styles is evaluated. Students learn experientially about groups and teams and the impact of diverse ethical perspectives by participating in group activities and observing leadership in small groups.

#### **LED 603 Leadership in the 21st Century**

Examination of emerging forms of leadership, influence and power, chaos and collaboration. The course will analyze multiple organizations within the private and public sectors, and will draw upon diverse perspectives, ethical considerations and applied approaches. Participate in experiential approaches to learning leadership skills which may include the classroom as a temporary organization to be examined in real time.

#### **LED 604 Leading Change and Adaptation**

Course topics will focus on the dynamics of change, organizational redesign, and the essential skills necessary for leaders to initiate corporate and organizational transformations. Resistance and acceptance of change initiatives, including the impact of organizational culture will be examined. Students will strengthen their leadership skills and strategies in order to initiate and implement change through problem-solving experiences across a broad range of organizational contexts.

#### **LED 605 Conflict and Power Dynamics**

Integration of the knowledge, skills, and abilities required to design, conduct, and evaluate effective conflict resolution and negotiation practices. Course topics include interpersonal and intra-group conflict resolution; persuasion, problem solving techniques and decision-making in conflict resolution; overcoming bias, anger, and retaliation. Students will develop leadership and dialogue skills used to navigate conflict situations, and begin to detect conflicts as potential clues of organizational challenges.

#### **LED 610 Analysis and Decision Making**

Identify quality information, data and research that inform decision making and strategy. Students will gain skills in interpreting data and develop critical thinking around key issues. In order to aid in analysis, explore statistical models and emerging data trends. Topics will include data analytics, overview of statistical models, data collection methods and critical interpretation of information.

#### **LED 615 Consulting and Assessments**

Students gain both knowledge and skills to consult to organizations on leadership issues and development, whether within the infrastructure or to an external client base. Through the use of assessment instruments, students gain both understanding of self as well as expertise in administering tools with clients. Assessments for leadership also include personality, team performance and conflict styles. In order to work effectively with clients, skills for facilitating and training will be included.

#### **LED 620 World View & Adult Development**

Adult development is intrinsic to the development of holistic leaders therefore students will gain knowledge of adult development concepts and theories. Identification of one's world view or ontology is interwoven with one's development in leadership therefore students will work to identify their world view and connect it with their development as a leader. Students will also gain knowledge of emerging models of leadership and integral approaches by linking their world view to their practice of leadership.

#### **LED 650 Teaching Leadership**

*Prerequisites: LED 602, LED 603, LED 605, LED 620*

Students that are interested in teaching adults about leadership or intend on working in public or corporate leadership development will work with a leadership studies faculty member in an apprentice or mentoring framework. Students will gain understanding of adult learning theory, experiential teaching methodology including case-in-point, here-and-now, group dynamics and Socratic dialogue.

#### **LED 680 Leadership Research**

*Prerequisites: LED 601, LED 602*

This course prepares students to conduct in-depth research in their area of interest synthesizing knowledge, and theory of leadership. Students will learn to judge scholarly, peer-reviewed work as unique from wisdom literature found in many popular leadership books. Two research papers will be written in the course with a focus on preparation for the thesis/capstone project. APA format (current edition) will be required, and students will gain skills in internet searches. In addition, students will give a presentation of approximately ten minutes on one of their research paper topics in professional attire and utilizing the appropriate technology.

#### **LED 690 Capstone Project**

*Prerequisites: 5 LED courses*

Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify scholarly sources from which data is gathered in preparation for the project. Students then gather data and present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. Students may choose to prepare a project as described in the Leadership Project Handbook. Grading is H, S, or U only.

#### **LED 699 Guided Study (variable units)**

This is an individual study under the direction of the instructor. This course requires prior approval of program lead faculty.

### **LIT - Literature**

#### **LIT 100 Introduction to Literature**

*Prerequisites: ENG 100, and ENG 101*

An overview of the main genres of literature, including fiction, poetry and drama. Examines literary language and different approaches to literary criticism designed to increase student confidence when responding to literature.

#### **LIT 310 Chinese Lit in Translation**

*Prerequisites: LIT 100*

This course is a survey of prominent modern authors from China in English translation. A selection of poems, short stories, novels, and plays will be considered. Attention will be given to social, intellectual, and political contexts out of which these works have arisen.

#### **LIT 311 British Literature I**

*Prerequisites: LIT 100*

A survey of important British authors and literary trends from Chaucer through the middle of the 18th century.

#### **LIT 312 British Literature II**

*Prerequisites: LIT 100*

A survey of important British authors and literary trends from the late 18th century through the modern era, with a focus on Romantic, Victorian and Modernist writers and texts. Some attention will also be paid to colonial and post-colonial writing in English.

**LIT 315 Arabic Lit in Translation**

*Prerequisites: LIT 100*

A survey of prominent authors from the Arabic speaking world in English translation. A selection of poems, short stories, novels, and plays will be treated. Attention will be given to social, intellectual, and political context out of which these works have arisen.

**LIT 321 American Literature I**

*Prerequisites: LIT 100*

A survey of important American authors and literary trends through the late 19th century. Texts will be situated in relation to cultural, philosophical, social and historical contexts, e.g., Puritanism and its legacies, varieties of American Romanticism, debates over slavery and gender roles, formation of national identities.

**LIT 322 American Literature II**

*Prerequisites: LIT 100*

A survey of important American authors and literary trends from the late 19th century through the present. Texts will be situated in relation to cultural, philosophical, social and historical contexts. Particular attention will be paid to the modernist canon and to works by women and authors of color that respond to American literary heritage and social conditions.

**LIT 338 Shakespeare**

*Prerequisites: LIT 100*

An examination of major works of William Shakespeare.

**LIT 345 Mythology**

*Prerequisites: LIT 100*

An examination of mythology. This course recognizes that myth-making is a creative activity central to all cultures, including our own society. Students analyze and compare mythological narratives from a variety of cultures.

**LIT 360 Literary Theory**

*Prerequisites: LIT 100*

A survey of major classical and contemporary arguments about the nature of literature, literary expression, and literary experience.

**LIT 361 Lit. of the Ancient World**

*Prerequisites: LIT 100*

An examination of literary works of two or more cultures from the beginnings of recorded literature until 100 C.E. All works will be read in English translation.

**LIT 401 Contemporary Fiction**

*Prerequisites: LIT 100*

An upper-level seminar in contemporary fiction. Students will discuss and analyze major genres and movements in contemporary fiction, focusing on American fiction. Students will situate contemporary fiction in current political, cultural, historical and philosophical trends to better understand the relationship between fiction and the contemporary world.

**LIT 402 Contemporary Poetry**

*Prerequisites: LIT 100*

A survey of important authors, movements, trends, and critical stances in contemporary poetry, with an emphasis on American poetry.

**LIT 410 African American Literature**

*Prerequisites: LIT 100, and ENG 240*

Examination of important representative works by U.S. African-American writers and theoretical approaches relevant to studying that literature. Emphases may vary in different sections.

**LIT 420 U.S. Latino Literature**

*Prerequisites: LIT 100, and ENG 240*

Examination of important representative works by U.S. Latino writers and theoretical approaches relevant to studying that literature. Emphases may vary in different sections.

**LIT 430 Children's Literature**

*Prerequisites: LIT 100*

Provides students with a foundation for teaching children to read and learn through reading. Students learn to identify the stages in reading development, select appropriate literary texts for diverse learners at each stage, analyze children's literary texts, and assess the literacy and language development of young learners.

**LIT 443 World of the Short Story**

*Prerequisites: LIT 100*

A look at short stories. The reading list includes varieties of form and style in short fiction drawn from world literature and focuses on contemporary writing.

**LIT 446 Studies in Poetry**

*Prerequisites: LIT 100*

Focused study of a particular theme, genre, period, or author.

**LIT 450 Studies in the Novel**

*Prerequisites: LIT 100*

Focused study of a particular theme, genre, period, or author.

**LIT 456 Studies in Drama**

*Prerequisites: LIT 100*

An examination of the conventions and varieties of dramatic texts and performance, focusing on drama of the 20th century. Includes discussion of both Western and non-Western traditions.

**LIT 460 Gender and Literature**

*Prerequisites: LIT 100*

A study of the representations of gender in literature to better understand changing literary aesthetics. Discusses assumptions about the ways gender permeates language and discourse.

**LIT 463 20th Century World Literature**

*Prerequisites: LIT 100*

This course will address 20th century literary works from diverse cultures and literary traditions. The assigned readings in this course will be outside the North American literary tradition.

**LIT 480 Literature of the Americas**

*Prerequisites: LIT 100*

This course will provide students with a hemispheric perspective to the study of the literatures of the Americas. The readings will come from a variety of prominent 20th century U.S. and Latin American literary texts. All works will be read in English translation.

**LIT 498 English Capstone Course**

*Prerequisites: Satisfactory completion of 8 upper-division LIT courses*

This course is designed as the culmination of the English B. A. program. Students will bring the skills in literary study, analysis, research and writing learned in the program to bear on an original work of literary scholarship. Students will also be given the opportunity to revisit and revise several papers written in previous classes in the major. This course is an eight-week Practicum. Grading is H, S, or U only.

**LTL - Language, Teaching and Learning****LTL 504B Teach Methods: Sec Schs**

Second language instructional approaches (Communicative, Content-Based, Situated Learning) and methodologies (ELD, SDAIE) and use of instructional materials in secondary and middle schools. Examination of the most effective age-appropriate strategies, techniques, resources, and technology applications for all students, especially English Language Learners.

**LTL 524S Lang Teach & Assess: Spanish**

Serves as a foundation for critically examining and implementing effective practices, assessments, and resources for teaching listening, speaking, reading, and writing in Spanish. Focuses on developing and implementing authentic approaches to teaching culture that integrate trends in history, politics, traditions, social relationships, and value systems.

**LTL 600 Found of Lang Teach & Learn**

Synthesize and apply the foundations of education: history, philosophy, legal aspects, ethics, and sociology of language teaching and learning with an emphasis placed on the major cultures represented in the state of California. Utilize the knowledge, paradigms and perspectives to deal effectively with the challenges and opportunities of diversity in language teaching and learning.

**LTL 602 Linguistics & Lang Learn**

Focuses on the components of language and theories of first and second language acquisition. Compares and contrasts the processes and outcomes of first and second language acquisition. Includes classroom implications of first and second language acquisition.

**LTL 604A Teach Methods: Elem Schs**

Examination of specific second language instructional approaches (Communicative, Content-Based, Situated Learning) and methodologies (ELD, SDAIE) and use of instructional materials in elementary schools. Demonstration and integration of the most effective age-appropriate strategies, techniques, resources, and technology applications for all students, especially English Language Learners.

**LTL 606A S-B Assessment: Elem Schs**

Examines and applies the theory of assessment and specific approaches and techniques of standards-based assessment and use of materials including tests for Single Subject Teaching Credential (CAHSEE, SHSP, PSAT and vocational assessment), in order to implement the most effective assessments in their teaching practices for all students, especially

English Language Learners, in elementary schools based on age-appropriate tools.

#### **LTL 606B S-B Assessment: Sec Schs**

Examines and applies the theory of assessment and specific approaches and techniques of standards-based assessment and use of materials including tests for Single Subject Teaching Credential (CAHSEE, SHSP, PSAT and vocational assessment), in order to implement the most effective assessments in their teaching practices for all students, especially English Language Learners, in middle and secondary schools based on age-appropriate tools.

#### **LTL 608 Culturally Responsive Inst**

Examines culturally responsive and inclusive instruction through historical, sociological and psychological perspectives. Emphasizes the development of successful family and community involvement. Includes an overview of multicultural and multilingual curricula and inclusive approaches to teaching.

#### **LTL 612S Culture: Experiences in U.S.**

Examines Latino historical and cultural information about 1) geographic and demographic features of countries of origin and immigration and migration patterns within the United States; 2) Latino historical eras, movements, and developments; 3) United States and countries of origin socio-political and socio-cultural features, and 4) diversity within countries of origin and in the United States.

#### **LTL 614S Bilingual Methods & Material**

Foundations of bilingual education, bilingualism and bi-literacy. Implications of school, home and community collaboration as well as language and literacy instruction and assessment. Applications of language teaching styles, materials, assessment and the use of technology in bilingual education settings. Strategies and methodologies to teach Spanish language in the classroom and application of higher order thinking.

#### **LTL 616S Language & Comm: Spanish**

Literal comprehension, inferential, interpretive and critical analysis of the following forms of communication: written expression, and oral communication. Students will demonstrate proficiency in reading, writing, listening and speaking Spanish for a variety of purposes in authentic contexts.

#### **LTL 618S Program Design & Advocacy**

Philosophical, theoretical, and research bases for second language programs and bilingual education, including the theoretical foundations, practices, limitations, and effects of the subtractive and additive perspective of secondary language, bilingual and dual language education. Literacy learning, native and simultaneous literacy development in the context of various approaches to program management, governance and school and community advocacy.

#### **LTL 620S Contrastive Analysis: Sp & Eng**

Examines and applies the linguistic and cultural structures and functions of Spanish and English, and provides a contrastive analysis and comparison of the two languages. Candidates will analyze the evolution of Spanish and English, as well as language variations and levels of language.

#### **LTL 622S Cultural Texts & Traditions**

Literary and cultural history and traditions of Spain and Latin America. Examination of historical, social, and political influences on Spanish and Latin American literary movements and cultures. Comparison of Spanish and Latin American cultural traditions, perspectives, products, and practices.

#### **LTL 690 Applied Research**

Knowledge, skills and dispositions required to locate, evaluate and generate research on language teaching and learning. Construction of an Applied Research Project that includes 1) the preparation of a written document ready for publication that reports findings from an applied research and 2) the preparation of a presentation that situates the research project's findings within the field of research on language teaching and learning and within the practices of professional educators.

### **MAT - Master of Arts in Teaching**

#### **MAT 635 Contemporary Issues/Challenges**

Provides advanced study in mathematics education with emphasis on contemporary issues and challenges confronting K-12 mathematics education at the K-12 levels. Focus on applying the mathematics principles and standards to improve curriculum, teaching and learning, assessment, technology usage and equity.

#### **MAT 636 Teaching Algebra/Number Theory**

*Prerequisites: MAT 635*

Provides K-9 advanced study in teaching and learning algebra and number theory content. Presents effective strategies and models of instruction to improve pedagogy and assessment in mathematics classrooms.

#### **MAT 637 Teaching Geometry/Masurement**

*Prerequisites: MAT 635, MAT 636*

Provides K-9 advanced study in teaching and learning geometry and measurement content. Presents effective strategies and models of instruction to improve pedagogy and assessment in mathematics classrooms.

#### **MAT 638 Teaching Probability/Stats**

*Prerequisites: MAT 635, MAT 636, MAT 637*

Provides K-9 advanced study in teaching and learning probability and statistics content. Presents effective strategies and models of instruction to improve pedagogy and assessment in mathematics classrooms.

#### **MAT 640 Applications of Research**

The purpose of MAT640 is to provide classroom educators with practical knowledge and skills required to understand, design, and write about research that is relevant to their lives as professional educators.

#### **MAT 640C Action Res for the Read Spec**

*Prerequisites: MAT 645, MAT 646, MAT 647A, and MAT 647B*

Fifth course of the Reading Specialization course sequence. Serves as an introductory educational research course designed to provide knowledge, skills, and dispositions required for candidates to understand, interpret, and evaluate research completed in MAT 647B. Candidates prepare an Action Research Report and utilize library and computer skills to locate research.

#### **MAT 641 Education & Social Pluralism**

Exploration of the principles of multiculturalism. Examination of ways to evaluate curricular content, adapt instruction, interact with parents and guardians, and create a classroom environment that accommodates the needs of learners in a culturally pluralistic society.

#### **MAT 642 Program Design**

This course will examine the underlying principles that have shaped standards, assessments, accountability and the need for educational reform. The course will emphasize evaluation of school programs, student assessment and program design using appropriate review criteria.

#### **MAT 643 Models of Teaching**

This course explores how a variety of teaching models and learning theories are applied in the instructional contexts. Specific application of some models and theories will be discussed in this course and presented in student-designed curriculum projects.

#### **MAT 644 Foundations of Curriculum**

This course surveys the field of curriculum with specific emphasis on foundations, principles, and issues for public educators in California's linguistically and culturally diverse society. The course identifies various approaches to curriculum and the development, design, implementation, and evaluation of curriculum. Application of curriculum approaches will be provided through student-designed analyses of curriculum.

#### **MAT 645 Dev. Fluency in Reading**

Research-based analysis of English phonology, morphology and orthography, with attention to teaching students to become proficient readers through recognizing sound-print relationships. Incorporates current approaches to phonemic awareness, explicit phonics instruction, recognition of high-frequency words and spelling patterns for both English speakers and English language learners.

#### **MAT 646 Comprehension Strategies**

Provides an investigation of meaning-making at both the local (discourse) and global (general knowledge) levels. Covers research-based models of discourse processing and representation construction. Introduces strategies to promote guided reading, independent reading, and study skills in all content areas, using the concepts of connecting background experience and applying self-monitoring strategies.

#### **MAT 647A Lang Arts Assess and Instruc I**

*Prerequisites: MAT 645, and MAT 646*

Develops the ability to assess the strengths and needs of students in reading, writing, and oracy through multiple measures. Includes classroom-based formal and informal, group and individual assessment. Also emphasizes assessment-based instruction, particularly early intervention strategies using flexible grouping, small groups, and one-on-one tutoring.

#### **MAT 647B Fld St: Lag Art Assess & In II**

*Prerequisites: MAT 645, MAT 646, and MAT 647A*

This field-experience course is the fourth course of the Reading specialization course sequence. It serves to offer the candidate the opportunity to implement research-based theory, assessment, and instructional

strategies with a diverse student population. Candidates must complete a field experience requiring assessment and instruction of students, including non-readers and English Language Learners. Candidates work with English Language Learners and struggling readers at early and intermediate levels in one-on-one, small group and whole class settings. The field experience component of this course is a supervised application of theoretical concepts in a practical setting.

#### **MAT 650 Teaching English Learners**

The course focuses on and applies current theories, research, and strategies in language structure and use, as well as in ESL teaching and learning. Factors such as social, political, cultural, legal, psychological, and pedagogical are addressed within the context of elementary, middle and secondary schools.

#### **MAT 651 Assessing Educational Leaders**

This is the foundation course for the Teacher Leadership Specialization and involves a self-assessment and the creation of a personal learning plan. Upon completion of the course, candidates will develop a clear sense of their strengths and challenges as educational leaders. In addition to developing a plan for their own professional learning, participating candidates will all learn the skills for assessing and developing other educational leaders within their organization.

#### **MAT 652 Leadership Accountability**

This course focuses on the role of the leader in educational accountability and contains an exploration of the “antecedents of excellence” which are measurable activities in teaching, curriculum, leadership, parent involvement, extracurricular activities, and other factors that are the antecedents of student achievement. Candidates learn to create accountability systems for their personal and professional responsibilities going beyond the consideration of test scores as the sole vehicle for educational accountability.

#### **MAT 653 Motivational Leadership**

This course focuses on the current state of teacher leadership, emerging proposals for reframing teacher leadership, and examines emotion intelligence research and its impact on morale and motivation of staff within organizations. Through completion of a triangulation assessment, and the creation of a personal action plan to improve emotional intelligence, candidates will better understand their organization and develop a clear sense of their own strengths and challenges as leaders.

#### **MAT 654 Seminar in Social Issues**

This course examines the issues of Poverty, Race and Class in terms of demographics, instructional, and structural influences associated with variations in student achievement. A thorough review of historical and emerging research around these issues will be examined within the lens of standards, accountability, and leadership policies.

#### **MAT 655 Leadership Impact Seminar**

This course requires candidates to apply their accumulated knowledge to a specific professional challenge addressing student equity and achievement. This is an individualized course involving the read-

ing of one required textbook and one additional text of the candidate’s choice on the topic of leadership or organizational effectiveness. An important component of this course is connecting leadership theory with practical application.

#### **MAT 670 Theory Best Practice Teaching**

Covers theories and research on Best Practices in education. Best Practice research on effective schools emphasizes: classroom instructional practices, classroom management, school organization and planning, strategies for linguistically and culturally diverse students to access the core curriculum, instructional leadership, teaching environment, teaching strategies, peer assistance, peer review process and parent and community support.

#### **MAT 671 Appl Best Practice Strat in CI**

Upon completion of this course, participants will possess the knowledge, skills and abilities identified in the California Standards for the Teaching Profession. The emphasis is on developing a repertoire of Best Practice Teaching Strategies that can be applied to classroom instruction and assessment of diverse learners.

#### **MAT 674 Differentiated Instruction**

Participants in this course learn how to increase student achievement by improving the match between the learner’s unique characteristics and various curriculum components; how differentiation involves changes in the depth or breadth of student learning; and how differentiation is enhanced through the use of appropriate classroom management, pre-testing, flexible small groups, tiered assignments, target teaching, and the availability of appropriate resources.

#### **MAT 675 21st Century Multimedia & Tech**

Students in this course will learn how to integrate, differentiate, align and individualize instruction using technology and multimedia technologies.

### **MCW - Creative Writing**

#### **MCW 600 Pedagogy of Creative Writing**

Examines the practical and theoretical models of teaching and learning creative writing with particular attention to the developments of the last twenty years. An introduction to and overview of contemporary theories, practices, texts, professional organizations and web sites will be the primary focus of this course.

#### **MCW 610 Textual Strategies**

Introduction to the craft of writing focusing on: narrative and alternative structures; developing language and style; and the importance of active reading in enhancing one’s own craft. In addition to reading and writing exercises, students produce a creative work which reflects their mastery of these tenets.

#### **MCW 630 Seminar in Fiction**

Students write and critique each other’s work in a workshop-style format. Through presentation and critique of published and student-generated work, students will advance their understanding of the genres’ many forms and styles, strengthen their own writing, and broaden their understanding of literature and various modes of literary writing.

#### **MCW 630A Advanced Workshop in Fiction**

*Prerequisites: MCW 630*

Intensive writing workshop in which students work closely with an established writer to further their development as creative writers and critical thinkers. Students will read classic and contemporary works of fiction, submit original manuscripts for peer and faculty review, and critique the manuscripts of peers.

#### **MCW 630B Adv Workshop in Fiction**

*Prerequisites: MCW 630*

Intensive writing workshop in which students work closely with an established writer to further their development as creative writers and critical thinkers. Students will read classic and contemporary works of fiction, submit original manuscripts for peer and faculty review, and critique the manuscripts of peers.

#### **MCW 635 Writing for Young Adults**

Two-month advanced writing workshop for students interested in writing for younger audiences. Students will write original works for young adult audiences and survey the history of young adult literature with an emphasis on learning the craft of writing for young adult audiences.

#### **MCW 640A Advanced Workshop in Poetry**

*Prerequisites: MCW 645*

Intensive workshop on the practice of poetry that includes reading a selection of contemporary poems, doing exercises to generate original poems, critiquing each other’s writing in a workshop setting, and creating a portfolio of original poetry.

#### **MCW 640B Advanced Workshop in Poetry**

*Prerequisites: MCW 645*

Intensive workshop on the practice of poetry that includes reading a selection of contemporary poems, doing exercises to generate original poems, critiquing each other’s writing in a workshop setting, and creating a portfolio of original poetry.

#### **MCW 645 Seminar in Poetry**

A poetry workshop where students will learn the craft of poetry by writing their own original work and offering feedback to their peers. Students will be introduced to contemporary poetry through readings and discussions of poems from a poet’s point of view.

#### **MCW 650 Seminar in Creative Nonfiction**

Students write and critique each other’s original work in a workshop-style format. Through presentation and critique of published and student-generated work, students will advance their understanding of the genre’s many forms, including memoir, autobiography, nature writing, literary journalism, and the personal essay, while strengthening their own writing.

#### **MCW 650A Adv Workshop in Lit Nonfiction**

*Prerequisites: MCW 650*

This intensive writing workshop will explore the artist’s quest for truth and address the question: how do we as writers in a post-modern age where memory, image and testimony are all suspect, know what we know? This course includes reading a selection of classic and contemporary literary nonfiction with selections from memoir, personal essay, travel writing, and literary journalism. Students will submit original manuscripts, critique the manuscripts of peers, and

will submit revised work for peer and faculty review. (May not duplicate content of MCW 50B)

### **MCW 650B Adv Workshop in Lit Nonfiction**

*Prerequisites:* MCW 650

Intensive writing workshop that includes reading a selection of classic and contemporary literary nonfiction, with selections from memoir, personal essay, travel writing, and literary journalism. Students will submit original manuscripts, critiquing the manuscripts of peers, and will submit revised work for peer and faculty review.

### **MCW 660 Thesis I (Practicum)**

*Prerequisites:* Requires completion of MFA CW portfolio all core, specialized study and elective courses

Students are required to work one-on-one with a faculty mentor in their particular field to develop their thesis proposal and an initial first draft of a full-length, publishable manuscript. Grading is by S or U only. Course is eligible for an "IP" grade.

### **MCW 670 Thesis II (Revision)**

*Prerequisites:* MCW 660

Capstone course, each student will submit a body of original work of publishable quality, appropriate length to the chosen genre, along with a preface in which the writer discusses her/his evolution as an artist and the evolution of the work. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

### **MCW 680A Adv Workshop in Screenwriting**

*Prerequisites:* MCW 685

Intensive writing workshop designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Readings of both classic and contemporary films reinforce students' knowledge of three-act structure and cinematic storytelling. Peer review and instructor feedback provide writers a mode of creative support.

### **MCW 680B Adv Workshop in Screenwriting**

*Prerequisites:* MCW 685, and MCW 680A

Intensive writing workshop designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Readings of both classic and contemporary films reinforce students' knowledge of three-act structure and cinematic storytelling. Peer review and instructor feedback provide writers a mode of creative support.

### **MCW 685 Basics of Screenwriting**

Introduction to the craft of screenwriting, particularly in regards to the principles of narrative and storytelling, traditional three-act structure, character, and dialogue. Through intensive reading and writing exercises, along with workshop critiques, students produce a finished treatment and the beginning of a feature-length screenplay.

## **MDC - Digital Cinema**

### **MDC 650 Producing Digital Cinema**

This course focuses on the process of producing and distributing digital cinema content. The course provides students with hands-on experience developing digital content in the form of a digital short based on

a personal narrative with archival images and found footage. Students develop individualized distribution strategies based on independent research into current and emerging exhibition media available to independent digital cinema producers, including technical specifications, digital content management and legal considerations.

### **MDC 651 Digital Cinematography**

*Prerequisites:* MDC 661

*Corequisites:* MDC 651P

This workshop focuses on digital cinematography and the aesthetic aspects of cinematic practice. Students evaluate core concepts of cinematography: composition, lighting, camera movement, lens selection and the technical limitations and advantages of digital cinematography. Taken concurrently with MDC 651P "studio practicum," students apply cinematic techniques using digital still and video cameras.

### **MDC 651P Cinematography Practicum (2.25 quarter units)**

*Corequisites:* MDC 651

In this independent "studio practicum" taken concurrently with MDC 651, students apply cinematic techniques and theory using digital still and video cameras based on practical assignments developed by the instructor. Practical assignments will receive individual and peer critiques.

### **MDC 652 Digital Editing**

*Corequisites:* MDC 652P

This workshop covers the history, theory and practice of motion picture editing and post-production workflow. Students evaluate and apply editing techniques and theory using digital still and video cameras based on practical assignments developed by the instructor. Practical assignments will receive individual and peer critiques.

### **MDC 652P Digital Editing Practicum (2.25 quarter units)**

*Corequisites:* MDC 652

In this independent "studio practicum" taken concurrently with MDC 652, students apply professional editing theory and techniques using non-linear editing systems on practical assignments developed by the instructor. Practical assignments will receive individual and peer group critiques.

### **MDC 653 Film Directing**

*Prerequisites:* MDC 651, MDC 660, and MDC 662

Focusing on the theory and practice of directing films, the course covers the director's responsibility for developing the vision and objectives of a production. Students analyze and break down scripts and evaluate aesthetic choices necessary for effective dramatic and visual storytelling.

### **MDC 660 Narrative Structure in Film**

This seminar examines the characteristics of cinematic storytelling found in popular genre and independent films, including the conventional three-act structure and variations on those structural elements.

### **MDC 661 Cinematic Design**

This seminar covers the application of visual aesthetic theory in the design of contemporary cinema and visual communication. Topics include the physiolog-

ical and psychological basis of visual design such as perception of light and color, and the use of compositional elements and principles of cinematic design to construct meaning in film.

### **MDC 662 Sound Design**

*Prerequisites:* MDC 652

Covers the role of sound in contemporary filmmaking, including the development of sound design as a part of contemporary cinema and essential aspects of field production audio recording, post-production workflow, studio mixing, audio effects, ADR, music and media asset management.

### **MDC 670 Producing Documentaries**

*Prerequisites:* MDC 650, and MDC 683

*Corequisites:* MDC 670P

This workshop covers the planning, stylistic and logistical requirements unique to documentary production as well as the aesthetic and stylistic considerations of documentary subjects. Students prepare production plans for documentary film projects that would qualify for grants and funding.

### **MDC 670P Documentary Practicum (2.25 quarter units)**

*Prerequisites:* MDC 650, and MDC 683

*Corequisites:* MDC 670

In this independent "studio practicum" taken concurrently with MDC 670, students develop a documentary funding package based on practical assignments developed by the instructor. Practical assignments will receive individual and peer group critiques.

### **MDC 680 Screenwriting**

*Corequisites:* MDC 680P

An introductory screenwriting workshop that provides a foundational study of the theory and practice of writing for feature film. The course is designed to enable students to complete an outline for a full-length feature screenplay and a first draft of a feature script based on their own original ideas. Through this course students will sharpen critical and analytical skills, develop a critical vocabulary to talk and write perceptively, articulately, and precisely about professional and student-generated screenplays, and to articulate their own aesthetic tastes and artistic goals. As a result of taking this course students should understand the need to take risks in order to explore and develop one's creative potential to discover and develop original work from one's personal vision.

### **MDC 680P Screenwriting I Practicum (2.25 quarter units)**

*Corequisites:* MDC 680

In this independent "studio practicum" taken concurrently with MDC 680, students develop a "first draft" of an original screenplay guided by practical assignments developed by the instructor. The original draft screenplay will receive a minimum of two individual critical reviews.

### **MDC 681 Screenwriting II**

*Prerequisites:* MDC 680

*Corequisites:* MDC 681P

In this workshop, students complete a second draft revision and "final polish" of an original screenplay. The course is designed to enable students to advance their analytical skill and apply them to professional and student-generated screenplays. Taken concurrently with MDC681P "studio practicum."

**MDC 681P Screenwriting II Practicum (2.25 quarter units)**

*Corequisites: MDC 681*

In this independent “studio practicum” taken concurrently with MDC 681, students develop a second “polished draft” of an original screenplay guided by critical feedback provided by the instructor. The original screenplay will receive a minimum of two individual critical reviews.

**MDC 683 Production Management**

*Prerequisites: MDC 650, MDC 651, MDC 652, MDC 662, and MDC 653*

*Corequisites: MDC 683P, MDC 688, and MDC 689*

Working collaboratively as director, director of photography, assistant director, or production manager, students develop a film production from pre-production through production and post-production. Includes script breakdowns for budget, schedule, casting, location, cinematography and production design, on-set procedures, and post-production work-flow.

**MDC 683P Production Management Practicum (2.25 quarter units)**

*Corequisites: MDC 683*

In this “independent studio practicum” taken concurrently with MDC 683, students apply industry practices to develop a production plan and pre-production documentation needed to execute a professional production. Practical assignments developed by the instructor will receive individual and group critiques.

**MDC 688 Production**

*Prerequisites: MDC 651, and MDC 653*

*Corequisites: MDC 683*

Collaborative production of short film projects using professional equipment. Includes masters production workshops and production of a short film in an authentic production environment. Must be taken on site at a National University campus and concurrently with MDC 683P. See the program catalog description for residency information. A materials fee for production expenses applies.

**MDC 689 Digital Cinema Post-Production**

*Prerequisites: MDC 650, and MDC 652*

*Corequisites: MDC 683*

Students work collaboratively editing digital cinema projects shot during MDC 688 using professional editing and audio post-production systems. Must be taken onsite at a National University campus. Must be taken concurrently with MDC 683P, unless approved by lead faculty. See the program catalog description for residency information. (A materials fee applies.)

**MDC 691 Thesis Production**

*Prerequisite: all other MDC core courses*

The MFA in Digital Cinema Thesis consists of a short subject digital motion picture, a written component that demonstrate the student’s ability to communicate coherently, critically, and creatively and a selected professional digital reel/ portfolio. The written components of the thesis include a project proposal, treatment/synopsis, shooting script, budget and production documentation, a critical analysis of the project and research on relevant genre influences, and a personal evaluation of the candidate’s portfolio work and evolution as a filmmaker. Initially, MFA

candidates work with their thesis advisor to develop a thesis proposal. Once a proposal is accepted, a grade of IP is assigned. Milestones established in the proposal include a shooting script or documentary shooting treatment, preproduction planning, production and post-production phases. A rough cut of the project must be submitted to the committee on DVD as specified by the thesis advisor for committee comment prior to completion of the project. Candidates have one-year from the awarding of the IP grade to submit a thesis. The completed thesis consists of the digital motion picture short, written thesis and digital portfolio on DVD in formats specified by the thesis advisor. The thesis committee evaluates the short subject motion picture project, written thesis and digital portfolio to determine whether the student has mastered the requirements for the MFA in Digital Cinema. Grading is by H, S, or U only. Course is eligible for an “IP” grade.

**MDC 692 Thesis Development**

*Prerequisites: Satisfactory completion of all MDC core requirements.*

MFA candidates work independently with a thesis advisor to develop a story and proposal for a digital cinema short suitable for funding through grants or other sources. This is a 16-week course. For unsatisfactory graded proposal, the course must be repeated. Grading is by H, S, or U only.

**MDC 693 Thesis Production (2.25 quarter units)**

*Prerequisites: MDC 692*

MFA Candidates work independently in consultation with the thesis production advisor during the pre-production and production phases. Production deliverables include a production plan, final budget and schedule, production documentation and dailies. This is a two-month course. Grading is H, S, or U only. Unsatisfactory graded course must be repeated.

**MDC 694 Thesis Postproduction (2.25 quarter units)**

*Prerequisites: MDC 693*

Development of a digital asset management plan, post-production workflow and schedule and an editing script or outline and editing the thesis short subject film independently under the guidance of a post-production advisor. Includes submission of multiple cuts of the film based on advisor and thesis committee critiques. This is a three-month course. Grading is S or U only. The course must be repeated for an unsatisfactory grade.

**MDC 695 Thesis Qualification (2.25 quarter units)**

*Prerequisites: MDC 694*

Final review and critique of a completed thesis film and written thesis. The candidate is allowed a maximum of three reviews to meet the qualification standard for the MFA. This is a two-month course. Grading is H, S, or U only. The course must be repeated for an unqualified project.

**MGT - Management**

**MGT 309C Prin. of Mgmt & Organizations**

This course is a survey of the theories, techniques, and concepts of management in organizations and the role of the manager in a technologically-oriented society.

**MGT 400 Ethics in Law, Business & Mgmt**

This course is an exploration of values and ethics in American business utilizing debate and written exercises. It also considers ethical issues arising in the global business environment.

**MGT 422 Team Bldg, Interpers Dynamics**

An overview of the issues of quality applied to human resources management, topics include the delegation of authority and empowerment, work groups, team building, and employee involvement, reward/recognition programs and employee morale, and the importance of written and oral communication skill in the delegation, sharing, and execution of work. Students gain a clearer understanding of the ways the workplace is changing to improve productivity and profitability.

**MGT 430 Survey of Global Business**

*Prerequisites: ECO 203, and ECO 204*

A study of the accelerating internationalization of all business, this course introduces upper-division undergraduate students to all facets of international business within three broad subject areas: (1) the economic framework of international business, (2) the operating frameworks of multinational corporations, and (3) a framework for global strategic management. It uses case studies to illustrate concepts and methods.

**MGT 442 Strategic Business Management**

A study of the application of strategic management principles to the developing, organizing, financing, and operating of a business enterprise, this course integrates and applies skills and knowledge gained in other business courses, especially those in management, marketing, accounting, and finance. To enroll in MGT 442, students must first complete all “Preparation for the Degree” courses and at least four of the courses listed as upper-division BBA requirements.

**MGT 451 Production & Ops Management I**

A survey of the fundamental concepts of production and operations management, the course covers the use of quantitative methods and computer applications for forecasting, resource allocation, decision theory, capacity planning, project management, inventory management, and quality assurance.

**MGT 481 Foundations of Entrepreneurshi**

A study of entrepreneurship with particular reference to creating and starting a new venture. Emphasis on historical development of entrepreneurship, risk taking and entrepreneurship, innovation and marketing the plan, financial plan, organizational plan, going public, and legal issues for the entrepreneur.

**MGT 482 Small Business Management**

An in-depth study of small to mid-sized companies with a view to preparing students for leadership roles. Emphasis on building and managing companies from the start-up phase to their growth and efficient operation. Problem solving strategies of managerial, legal and ethical issues and dilemmas particularly relevant to small business.

**MGT 483 E-Business**

Creating, integrating and maintaining successful e-business through a business plan. Emphasis on

origin and growth of e-business, security concerns of e-business, entrepreneurial aspects of business-to-business e-commerce, e-tailing and supply chain management. Students are encouraged to develop business plans through their own website.

#### **MGT 484 Family Business Management**

Planning and operation of an established family business for maximization of profit. Emphasis on succession to next generation, evaluating then existing business plans, marketing strategies, conflict resolution, estate planning, legal and financial aspects.

#### **MGT 490 Guided Study** (variable units)

This course is individual study under direction of instructor. It requires prior approval of appropriate academic department.

#### **MGT 601M Principles of Management**

Examination of management theory and provide opportunities for application of these ideas in real world situations. This examination focuses on the managerial functions of Assessing, Planning, Organizing, and Controlling. Both traditional and cutting-edge approaches are introduced and applied. Specific attention is paid throughout the course to the ethical implications of managerial action and inaction.

#### **MGT 602 Strategic Decision-Making**

A capstone course for MBA students. An in-depth study of general management functions as organizations adapt to the global environment, this course emphasizes environmental characteristics that make strategic management critical to organizational success, including assessment of organizational strengths and weaknesses, identification of opportunities and threats, optimum response to unanticipated events, and strategic analysis in turbulent environments. It also analyzes the socio-cultural, political, economic, ethical, technological, and regulatory environments that have an impact on businesses in multicultural settings. The course places special focus on the impact of NAFTA and GATT upon the strategic management of business enterprises. Explores global business opportunities provided through new technologies for both small firms and large corporations.

#### **MGT 603 Business Operations Management**

This course presents a customer-oriented view of operations within an organization. Guided by the organization's strategic plan, operations deliver the products and services to the customers. This course explores how this delivery is accomplished with efficiency and effectiveness. Components of the course include issues of quality, physical design, and systems management.

#### **MGT 604 Project and Program Management**

This course provides a foundation of theory and practice for managing the successful use of project or program approaches to complete work in organizations. Students explore a wide-variety of projects and programs. Specific topics include the definition and application of these approaches, development of work plans, and measurement and evaluation of results.

#### **MGT 605 Organization Mgmt & Leadership**

This course distinguishes the fundamental practices of sound management functions to the understand-

ing of effective leadership. Organizations need both leadership and management understanding to function effectively in creating the learning organization. Students will learn to analyze and create plans for strategic management, and apply leadership concepts and approaches.

#### **MGT 606 Service Management**

This course provides a survey of the different types of services provided by organizations. Topics include similarities and differences between production of services and production of products, the wide variety of services produced, proportion of organizations' offerings that are services, and accountability and quality of services.

#### **MGT 607 Performance Management**

This course provides an introduction to the connection between individual performance and organizational achievement. Topics include aligning individual objectives with organizational objectives, motivation, performance appraisal, coaching, and rewarding successful performance.

#### **MGT 608 Managerial Support Systems**

Survey of the principal information systems applications and how business decisions are facilitated by these applications, including information as a competitive resource. Also covered are supply chain management, enterprise resource planning, and knowledge management. Topics are approached from a systems standpoint, emphasizing effective managerial use of such systems.

#### **MGT 610C Graduate Business Project**

*Prerequisites: Specific prerequisites for each program are indicated below: MBA students: completion of 31.5 quarter units in the MBA program.* A project where students work in teams or as individuals under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates. Grading is H, S, or U only. MGT 610C is two months in length.

#### **MGT 612 Global Strategic Project**

This course is the capstone for the Master of Global Management. It provides a foundation in the creation and execution of organizational strategy. In this context, students are expected to draw on the content from program to successfully complete this project that has global strategic impact. This project should conclude with a set of actionable recommendations.

#### **MGT 625 Managerial Communication**

This course explores the important roles that communication plays in managers/leaders being effective in their tasks as they exchange meaning with supervisees, peers, supervisors, the larger organization, and the community. Both formal and informal communication will be addressed. Additionally, issues such as cross-cultural communication, ethics, conflict resolution, crisis communication, and developing organizational communication competencies will be investigated.

#### **MGT 630 Global Business Environment**

An analysis of the global economic, political, and cultural factors affecting international business, this

course provides an overview of international trade and investment theory, the pros and cons of protectionism, the global financial environment, and the role of the multinational corporation. It analyzes international sourcing, marketing, and strategic management for global business.

#### **MGT 635 The Org Consulting Process**

A survey of the history, values, assumptions, methods, and limitations of the organization consulting process, the course discusses both internal and external consulting as well as roles of managers as both consultants and administrators of the consulting process.

#### **MGT 637 Comparative Int'l Management**

This course studies the impact of country-specific cultural, economic and legal factors on the theory and practice of managing multinational corporations. Case studies focusing on North American, Latin American, European and Asian settings are used to illustrate the feasibility of adapting and combining different national management styles in the operations of domestic and multinational corporations.

#### **MGT 640 Operation Planning and Impleme**

This course presents the connection between the operations management of an organization and its productivity. Issues of 1) supply chain management, 2) production planning, processes, locations, and quality, 3) human resources, and 4) project management are explored from an operations management perspective. The course identifies the impact of the internet and intranets on operations management as well as the operations management issues resulting from the continued growth of e-commerce.

#### **MGT 651 Managing Safety Issues & Regs.**

An analysis of current issues manifested by major legislation and the significant health and hygiene regulations faced by health safety managers, the course covers safety program models including workers compensation insurance, fire protection, product liability, and other casualty risks involved in safety and health programs.

#### **MGT 652 Business Simulation**

*Prerequisites: MGT 602, MGT652 is a simulation of strategic decision-making, and a thorough knowledge of business strategy theory and models is required to participate productively in this simulation.* A thorough exercise in strategic decision-making at the functional and corporate levels. Students make strategic choices on key marketing, finance, accounting, human resources and operations management issues, and deal with the effect of changes in the economic and political environment on consumer demand, the exchange rate and tariffs. They take corrective action after each round, evaluating results in terms of a cumulative balanced scorecard.

#### **MGT 680 Topics in Int'l Business**

This is a graduate seminar covering new trends and areas of interest in international business with a focus on regional business environments. Examples of topics treated in the course are: doing business in emerging markets; economic integration in Europe and Latin America; emergence of new global firms and industries; offshoring; outsourcing; etc.



### **MGT 690 Guided Study** (variable units)

This is individual study under direction of instructor. It requires prior approval of appropriate academic department.

## **MKT - Marketing**

### **MKT 200 Basic Marketing**

Introduction to contemporary marketing and its application in the marketing implementation process. It places special focus on the use of the four P's (Price, Promotion, Product and Place) as well as market opportunities, product development, promotion planning, pricing decisions, and channels of distribution.

### **MKT 210 Intro to Consumer Behavior**

*Prerequisites: MKT 200*

A study of the dynamics of human behavior and how it relates to the purchasing decision, this course provides a general view of the different factors that influence the consumer's decision-making including, personality, social groups, culture, values structure, perception and learning.

### **MKT 220 Intro to Personal Selling**

*Prerequisites: MKT 200*

Overview of the elements of success in sales, including researching products and competitors, handling objections, making sales through in-person interviews or over the phone, identify different types of customers and how to sell best to each type, and selling to corporations.

### **MKT 230 Basic Advertising Concepts**

*Prerequisites: MKT 200*

Introduction to the principles of advertising where students learn how to select and use the various advertising media to meet specific marketing problems and opportunities. It encompasses an overview of radio, television, print media, outdoor advertising, and media budgets.

### **MKT 302A Marketing Fundamentals**

This course is the introduction to contemporary marketing theory and its application in the marketing implementation process. It places special focus on identifying market opportunity, product development, promotion planning, pricing decisions, and channels of distribution.

### **MKT 420 Principles of Consumer Behavior**

*Prerequisites: MKT 302A*

A study of the dynamics of human behavior and how it relates to the purchase decision, the course provides an in-depth view of the many factors that influence the consumer's decision-making process including personality, social groups, culture, values structure, perception, and learning. Course material is related to market strategy development through lecture, case, and field study.

### **MKT 430 Intro to Global Marketing**

*Prerequisites: MKT 302A*

An introduction to the fundamentals of trade, finance, and investment in the international context, the course discusses the international monetary framework and foreign exchange in detail. It reviews theory and history of international trade, including exporting and importing, regional economic integra-

tion, and international marketing.

### **MKT 434 Intro to Market Research**

*Prerequisites: MKT 302A*

A course that gives the student an overview and practical application of contemporary methods for gathering, analyzing, and preparing market research for use in marketing decision making. It focuses on defining organizational information needs and designing appropriate research methods to obtain it. Specific topic areas include qualitative and quantitative research methods, secondary research, internal market intelligence systems, and data analysis.

### **MKT 440A Sales Techniques & Methodology**

*Prerequisites: MKT 302A*

A survey of the essential principles of salesmanship and selling techniques, the course includes the approach to non-manipulative selling and benefit identification. Also covered is how to identify the right market segment, prospect, and plan for personal selling. It introduces direct selling and provides exercises that enhance the direct selling process.

### **MKT 441 Channel and Value Networks**

*Prerequisites: MKT 302A*

A study of all phases of management skills in the field of physical distribution with emphasis on customer service and international distribution strategies, the course covers distribution strategies for products and services. It pays specific attention to direct distribution (from manufacturing to retail), indirect distribution (agents, independent representatives, and VARs), and direct marketing (fulfillment centers).

### **MKT 442A Intro to Public Relations**

An exploration of the various methods for dealing with three of the most critical audiences for business information: investors, government agencies and the public.

### **MKT 443 Introduction to Advertising**

*Prerequisites: MKT 302A*

A survey of effective advertising techniques in multiple media (virtual, visual, radio, television) and advertising campaign allocation methods.

### **MKT 445 e-Marketing**

*Prerequisites: MKT 302A*

An introduction to the interactive methods of marketing using a digital platform including social media, web-based and advanced global marketing techniques.

### **MKT 446 Introduction to Services Mkt**

*Prerequisites: MKT 302A*

This course examines services marketing as distinct and separate from product marketing. Discussions focus on the theory and practice of designing and developing service marketing strategies for segmented populations. Emphasis is placed on positioning various types of services through added value and immediate response using technology to communicate effectively in a global market.

### **MKT 447 Marketing for Entrepreneurs**

*Prerequisites: MKT 302A*

A discussion of the strategies and ideas for building a business in the global economy for the entrepreneurial

business owner taking a hands on approach to managing a company. This course focuses on innovation and creativity, global thinking, service support, and the importance of the internet in developing marketing strategy in both large and small companies.

### **MKT 448 Not-For-Profit Marketing**

*Prerequisites: MKT 302A*

A study of the marketing dynamics of Not-For-Profit organizations in which multiple groups, often with conflicting goals and needs, must be simultaneously satisfied for organizational success. A particular emphasis is placed on the identification and attraction of funding sources in the community.

### **MKT 449 Advanced Market Research**

*Prerequisites: MKT 434*

Data is everywhere, but knowledge is precious. Organizations require extensive information to identify new markets and new ways of addressing existing markets. Students will learn how to use software to extract and analyze data, find patterns and interpret the results to develop marketing strategies and messages for traditional and Web 2.0 media.

### **MKT 480 Marketing Capstone**

*Prerequisites: Completion of 31.5 quarter units of upper-division core requirements, MKT 302A*

A synthesis of the marketing knowledge gained in the undergraduate program as expressed through a professional research- or internship experience-based writing project overseen by a faculty member.

### **MKT 602 Marketing Management**

An in-depth examination of marketing environments and the impact marketing activities have on organizational operations in competitive, global, multicultural business settings, the course discusses both domestic and international frameworks of the fundamental marketing functions of product, pricing, distribution, and promotion. It explores and analyzes modern marketing problems and solutions from conceptual, legal, and ethical perspectives. It explains marketing information systems and the use of advanced technologies in marketing decision making.

### **MKT 620 Consumer Behavior**

*Prerequisites: MKT 602*

An in-depth study of how psychological, sociological, and cultural variables influence buying behavior and marketing strategy development. It focuses on identifying the relevant behavioral variables in a given product purchase situation and determining how marketing strategy can be adapted to meet the ways in which consumers perceive, select, and buy. It uses advanced cases and a field study project.

### **MKT 631 Global Marketing**

*Prerequisites: MKT 602*

A study of strategic planning and organizing for international marketing, researching global markets, marketing consumer products, industrial products, and services in the world market, the course explores the international advertising and promotion effort, personal selling and personnel management, pricing, distribution systems, export trade mechanics and logistics, financial requirements for international marketing, and coordinating and controlling global operations. It also discusses the effect of trade agreements on international business.

### **MKT 633 Sales Management**

*Prerequisites: MKT 602*

This course is a survey of all facets of sales management, including estimating sales potential and forecasting sales, manning territories, selecting, training, motivating, supervising and compensating the sales force, and interfacing with other company functions. Also covered are typical sales management problems and potential solutions.

### **MKT 634 Market Research**

*Prerequisites: MKT 602*

An examination of principles and techniques of market research with emphasis on quantitative applications, this course focuses on defining organizational information needs and designing appropriate research methods to obtain information. It covers qualitative and quantitative research methodologies, secondary research, internal market intelligence systems, and data analysis.

### **MKT 635 Ad Management & Marketing**

*Prerequisites: MKT 602*

An analysis of marketing communications from business, social, economic, and political perspectives, this course provides an in-depth discussion of advertising and promotion as key tools in marketing new and established products. It examines advertising planning and management, research, creative development, media selection, direct response, and advertising agencies. Emphasis is on new media technologies and the growing use of alternative media in communicating with selected publics.

### **MKT 651 Mobile Marketing**

This course covers how mobile marketing is defining business today, including strategy, tracking ROI, advertising, applications and mobile websites. From text messaging to QR codes, consumer interactions with mobile devices, and the laws and ethics of mobile marketing are explored in this course.

### **MKT 652 Adv Mobile Mkt Strategies**

*Prerequisites: MKT 651*

This course will present a strategic focus for marketing in the mobile world. Students will cover the 3 C's: Communication, Content, and Commerce as it relates to mobile marketing. Students will be exposed to the most current cases in mobile marketing, and will be challenged to validate the ROI of mobile marketing in business globally. This course will include use of QR codes, Near Field Technology (NFT) and Location Based Services (LBS).

### **MKT 653 Social Media**

This course gives a foundation to the practical business applications of social media in a marketing world. Through Facebook, LinkedIn, blogs, YouTube, Pinterest and other platforms, students discover that social media is for more than just making friends and that there are now only a few degrees of separation globally. Students learn that social media is about marketing at the right time, place and with the right message for existing as well as prospective customers with both legal and ethical behaviors.

### **MKT 654 Adv Social Media for MKT**

*Prerequisites: MKT 653*

Mastering business using social media is about sustaining relationships with customers and tracking

them throughout the supply chain. Customer Relationship Management and the three M's will be covered: Monitoring, Measurement, Metrics. Case studies will be used throughout the course to illustrate the mastery of the subject.

### **MKT 655 Mobile MKT SocialMedia Project**

*Prerequisites: MKT 654, MKT 652*

Students work in teams or as individuals under the guidance of an assigned faculty advisor. Students gather intelligence and then create a strategic Mobile Marketing/Social Media Plan for an existing or new company. Students present their plans in both written and oral forms to faculty, industry experts and classmates. Presentations include how to implement and evaluate their plan's effectiveness for products or services in a global marketplace.

### **MKT 660 Strategic Operational Marketin**

*Prerequisites: MKT 602, MKT 620, MKT 631, and MKT 634*

Students clarify research topics and identify data sources in preparation for the development, implementation and evaluation of a Marketing Plan for a product or service. Students will gather data and present their research in both written and oral form to faculty and classmates.

### **MKT 670 Selected Topics in Marketing**

*Prerequisites: MKT 602*

This course that is developed on request from regional centers to serve specific regional educational and business needs. Potentially it covers topics such as telecommunications, computers, health care services, marketing communications, retail management, and/or industrial marketing.

## **MNS - Management Science**

### **MNS 205 Intro to Quantitative Methods**

*Prerequisites: Placement Evaluation*

An examination of advanced algebra techniques in the business setting, including linear systems, polynomials, exponential and logarithmic functions, as well as introduction to probability and statistics. The primary quantitative course required for MNS 407. (Students who have taken college algebra (MTH 215) within the last three years are exempt from this course.)

### **MNS 407 Management Science**

*Prerequisites: MNS 205*

A survey of the fundamentals of management science. Emphasizes the concepts and mathematical techniques most useful in business and finance.

### **MNS 601 Statistics for Business**

An examination of the increasing complexity of business problem-solving confronting today's managers, this course covers the role statistics and forecasting play in the business decision-making process, as well as the principles and steps involved in planning and conducting business research. Within the context of this course, students propose to study a situation that exists within an organizational setting and identify a faculty research advisor with knowledge in the focus area.

### **MNS 606 Decision Systems for Managers**

Focus on major corporate applications of information technology, learning how business decisions are

facilitated by these applications, including information as a competitive resource, supply chain management, enterprise-wide systems, knowledge management, and data mining. Topics are addressed from a systems approach, emphasizing effective managerial use of such information systems.

## **MRA - Clinical Regulatory Affairs**

### **MRA 600 Intro to Regulatory Affairs**

This course is designed to present an introduction to the regulations and documents necessary for FDA approval of a new medical device or pharmaceutical product. The student will be introduced to federal regulations (CFR), human subject regulations, clinical trials and evidence based documents, clinical protocols, data management, clinical trial data, investigational review board and submissions of drug and device approval documents. An introduction to clinical and manufacturing process and standard operating procedure documentation will also be included.

### **MRA 601 Clinical Documentation**

This course will focus on the laws and regulations, documentations and process imposed by the Federal government especially the Food and Drug Administration related to pharmaceutical and medical device approval and the clinical trials associated with the approval process. Emphasis is placed on designing and implementing appropriate clinical trial protocol documents as well as all forms associated with the clinical trials used for evidence based documentation of the trial(s). Statistical justification will also be introduced for use as to methodology and analysis of the trial.

### **MRA 602 Human Subjects in Clinical Tri**

This course is designed to give the student the fundamental knowledge in the protection of human subjects in a clinical trial. The course will emphasize federal, state and local regulations in protecting the health and welfare of human subjects in a clinical trial. Proper documentation, HIPAA regulations, IRBs, international codes of conduct, Declaration of Helsinki, Informed Consent, adverse events CFRs and all other pertinent documents and codes will be covered.

### **MRA 603 Medical Device and Pharmaceuti**

This course will focus on the laws and regulations, documentations and process imposed by the Federal government especially the Food and Drug Administration related to pharmaceutical and medical device approval. The course will provide students with detailed knowledge and practical application as it applies to appropriate documentation and process of approval for pharmaceutical and medical devices. The students will understand the nomenclature of the regulatory agencies; have a thorough knowledge of the code of Federal Regulations as it applies to medical devices and pharmaceutical products.

### **MRA 604 Coordinating and Monitoring Cl**

This course is designed to give the student comprehensive knowledge in coordinating and monitoring clinical trials and clinical trials research. Emphasis is placed on understanding regulations, good clinical practice, an overview of research, standard operating procedure, data documentation, preparing and working with subjects, monitoring clinical trials and study closure.

### **MRA 605 Analytical Methods for Regulation**

This course will give the student the fundamental knowledge of statistical concepts and analytical methods as applied to biomedical science and clinical trials. It will emphasize basic concepts of methodology and experimental design, quantitative analysis of data and statistical significance. A case study approach will be used to cover the basic designs of clinical trials with emphasis on appropriate methodologies, endpoint variables, control groups, blinded studies, eligibility criteria and placebo control. The course will cover statistical analysis including probabilities and variables. Students will be required to design and implement a full protocol for a fictitious drug or medical device elucidating the data for approval.

### **MRA 606 FDA Regulations & Submissions**

This course will give the student the fundamental knowledge of FDA regulations as they apply to medical devices and pharmaceutical products and the documentation needed for such approval. The code of Federal Regulations will be utilized with emphasis on CFR 21, FDA compliance, ICH guidelines for international harmonization and Good Clinical Practice (GCP), investigator study files, FDA audits and Adverse Event reporting.

### **MRA 610A Regulatory Affairs Capstone**

A two month course that meets on a once a week basis, this course is designed to have the student develop and implement a research document that integrates all facets of a clinical trial including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program. Grading is by S or U only. Course is eligible for an "IP" grade.

### **MRA 610B Regulatory Affairs Internship**

This course is designed to give the student a "hands on" real world experience working in a clinical trial environment. The student will acquire fundamental knowledge in evidence based clinical data, statistical analysis and documentation of clinical results. The student will be required to write a critical evaluation of the clinical trial a complete analysis of methodology, clinical forms, FDA regulations and data management. Grading is by S or U only. Course is eligible for an "IP" grade.

## **MTH - Mathematics**

### **MTH 12A Algebra I**

First of a two-course sequence covering methods of simplifying formulas and expressions, solving equations and inequalities, operating with exponents, and translating statements to symbols. Calculator use is highly recommended. Grading is S or U only. (This course is remedial in nature and does not award collegiate credit)

### **MTH 12B Algebra II**

Second of a two-course sequence extending skills and logical analysis begun in MTH 12A. Course covers rational expressions, linear equations in two variables, algebraic and graphical solutions of systems of equations, scaling and variations, quadratic and rational equations with emphasis on practical applications. Calculator use is highly recommended.

Grading is S or U only. (This course is remedial in nature and does not award collegiate credit)

### **MTH 204 Mathematics for Science**

*Prerequisites: MTH 12A, and MTH 12B, or Accuplacer test placement*

A review of basic mathematics principles, including main algebra concepts, for business, probability and statistics, physical, natural, and social sciences for non-mathematics majors. This course provides the necessary skills to be successful in MTH 210, MTH 215, SCI 104 and SCI 104A, SCI 101 and SCI 101A, SCI 102, SOC 100 and SOC 260.

### **MTH 209A Fundamentals of Mathematics I**

*Prerequisites: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

A study of the real number system and its subsystems, ancient and modern numeration systems, problem-solving and simple number theory. Includes teaching materials and discussion of today's professional organizations. This is a content course, not a methods course.

### **MTH 210 Probability and Statistics**

*Prerequisites: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

An introduction to statistics and probability theory. Covers simple probability distributions, conditional probability (Bayes Rule), independence, expected value, binomial distributions, the Central Limit Theorem, hypothesis testing, sampling and analysis of variance. Assignments may utilize the MiniTab software, or text-accompanying course-ware STAT-DISK for DOS PCs. Computers are available at the University's computer lab. Calculator with statistical functions is required.

### **MTH 214 Modeling of the Environment**

*Prerequisites: Placement Evaluation*

A course offering a thorough and useful beginning-level understanding of mathematical modeling. Examines diverse applications from the physical, biological, business, social and computer sciences. Discusses the limitations, as well as the capabilities, of models applied in understanding the real world and its inhabitants.

### **MTH 215 College Algebra & Trigonometry**

*Prerequisites: Accuplacer test placement evaluation, or MTH 12A, and MTH 12B*

Examines higher degree polynomials, rational, exponential and logarithmic functions, trigonometry and matrix algebra needed for more specialized study in mathematics, computer science, engineering and other related fields. Computer and/or graphing calculator use is highly recommended.

### **MTH 216A College Algebra I (3 quarter units)**

*Prerequisites: Accuplacer test placement evaluation, MTH 12A, and MTH 12B*

The first part of a comprehensive two-month treatment of algebra and trigonometry preliminary to more specialized study in mathematics. The course covers higher degree polynomials, rational functions, exponential and logarithmic functions, transformations and the algebra of function, matrix algebra and basic arithmetic of complex numbers.

### **MTH 216B College Algebra II (3 quarter units)**

*Prerequisites: MTH 216A*

The second month of a comprehensive two-month treatment of algebra and trigonometry; this course is a continuation of MTH 216A. Topics include trigonometric functions, analytic trigonometry and application, parametric equations, matrix algebra, sequences and series, and applied problems. Graphing calculator may be required.

### **MTH 220 Calculus I**

*Prerequisites: MTH 215, or Accuplacer test placement, or evaluation by a lead faculty*

(Cross listed and equivalent to CSC208) An introduction to limits and continuity. Examines differentiation and integration concepts with applications to related rates, curve sketching, engineering optimization problems and business applications. Students may not receive credit for both MTH220 and CSC208.

### **MTH 221 Calculus II**

*Prerequisites: MTH 220*

A discussion of differentiation and integration concepts of the natural logarithm, exponential and inverse trigonometric functions and applications to volumes of revolution, work and arc length. Covers improper integrals and highlights ideas and contributions of Natpier, Huygens and Pascal. Graphing calculator is required.

### **MTH 222 Calculus III**

*Prerequisites: MTH 221*

A study of sequences, Taylor Polynomials, infinite series, and tests for convergence, and the power series. An overview of ordinary differential equations; the initial-value Problem; exactness and integrating factors; and Bernoulli and higher-order equations with forcing functions. Graphing calculator is required.

### **MTH 223 Calculus IV**

*Prerequisites: MTH 222*

A study of functions of several variables: extrema and Lagrange Multipliers, with application to today's optimization-problems in engineering, business, and ecology. Vector algebra and space geometry; Kepler's Laws with application to satellite orbital velocity problems and the rendezvous phenomenon, iterated integrals and applications, the Jacobian transformation will be studied. A graphing calculator is required.

### **MTH 301 Fundamentals of Mathematics II**

*Prerequisites: MTH 209A, or Accuplacer test placement evaluation*

This continuation of MTH 209A includes concepts of measurement, geometry, probability and statistics, elementary synthetic and Euclidean Geometry. Computer programming in BASIC is introduced. Methods are incorporated whenever possible. However, both MTH 209A and MTH 301 are content/concept courses as prescribed by State regulations, not methods courses. Calculator may be required.

### **MTH 304 Math Practicum and Portfolio**

*Prerequisites: MTH 215, or MTH 216A, and MTH 216B, or placement evaluation*

\*Should be taken as early as possible in the student's program. Students observe and reflect on the actual work of public secondary school mathematics teachers (at least 28 hours in public middle or secondary

school mathematics classrooms and at least 3.5 hours of student activities and administrative meetings). Grading is by S or U only. Course is eligible for an "IP" grade.

### **MTH 311 Topics from Geometry**

*Prerequisites:* MTH 215

A survey of main concepts of Euclidean geometry with the emphasis on the axiomatic approach, constructions, logic of proof, and some ideas from non-Euclidean geometry including historical aspects. A study of axioms of Euclidean Geometry, inference rule, some basic theorems of Euclidean Geometry, and rigorous proofs will be offered.

### **MTH 317 Mathematical Modeling**

*Prerequisites:* MTH 215, or MTH 216A, and MTH 216B, and MTH 210

An introductory to mathematical modeling, utilizing a variety of diverse applications from physical, biological, business, social, and computer sciences. Discuss the limitations, as well as the capabilities, of mathematics as applied to understanding of our world. Teaches problem identification, models of solutions and model implementation. Graphing calculator is required.

### **MTH 325 Discrete Mathematics**

*Prerequisites:* MTH 215, or MTH 216A, and MTH 216B

(Cross listed and equivalent to CSC331) This course studies combinatorial and graph theory as the theoretical foundation for today's advanced technology. It analyzes algorithms, logic, circuits, number bases, and proofs. Ample applications (graphs, counting problems, Turing Machines, codes) examine the ideas of Euler, Boole, Floyd, Warshall, Dijkstra, Church and Turing, Shannon, Bernoulli. Graphing calculator is required. Students may not receive credit for both MTH325 and CSC331.

### **MTH 410 Technology in Math Education**

*Prerequisites:* MTH 215, or MTH 216A, and MTH 216B, or MTH 301

Computer Technology in the Mathematics Classroom An overview of the computer-based technology in the mathematics classroom. Evaluates graphing calculators, and computer software such as Maple, Scientific Workplace, Geometer's Sketchpad, MiniTab, SPSS, and others to determine their value in illuminating concepts in the curriculum.

### **MTH 411 Number Theory**

*Prerequisites:* MTH 215, MTH 216A, MTH 216B, or MTH 301

An examination of fundamental concepts of numbers, including divisibility, congruencies, the distribution of Primes, Pythagorean triples, the Euclidean Algorithm, the Fundamental Theorem of Arithmetic, Diophantine equations, and Goldbach's conjecture. Emphasizes active student involvement in posing and testing conjectures, formulating counter examples, logical arguments and proofs.

### **MTH 412 History of Mathematics**

*Prerequisites:* MTH 215, or MTH 301, or MTH 216A, and MTH 216B

Examines currents in the development of mathematics and throughout ancient Egypt, Babylon, China, and the Middle East. It studies math's influence on

society through the major events of Europe, contemporary developments, and some projections into the future, including the women and men who played key roles in evolution of mathematics.

### **MTH 416 Algebraic Structures**

*Prerequisites:* MTH 435, and MTH 325

A look at groups, rings and fields, as well as applications of these systems. Discusses equivalence relations, Lagrange's Theorem, homomorphisms, isomorphisms, Cayley's Theorem and quaternions. Also examines error correcting codes and issues of cryptography. Graphing calculator may be required.

### **MTH 417 Foundations of Geometry**

*Prerequisites:* MTH 216A, and/or MTH 216B, or MTH 215, and MTH 311

A discussion of fundamental ideas and processes common to Euclidean and Non-Euclidean Geometries: projective, affine and metric geometry. Examines the interplay between inductive and deductive reasoning and formal and informal proof. Addresses uses in science (transformations, scaling), art (Escher-type tessellations, projections), architecture (three-dimensional figures) and computer science (fractals, computer-aided design).

### **MTH 418 Statistical Analysis**

*Prerequisites:* MTH 210, and MTH 220

An examination of statistical applications to business, computer science, psychology, education, social sciences, and mathematics with fundamental concepts of probability distribution, mathematical models relating independent and dependent random variables, hypothesis testing and experimental design. Includes fundamental analysis of variance, various distributions and methods of regression, analysis and scaling.

### **MTH 432 Advanced Calculus**

*Prerequisites:* MTH 223

A look at sets, functions and the real numbers. Topics include the Completeness axiom, cardinality and Cantor's Theorem, LimSup and LimInf; the topology of  $R^1$  and  $R^2$ , open sets, limit points, compactness and the Heine-Borel Theorem, continuous functions properties, uniform continuity, the Mean-Value theorem; the Riemann integral and the Lebesgue Measure.

### **MTH 433 Differential Equations**

*Prerequisites:* MTH 223, and MTH 435, or CSC 209, and CSC 310

Examines systems of linear equations and matrices, elementary vector-space concepts, and geometric interpretations. Discusses finite dimensional vector spaces, linear functions and their matrix representations, determinants, similarity of matrices, inner product, rank, eigenvalues and eigenvectors, canonical form, and Gram-Schmidt process.

### **MTH 435 Linear Algebra**

*Prerequisites:* MTH 220, and MTH 325

An examination of systems of linear equations and matrices, elementary vector-space concepts and geometric interpretations. Discusses finite dimensional vector spaces, linear functions and their matrix representations, determinants, similarity of matrices, inner product, rank, eigenvalues and eigenvectors, canonical form and Gram-Schmidt process. Computer software will demonstrate computational techniques

with larger matrices. Graphing calculator or appropriate software may be required.

### **MTH 438 Applied Mathematical Modeling**

*Prerequisites:* MTH 433, MTH 416, and MTH 432

A capstone course intended to culminate the core mathematics major studies and should be taken at or near the end of the program. Discusses principles and methods of constructing, analyzing, interpreting, evaluating, and refining mathematical models. Compares analytic and simulation, discrete and continuous, deterministic and stochastic models.

### **MTH 440 Numerical Analysis**

*Prerequisites:* MTH 220

An introduction to numerical computation. Discusses errors in numerical computation, truncation and discretization, and machine storage restrictions as well as function approximation, roots of nonlinear equations, systems of linear equations, algebraic eigenvalue problems, polynomial interpolation, and cubic spline interpolations, quadratures, numerical differentiation, initial and boundary-value problems.

### **MTH 441 Abstract Algebra**

*Prerequisites:* MTH 416

This course continues and advances the work done in MTH 416 Algebraic Structures, discussing selected fundamental algebraic structures. The main concepts of Sylow Theory of finite groups, finite permutation groups (Cayley's Theorem), Galois Theory, Lattices Theory, Coding Theory and Cryptography, Boolean Algebra and Switching Theory are studied.

### **MTH 442 Functions of Complex Variables**

*Prerequisites:* MTH 223

This course is a study of functions of complex variables and their applications to other mathematics branches, sciences, and engineering. The following topics will be examined: the complex plane, analytic functions, integration and Cauchy's Theorem, sequences and series, residue calculus, Fourier and Laplace transforms, and applications.

### **MTH 450A Mathematics Project Course I**

*Prerequisites:* Completion of Mathematics Core for B.S. and interview with Department Chair.

The project courses are not independent study. They are directed student team projects or internships in mathematics. Requires utilization of previously acquired skills and knowledge to complete the project. Students can select project topics from industry, government, business, education, or research. Grading is S or U only.

### **MTH 460 Problem Solving Strategies**

*Prerequisites:* MTH 416, and MTH 417

The aim in the course is not to impart any specific body of knowledge, but rather to foster the students' understanding that mathematics is a science of identifying, solving problems and generalizing. The course includes the description of main approaches to solving standard and challenge math problems.

### **MTH 461 Methods of Teaching Math**

*Prerequisites:* MTH 311, MTH 325, MTH 412, and MTH 460

A critical inquiry into present-day tendencies in teaching mathematics in order to help prospective math-

ematics teachers to acquire their professional skills in the teaching of mathematics in secondary school. Fundamental concepts of mathematics and effective approaches to their teaching will be discussed.

#### **MTH 490 Guided Study** (variable units)

Individual study under direction of a faculty member. Requires prior approval of appropriate academic department and school dean. Requests should be made well in advance.

#### **MTH 610 Topics in Modern Algebra**

*Recommended Preparation:* MTH 416, MTH 435, MTH 411

Examines the algebra of various mathematical structures with the goal of gaining a broader and more sophisticated understanding of algebraic structures. Topics include groups, rings, fields and other main algebraic structures.

#### **MTH 620 Number Systems**

*Prerequisites:* MTH 610

Provides students with a deeper understanding of algebraic foundations of the real number system and its generalizations, covers the algebraic and topological properties of the real number system and several of its subfields and subrings.

#### **MTH 630 Fundamentals of Geometry**

*Prerequisites:* MTH 620 *Recommended Preparation:* MTH 417

Considers areas of Euclidean and non-Euclidean geometries, axiomatic systems, synthetic and analytic representations, relationships with algebra, and selected topics and applications

#### **MTH 640 Real Analyses**

*Prerequisites:* MTH 630, MTH 620

Topics include real and complex number systems, elements of point-set topology of Euclidean space, numerical sequences and series, continuity and differentiability for functions of one and several variables. The Riemann-Stieltjes integral as a generalization of the Riemann integral, sequences and series of functions, and Fourier series will be studied as well.

#### **MTH 650 Topics in Functional Analysis**

*Prerequisites:* MTH 640

A generalization of the main notions and concepts of analysis, geometry and algebra. Topics include operators (functions), metric and topological spaces, complete spaces, completion of metric spaces, contraction mapping principle, separable spaces, compactness of sets and criteria of compactness in a metric spaces, linear spaces and linear operators, linear normed spaces, finite spaces and subspaces, abstract Hilbert spaces, linear operators in linear normed spaces, space of linear operators.

#### **MTH 660 Mathematical Statistics**

*Prerequisites:* MTH 650 *Recommended Preparation:* MTH 438

Theory and practices of statistical analysis and inference with emphasis on analyzing and solving real problems using statistics. Descriptive statistics, topics from probability, sampling distributions, estimation, hypotheses testing, regression, correlation, non-parametric techniques and analysis of variance, and computer programming incorporated throughout.

#### **MTH 670 Mathematics Curriculum**

*Prerequisites:* MTH 610, MTH 620, MTH 630, MTH 660

Analyze secondary school mathematics curriculum development from a historical perspective and discuss past influences on current methodology. Distinguish current curriculum trends and design alternatives. Evaluate contemporary curriculum by assessing an existing text or program. Explores the current state and various facets of the changing mathematics curriculum, instruction, and assessment, looking at the national standards from the past and exploring directions and practical strategies for the future.

#### **MTH 681 Research in Math and Math Ed I**

*Prerequisites:* MTH 670

The first course designated to the initial stage of the thesis development. The content of these courses will include an analysis of mathematics foundations of curricular materials and/or issues in mathematics education. Students will develop a proposal for thesis research in mathematics or mathematics education, incorporating fundamentals of research and possible practical implementation.

#### **MTH 682 Research in Math and Math Ed 2**

*Prerequisites:* MTH 681

A continuation of MTH 681 course. The content of these courses will include an analysis of mathematics foundations of curricular materials and/or issues in mathematics education. Within this course the students initiate and develop thesis research based on the approved in MTH 681 research proposal under guidance of thesis advisor.

#### **MTH 683 Research in Math and Math Ed 3**

*Prerequisites:* MTH 682

The last and final course from the series of MTH 681, 682, 683 Research in Mathematics Education project courses. Includes an analysis of mathematics foundations of curricular materials and/or issues in mathematics education. Within this course the students continue developing and finalize the thesis research under guidance of thesis advisor.

### **MUL - Digital Entertainment and Interactive Arts**

#### **MUL 200 Communication Tools**

*Prerequisites:* ENG 100, ENG 101, and COM 100, or COM 103

An overview of digital communication tools and techniques used in today's workplace, as well as an introduction to message design and the social and ethical responsibilities within the digital communication field. Through intensive practice, students learn how to write for various business, education and entertainment purposes, such as analytical, descriptive, procedural, summative and technical. They learn foundations of web design, web animation, copy editing and formatting techniques in conjunction with traditional and online research skills. Software instruction includes Macromedia Studio MS Word, PowerPoint, Internet browsers, compression utilities, and FTP programs.

#### **MUL 205 Principles of Graphic Design**

*Prerequisites:* ENG 100, ENG 101, and COM 100, or COM 103

A hands-on introduction to the principles and techniques of graphic design for print and digital media that covers print vs. digital production, resolution and size considerations, vector vs. raster formats, color theory and layout principles, typography, file formats, output, and management. Software instruction is in Adobe Photoshop.

#### **MUL 245 Principles of Web Design**

*Prerequisites:* ENG 100, ENG 101, and COM 100, or COM 103

Introduces the terminology, history and evolution of web design and the use of hypertext. Provides an overview of effective web page design and efficient site architecture. Covers content development, navigation, and usability. Software instruction is in Dreamweaver.

#### **MUL 255 Interactive Design**

*Prerequisites:* ENG 100, ENG 101, and COM 100, or COM 103

Provides a hands-on introduction to the basics of web presentation. Students apply aesthetic and usability criteria to produce web presentations, movies, and other animated components for placement into websites. Covers technological constraints of web presentation and animation, appropriate uses of motion in a web page, gaming element, game design, and digital asset management for optimal delivery of animated content. Software instruction is in Macromedia Flash.

#### **MUL 265 Digital Audio and Video**

*Prerequisites:* ENG 100, ENG 101, and COM 100, or COM 103

This course provides an introduction to the basic application skills and concepts of non-linear editing. Students learn the basic properties of audio, video and still assets, and practice importing, logging, and basic insert assembly editing. They also develop a sensitivity to the unique aesthetic and usability criteria of digital video in application environments. Software instruction is in Adobe Premiere, Sonic Foundry Sound Forge and Acid Pro.

#### **MUL 275 3-D Modeling and Rendering**

*Prerequisites:* ENG 100, ENG 101, and COM 100, or COM 103

Provides a hands-on introduction to the basics of 3-D graphics in still and animated formats. Students produce basic 3D elements and apply aesthetic and usability criteria to their placement in digital and print media applications. Covers technological constraints of 3D applications; appropriate uses of still and motion 3D elements to enhance message delivery; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max

#### **MUL 295 Professional Project**

*Prerequisites:* MUL 200, MUL 205, MUL 245, MUL 255, MUL 265, MUL 275

Professional project is a course dedicated to the finishing and composition of a print and digital portfolio to represent the successful work of each student. Professional project gives each student an opportunity to reflect on their courses and projects that have been created and the ability to practice with theory

and technologies that will be used in the workplace. Professional project gives the student the added benefit of having a professionally organized print and online presence to best represent themselves and the program in the marketplace.

### **MUL 300 Convergence Media**

*Prerequisites:* COM 100, or COM 103, and COM 220  
An integration of digital communication tools and techniques used in today's workplace. Learn how to create digital media products for various business, education, and entertainment purposes.

### **MUL 305 Graphic Design and Artistry**

*Prerequisites:* COM 100, or COM 103, and COM 220  
Hands-on application of principles and techniques of graphic design for print, video and digital media. Cover concepts including color theory, composition, photo manipulation and special effects in digital production. Focus on understanding and defining a personal style in the digital visual medium.

### **MUL 309 Camera and Image**

*Prerequisites:* COM 100, or COM 103, and COM 220

A hands-on, project based exploration of the use of still and video cameras in production. Focus will be on a balance between the technical and the aesthetic. Essential camera functions are well known and timeless as the technology for image capture and replication advances rapidly.

### **MUL 310 Introduction to Video Gaming**

*Prerequisites:* ENG 100, ENG 101, COM 100, or COM 103

An overview of video gaming and its applications: the current soft- and hardware tools used to build and deliver video games; the history and evolution of the field; and its social and ethical implications. Students learn the fundamentals of how a video game is created from its inception to release and become familiar with the roles of programmers, designers, artists, and writers in developing the product. Includes an overview of the basics of mathematics and physics used in video game development, as well as the computer languages appropriate for the various game genres: action, role-playing, adventure, simulation, etc.

### **MUL 315 Video Game Design**

*Prerequisites:* COM 100, and COM 103, or COM 220  
An in-depth review of video game development, with emphasis on game design theory and practice. Fundamental principles and strategies of game design transform a story or game vision into a virtual environment prototype that integrates player activity, interface, and graphics. Cover basic algorithms that control interactivity and representation while learning about the various tools available to designers, such as prototyping software and game engines.

### **MUL 318 Video Game Production**

*Prerequisites:* All general core courses.

A survey course in the fundamental principles and strategies of video game production. Students assume the role of producer, as they learn game assembly, project management and tracking. The course introduces the challenges posed by the ever-changing technologies used to make and deliver video games, and students become familiar with the many different game engines available to developers. Software

instruction is in Anark, Genesis3D, MS Project, and Concurrent Version System/Revision Control System (CVS/RCS).

### **MUL 318A Video Game Production Lab (1.5 quarter units)**

*Prerequisites:* MUL 315

This laboratory course provides students with an opportunity to use tools and methods of video game production. While not intended to be an extensive and comprehensive course on the game production process, the lab introduces the student to the basic tools while providing hands-on experience on how they are used to produce the final product. This will include teaching the student the fundamental parts of a video game engine and providing examples of how the professional community makes modifications to these engines to achieve specific objectives. The student will also use tracking software during game production. Software instruction is in Anark, Genesis3D, MS Project, and Concurrent Version System/Revision Control System (CVS/RCS).

### **MUL 325 Psychology of Video Games**

*Prerequisites:* All general core courses, and PSY 100

An overview of the psychological aspects of game playing, with particular emphasis on video gaming. The course presents the historical foundations of research into human play activity, as well as current research into video gaming and its impact on individuals and society. Students learn about the interaction between people and video games in terms of individual sensory response, personality, and social behavior. Covers human-computer interaction issues specific to video gaming, such as cognitive processing, reaction time, idiosyncratic navigation, and non-traditional interface design. Topics include motivation, addiction, fantasy escapism, conflict, aggression, reward, player prestige, and alienation.

### **MUL 332 Electronic Design and Layout**

*Prerequisites:* ENG 100, ENG 101, COM 100

An introduction to layout design for print and Web publishing that covers typography, layout theory, prepress production methods and project management. Emphasizes practical development techniques to produce digital visual images efficiently. Software instruction is in Adobe Illustrator.

### **MUL 335 Digital Design for Print**

*Prerequisites:* ENG 100, ENG 101, COM 100, or COM 103

This course covers the stages of publishing in print media from the inception of a project through to the distribution of a finished product. It provides students with the opportunity to put their theoretical and classroom knowledge to practical use in the design, creation and printing of a project. Topics include: typography, layout theory, pre-press production and project management. Students learn through intensive practice layout techniques for digital and print delivery. Software instruction is in QuarkXPress and InDesign.

### **MUL 336 2-D Graphic Imaging**

*Prerequisites:* MUL 200, MUL 205, MUL 245, MUL 255, MUL 265, MUL 275

An intermediate course in computer-aided photographic manipulation and the merging of vector and raster graphic files used in web authoring and print design. Students produce images in a variety of dig-

ital formats, applying aesthetic and composition design principles. Covers technological limitations of Internet graphics. Software instruction is in Adobe Photoshop and Illustrator.

### **MUL 345 Applied Web Design**

*Prerequisites:* COM 100, and COM 103, or COM 220

Hands-on application of principles and techniques of web design for digital media and provides an in-depth study of effective web page design and efficient site architecture. Engage in projects in content development, navigation, and usability.

### **MUL 355 Game Scripting**

*Prerequisites:* COM 100, or COM 103, and COM 220

In-depth, hands-on application of web programming, game scripting, and web presentation. Apply aesthetic and usability criteria to produce web presentations, "movies" and other animated assets for placement into student projects. Explore applied technological constraints of web presentation and animation, game design, game scripting, appropriate uses of motion in a web page, and digital asset management for optimal delivery of animated content.

### **MUL 365 Digital Video Editing**

*Prerequisites:* MUL 265 or equivalent.

In this course, students develop hands-on experience in advanced nonlinear editing. Students assess the aesthetic impact of editing decisions and demonstrate proficiency with timing, continuity, music cutting, transitions, and the use of color. Focus is placed on the role of editing in telling a compelling story.

### **MUL 370 Digital Interactivity**

*Prerequisites:* COM 100, and COM 103, or COM 220

Hands-on introduction in the basics of web interactivity along with its potential for e-business, entertainment and education. Apply aesthetic and usability criteria to visual, textual and aural components integrated into interactive presentations, games and instructional media. Engage in the exploration of the technological constraints of Web delivery, interactive design, composition and media integration techniques.

### **MUL 375 3-D Modeling for Game Art**

*Prerequisites:* COM 100, or COM 103, and COM 220

Hands-on application of 3-D graphics in still sequential and non-sequential media. Produce basic 3-D elements and apply aesthetic and usability criteria to their projects in digital, animated sequence, video and print media applications. Students compare technological constraints of 3-D applications, appropriate uses of sequential and non-sequential 3-D elements to maximize impact of message delivery, and the management of digital assets for optimal delivery of media.

### **MUL 381 Video Game Art**

*Prerequisites:* All general core courses.

A hands-on course to learn video game art and its design for entertainment, military, and education; the course presents the current software tools used to build and deliver video game art. Students learn the fundamentals of how video game art is created from its inception to incorporation into a video game; they learn the role of artists in the video game development team; and also the current tools used to create game art.

### **MUL 385 Video Game Animation**

*Prerequisites: All general core courses*

Provides a hands-on introduction to the basics of 3-D and character animation for video game development. Students produce basic 3D environments and animation, as well as animated characters for use in video games and simulations. They apply aesthetic and usability criteria specific to video games. The course covers technological constraints of 3D and character animation; appropriate uses of animated 3D characters and elements to enhance game message delivery and interactivity; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

### **MUL 399 Emerging Technologies**

*Prerequisites: COM 100, or COM 103, and COM 220*

Topical lectures and investigations into new trends and technologies in the Digital Media Design field. Explore developing technological trends and the strategies for utilizing them in the production of content. Focus on integrating the new tools and trends into digital media production.

### **MUL 401 Advanced Video Game Design**

*Prerequisites: All general core courses.*

Students learn advanced video game design techniques. They become familiar with advanced techniques for game production management, game asset management, and advanced prototyping tools. The advanced design documents and prototype developed in this class will be used to further produce and/or further modify a video game in the follow-on course, MUL 411 (Video Game Production Project).

### **MUL 410 Authoring Corporate Training I**

*Prerequisites: ENG 100, ENG 101, and COM 100*

Provides an introduction to instructional design for corporate training through e-learning and multimedia. Students evaluate digital training packages according to instructional design theory and learn multimedia authoring skills to apply to instructional modules they produce. Covers learning theories, authoring tools, multimedia development and usability criteria applied to instructional media. Software instruction is in Macromedia Authorware.

### **MUL 411 Video Game Production Project**

*Prerequisites: All general core courses, MUL 325, MUL 318, and MUL 401*

Students apply advanced theory and practice to create a professional video game design and production product. They develop the game concept they evolved in prior classes into a commercial quality set of game production documents together with a high quality prototype or game engine modification suitable for a commercial pitch of a game to a client.

### **MUL 420 Multimedia Arts Portfolio Proj**

*Prerequisites: All general core courses and concentration courses.*

In this two-month capstone course, students assemble a portfolio of their best work from previous Digital Media Design courses and edit/polish those pieces until they are suitable to show a prospective digital media design industry employer. The final portfolio will include some combination of the digital presentations and graphics, websites, game elements and animations. Printed materials such as journal style documentation, creative briefs, propos-

als, flow charts, executive summaries and descriptive critiques are also encouraged. Grading is S or U only.

### **MUL 430 Advanced Design Project**

*Prerequisites: COM 100, or COM 103, and COM 220*

Advanced course in digital graphic manipulation. Produce a portfolio of images, applying successful aesthetic and composition design principles. Cover strategies to create focused, clear imagery that conveys a well-defined message. Continue to work on the visual themes they have developed in earlier courses in preparation for final portfolio.

### **MUL 431 Adv Page Layout / Production**

*Prerequisites: All general core courses, MUL 336, and MUL 430*

A hands-on course on advanced techniques of web graphics production. The course presents the current software tools and techniques for the creation and production of web graphics intended to create identity, atmosphere, and navigation on websites. Students will be exposed to advanced techniques of web graphics, including working with layers, slicing, hotspots, rollovers, using graphics as framing devices on websites and the use of graphics for content. Students will use current industry software to master the skills of print production, including Photoshop, ImageReady and Dreamweaver.

### **MUL 432 Print / Web Production**

*Prerequisites: All general core courses, MUL 336, MUL 430, and MUL 431*

This is a hands-on course on print production. The course presents the current software tools and techniques for print production of a wide variety of projects and materials. Students will be exposed to the concepts and techniques of print production, including digital pre-press, color management, and the steps required to prepare printed pieces for final output. Students will use current industry software to master the skills of print production, including learning the Adobe Acrobat PDF workflow for digital pre-press and the latest digital production tools.

### **MUL 440 Multimedia Design for the Web**

*Prerequisites: All general core courses.*

Intermediate Web page authoring and site design. Students compile graphics, animation and text to produce sites that demonstrate e-business, entertainment and distance education uses of the Internet. Students apply aesthetic and usability criteria to websites developed according to industry practice. Software instruction is in Macromedia Dreamweaver. Certified Internet Webmaster (CIW) curriculum included.

### **MUL 445 Digital Project Management**

*Prerequisites: COM 100, or COM 103, and COM 220*

Advanced course in understanding and planning the production of a digital media project. Covering the concepts of the production pipeline and establishing the basis and timeline for the final project. Plan and present preparations for their final digital media portfolio.

### **MUL 450 Advanced Web Presentation**

*Prerequisites: MUL 440, All general core courses.*

Provides hands-on training in advanced Web presentation techniques. Students learn media integration techniques for quick-loading websites that use streaming vector animation and sound. Covers conceptual 14 approaches to building interactivity

into Web presentations; advanced usability testing for user satisfaction; and digital asset management theory and practice. Software instruction is in Macromedia Flash.

### **MUL 460 Advanced Digital Audio & Video**

*Prerequisites: MUL 365*

Advanced digital audio and video production techniques. Students write scripts, create storyboards and program a/v clips for business, entertainment and educational purposes. Covers advanced Web casting techniques and strategies to overcome technological limitations of Web video and sound. Software instruction is in Sonic Foundry Sound Forge, Adobe Premiere and Terran Media Cleaner.

### **MUL 461 Motion Graphics**

*Prerequisites: COM 100, or COM 103, and COM 220*

A hands-on course in motion graphics for broadcast, video, and film; the course presents the current software tools used to build and deliver motion graphics. Apply concepts and techniques of compositing layers of computer-generated imagery and live action video, special effects, camera movements and cinematic points of view, as well as the design of titling and motion imagery. Survey works of professional animators, directors, and producers to demonstrate industry-standard techniques.

### **MUL 462 Digital Audio Creation**

*Prerequisites: COM 100, or COM 103, and COM 220*

Computer-aided digital audio creation used in DVD, video, and Web authoring. Students learn basic music theory and composition practices applied to digital audio production, utilizing professional software tools used in the field, as well as hardware applications. Covers file management and compression for specific delivery mediums.

### **MUL 463 Digital Video Production Proj**

*Prerequisites: All general core courses; MUL 460, MUL 461, MUL 462*

Students apply advanced theory and practice to create a professional video production. They develop a concept into a script and manage all phases of production, such as field lighting, videography, sound recording, editing, and producing to DVD and tape. Software instruction is Premiere Pro, Acid Pro, Pro Tools, and Audition.

### **MUL 470 Interactive Multimedia**

*Prerequisites: All general core courses.*

Provides hands-on training in the production of interactive products for e-business, entertainment and education. Students conduct needs assessments for a variety of potential interactive presentations, games and instructional media and apply project management skills to a product they produce. Covers strategies to overcome the technological constraints of Web and CD-ROM delivery; interactive design theory and practice; needs assessment procedures; and methods of project management. Software instruction is in Macromedia Studio and MS Project.

### **MUL 471 Adv Digital Interactivity Proj**

*Prerequisites: COM 100, or COM 103, and COM 220*

Advanced training in the production of interactive products using computer-based authoring tools for e-business, entertainment, and education. Conduct extensive reviews of interactive presentations,

games, and instructional media and apply lessons learned to programming user friendly interactive models in real-time virtual environments. Cover advanced problem solving techniques applied to; interactive design theory and practice; and methods of project management.

#### **MUL 480 Character Animation**

*Prerequisites: All general core courses.*

Provides a hands-on introduction to the basics of 3-D animation. Students produce basic 3-D animation and apply aesthetic and usability criteria for appropriate and effective use. Covers technological constraints of 3-D animation; appropriate uses of animated 3-D elements to enhance message delivery; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

#### **MUL 481 Advanced Animation Project**

*Prerequisites: All general core courses, MUL 381, MUL 385, MUL 481*

A hands-on course to learn video game art and its design for entertainment, military, and education; the course presents the current software tools used to build and deliver video game art. Students learn the fundamentals of how video game art is created from its inception to incorporation into a video game; they learn the role of artists in the video game development team; and also the current tools used to create game art projects.

#### **MUL 490 Guided Study** (variable units)

*Prerequisites: Faculty Determined.*

Courses require individual study under direction of instructor. Furthermore, course requires proper approval of appropriate academic department.

#### **MUL 495 Internship** (variable units)

Internship

### **MUS - Music**

#### **MUS 100 Fundamentals of Music**

An examination of the basic structure of Western music, musical styles, form, different periods and their chief representatives and the dynamics of musical expression and appreciation. Introduces students to elements of music theory common to many cultures.

#### **MUS 326 American Music**

*Prerequisites: ENG 100, and ENG 101*

A survey of American music from the Colonial period to the present. Emphasizes political, social and economic developments as related to the evolution of American music, including popular, religious and art music in a broad array of styles.

#### **MUS 327 World Music**

*Prerequisites: ENG 100, and ENG 101*

An exploration of musical traditions and techniques in a variety of cultures, including Japan, India, Native America, South America, and Africa. Broadens students' cultural understanding of music.

### **NBC - National Board Certified**

#### **NBC 639 Leadership Portfolio**

This course is designed to provide classroom educators the knowledge and skills required to understand and evaluate research relevant to their roles as professional educators. Teachers will develop a professional portfolio that incorporates knowledge, understanding, and evaluation of research providing evidence of meeting NBPTS certificate standards by performance-based assessments. Course is eligible for an "IP" grade.

#### **NBC 680 Quality Teaching and Learning**

This course will provide students with an overview that leads to clear interpretations and understanding of the various components and interconnections that shape and influence the quality of teaching, student learning, professional development and leadership in our schools and communities.

#### **NBC 681 Membership in Learning Community**

This course will guide students in the review of research and articles that focus on the definitions, features and significance of learning communities in schools, classrooms, and associations.

#### **NBC 682 Videotape Analysis**

This course will provide students with extended time and opportunities to explore and comment on accomplished teaching practices related to the NBCT standards in their fields of expertise.

#### **NBC 683 Student Work and Assessments**

This course will provide students with opportunities to review research and commentary that guide and shape decisions and judgments we make when determining the levels of progress students are making toward achieving academic goals, and to identify elements of our practice that contribute to successful learning outcomes.

### **NSG - Nursing**

#### **NSG 200 Foundations of Nursing**

*Prerequisites: "C" or better in, NSG 211T and "S" in, NSG 211A. Corequisites: NSG 200A*

Using the nursing process, this course focuses on meeting basic human needs through planning and implementing nursing. This course covers beginning knowledge and skills required for nursing care of patients with commonly occurring health problems. Basic concepts of therapeutic communication are discussed. Concurrent enrollment in NSG200A is required.

#### **NSG 200A Foundations Clinical Lab**

*Prerequisites: "C" or better in NSG211T and "S" in NSG 211A.*

Using nursing language, students devise basic plans of care for patients. Practical application of beginning knowledge and skills required for nursing care of patients is demonstrated in both Lab and clinical settings through simulation and patient interaction. Concurrent enrollment in NSG 200 is required unless. Grading is by S or U only.

#### **NSG 205 Medical-Surgical Nursing I**

*Prerequisites: NSG 200, and NSG 200A, or NSG 204, and NSG 204A*

The course focuses on concepts relating to care of the adult in the acute care setting with commonly occurring medical-surgical problems. Emphasis of this course is on the use of the nursing process and in developing competence in providing and coordinating nursing care. Concurrent enrollment in NSG 205A is required.

#### **NSG 205A Medical-Surgical I Clinical**

*Prerequisites: NSG 200, and NSG 200A, or NSG 204, and NSG 204A*

Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring medical-surgical problems is demonstrated in both Lab and clinical settings. Using the language of nursing, students will devise and implement care plans and teaching plans. Concurrent enrollment in NSG 205 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

#### **NSG 211A Health Assessment Clinical** (1.5 quarter units)

*Recommended Preparation: Nursing Student Group*

This course covers practical application of holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and lab and diagnostic procedures. Concurrent enrollment in NSG 211T is required. Grading is by S or U. This course is 45 contact hours.

#### **NSG 211T Health Assessment** (3 quarter units)

*Prerequisites: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75 Recommended Preparation: Nursing Student Group*

This course covers holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and lab and diagnostic procedures. Concurrent enrollment in NSG 211A is required. This course is 30 contact hours.

#### **NSG 304 Pharmacology in Nursing**

*Recommended Preparation: Nursing Student Group*

This course will present an overview of pharmacokinetics and pharmacodynamics of drugs, as well as drug classifications. Current issues in drug legislation, design, manufacturing and marketing will be explored. Emphasis will be placed on the role of the professional nurse in medication administration, including both expected and unexpected effects of drugs on patients.

#### **NSG 310 Professional Nursing Values**

*Recommended Preparation: Nursing Student Group*

This course provides an introduction to fundamental values as a foundation for professional nursing practice. It provides an understanding of key components necessary for demonstration of professional value-based behaviors. The concept of caring will be examined through the values of altruism, autonomy, human dignity, integrity and social justice.



### **NSG 314 Child-bearing Family Nursing**

*Prerequisites:* "C" or better in NSG 205 and "S" in NSG 205A *Recommended Preparation:* Nursing Student Group

This course focuses on the health care needs of parents and newborns during the childbearing experience. Introducing the concept of the family as a unit, emphasis is placed on the variations in health care due to behavioral, life cycle, physiological, cultural, and environmental factors. Concurrent enrollment in NSG 314A is required.

### **NSG 314A Child-bearing Family Clinical**

*Prerequisites:* "C" or better in NSG 205 and "S" in NSG 205A *Recommended Preparation:* Nursing Student Group

This course covers practical application of knowledge and skills required for nursing care of families in the childbearing period. Using the language of nursing, students will care for the family as a unit, considering behavioral, life cycle, physiological, cultural and environmental factors. Concurrent enrollment in NSG 314 is required unless approved by the Department Chair. Clinical

Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

### **NSG 315 Pediatric Nursing**

*Prerequisites:* NSG 314, and NSG 314A

Continuing examination of the family as a unit, this course focuses on the health care needs of families with children. Emphasis is placed on the variations in health care due to behavioral, life cycle, genetic, cultural, and environmental factors. Concurrent enrollment in NSG 315A is required unless approved by the Department Chair.

### **NSG 315A Pediatric Nursing Clinical**

*Prerequisites:* NSG 314, and NSG 314A

This course covers practical application of knowledge and skills required in nursing care for families with children. Using the language of nursing, students will care for the family with children as a unit, considering behavioral, life cycle, genetic, cultural and environmental factors. Concurrent enrollment in NSG 315 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

### **NSG 320 Medical-Surgical Nursing II**

*Prerequisites:* "C" or better in NSG 315 and "S" in NSG 315A *Recommended Preparation:* Nursing Student Group

This course focuses on concepts relating to care of the adult in the acute care setting with medical-surgical problems. In addition, urgent and critical nursing care responses to symptomatology are addressed. Emphasis is on refining use of the nursing process to provide nursing care for individuals with specific health care needs/problems. Concurrent enrollment in NSG 320A is required unless approved by the Department Chair.

### **NSG 320A Medical-Surgical II Clinical**

*Prerequisites:* "C" or better in NSG 315 and "S" in NSG 315A *Recommended Preparation:* Nursing Student Group

Practical application of knowledge and skills re-

quired for nursing care of adult patients with commonly occurring acute/critical medical-surgical problems is demonstrated in both Lab and clinical settings. Concurrent enrollment in NSG 320 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

### **NSG 325 Psychosocial Nursing**

*Prerequisites:* "C" or better in NSG 320 and "S" in NSG 320A *Recommended Preparation:* Nursing Student Group

This course demonstrates the relevance of psychosocial nursing concepts to all areas of professional practice. It provides a conceptual integration of the nursing process, theories, and research from the biopsychosocial sciences and humanities to promote mental health and provide care to elderly people and people with mental disorders. Concurrent enrollment in NSG 325A is required.

### **NSG 325A Psychosocial Nursing Clinical**

*Prerequisites:* "C" or better in NSG 320 and "S" in NSG 320A or see specific degree *Recommended Preparation:* Nursing Student Group

Practical application of knowledge and skills required for nursing care of older adult and mentally ill patients with commonly occurring problems is demonstrated in both Lab and clinical settings. Concurrent enrollment in NSG 325 is Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

### **NSG 332 Evidence-Based Practice**

*Prerequisites:* BST 322

This course introduces the concept of evidence based practice. Emphasis is placed on identification, evaluation, and application of best evidence for improving patient-centered care. Focus is on levels and sources of evidence such as research, professional guidelines and other best practices.

### **NSG 340 Nursing Leadership/Management**

*Prerequisites:* "C" or better in NSG 325 and "S" in NSG 325A *Recommended Preparation:* Nursing Student Group

The primary purpose of this course is to facilitate the development of a broad view of the management of health care delivery systems and the nurse's role in that arena. Concurrent enrollment in NSG 340A is required unless approved by the Department Chair.

### **NSG 340A Leadership/Management Clinical (1.5 quarter units)**

*Prerequisites:* "C" or better in NSG 325 and "S" in NSG 325A *Recommended Preparation:* Nursing Student Group

This course covers practical application of skills and knowledge required to coordinate care for multiple patients in a multidisciplinary setting. Concurrent enrollment in NSG 340 is required. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

### **NSG 341 Leadership & Mgmt in Nursing (3 quarter units)**

*Recommended Preparation:* Nursing Student Group

The primary purpose of this course is to facilitate the development of a broad view of the management of

health care delivery systems and the nurse's role in that arena.

### **NSG 342 RN-BSN Nursing Management**

The purpose of this course is to facilitate the development of a broad view of the management of health care delivery systems and the nurse's role in that arena.

### **NSG 403 Nursing Theories and Models**

*Recommended Preparation:* Nursing Student Group

This course facilitates the practice of professional nursing by providing students with an opportunity to experiment with the application of various conceptual models in order to evaluate the impact of conceptual models on nursing practice.

### **NSG 404 Pharmacology for Nurses**

*Recommended Preparation:* Nursing Student Group

This course will synthesize pharmacological concepts including an overview of the history of drugs along with current issues. Pharmacotherapeutics, pharmacodynamics, pharmacokinetics, contraindications and precautions for prototype drugs for multiple body systems will be discussed. Major emphasis will be placed on nursing management practices as well as the nurse's role in pharmacological research.

### **NSG 410 Community: Population Focus**

*Prerequisites:* NSG 411

A study of community health nursing concepts as they apply to the health of individuals. Explores the nursing care of individuals in the community using primary, secondary and tertiary models of therapeutic intervention. This course includes a required clinical practicum.

### **NSG 411 Community Health Frameworks**

*Prerequisites:* NSG 412

A study of providing nursing care to families in the community using community health nursing concepts. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum.

### **NSG 412 Community Healthcare Delivery**

A study of community health nursing concepts as they apply to the health of groups and the community at large. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum

### **NSG 413 Population Based Nursing (6 quarter units)**

*Corequisites:* NSG 413A

Concepts of nursing at the level of groups, communities and populations are introduced and analyzed. A systems focus is utilized for health promotion within selected vulnerable populations. Health policy development through collaboration with stakeholders at the level of individual, family, neighborhood, and community are evaluated.

### **NSG 413A Population Based Nursing (3 quarter units)**

*Corequisites:* NSG 413

Application of concepts in clinical prevention, risk assessment, health promotion and population health to a community health problem. Students are re-

quired to implement a community health project and evaluate the results of the project during the course.

#### **NSG 414 Nursing Leadership** (3 quarter units)

Facilitates acquisition of the knowledge, skills, and attitudes of a generalist professional nurse in the role of leadership and management of health care. The student will analyze organizational, legal, and interpersonal principles within the health care setting.

#### **NSG 414A Nursing Leadership Practicum** (1.5 quarter units)

*Corequisites: NSG 414*

The focus is practical application of the knowledge, skills, and attitudes of a generalist professional nurse in the leadership and management of health care within a variety of settings. The student will apply principles of delegation, supervision, prioritization and collaboration within the health care team.

#### **NSG 422 Nursing Research**

*Prerequisites: NSG 322*

This course introduces students to quantitative and qualitative research in nursing by reviewing, evaluating and critiquing current research studies which use a variety of designs. Throughout the course, an emphasis will be placed on the philosophical underpinnings of the quantitative and qualitative research paradigms as well as the use of research in nursing practice.

#### **NSG 435 Cooperative Clinical Practicum**

*Prerequisites: Students must have a GPA of 3.0*

*or higher in all NU Nursing courses that are prerequisite to this course., and Students must have successfully completed all NU NSG theory and clinical courses through Medical-Surgical Nursing II as follows: NSG 403, NSG 211T, NSG 211A, NSG 304, NSG 200, NSG 200A, NSG 205, NSG 205A, NSG 320, and NSG 320A*

This course combines work experience with regular college instruction. Participants earn college credit while working in a position related to the role of BSN graduate.

#### **NSG 440 Professional Issues in Nursing**

This course introduces nursing professional issues. Key concepts include: Scope and standards of nursing practice, social policy in nursing, ethics, regulation and legal issues in professional practice. Students begin study of patient safety, holistic and patient centered care concepts, and are guided to begin their development of a professional identity.

#### **NSG 445 Quality Improvement/Proj Mgmt**

*Prerequisites: BST 322, NSG 332*

This course introduces the concepts, techniques, strategies and metrics of quality improvement in nursing. Patient care quality and safety in the context of structure, process and outcomes in healthcare delivery are explored. Identification of improvement opportunities, action plan development and outcomes evaluation through use of project management strategies are addressed.

#### **NSG 446 Quality Improvement Practicum**

*Prerequisites: BST 322, NSG 332*

*Corequisites: NSG 445*

Students collaborate with a clinical facility based Quality Improvement (QI) Team to conduct a Quality Improvement project under the supervision of a Practicum Preceptor and the course instructor. A written report of the project is required.

#### **NSG 600 Advanced Practice Nursing**

This course explores the role of the Advanced Practice Nurse within a changing health care environment, focusing on role theory and role development related to advanced practice. Leadership skills are developed for independent practice and collaboration within multidisciplinary professional and organizational frameworks.

#### **NSG 606 Health Policy & Finance**

Addresses the acquisition of knowledge and skills to promote health, help shape the health delivery system, and advance values through policy processes and advocacy. The intricacies of the organization and financing of healthcare delivery systems and the effect of health policies on healthcare delivery are the foci.

#### **NSG 607 EBP for Advanced NSG Practice**

Exploration of types and quality of evidence used to support nursing practice. Study of research designs, measurement tools, and other methods for the safe application of evidence to development of improved care and care systems are emphasized. Identification of an evidence-based scholarly question pertinent to advanced practice nursing.

#### **NSG 620 Theory in Advanced Practice**

This course develops critical thinking skills to support advancement of nursing knowledge through theory development, analysis, and application of advanced nursing practice in diverse settings. Students explore the philosophical and theoretical underpinnings of nursing practice and develop skill in analysis of nursing and related theories.

#### **NSG 622 QI & Project Management**

Centers on identifying and developing the skills needed by leaders in today's healthcare arena. Students will employ the concept of leadership in the four key domains of advanced practice: clinical practice environments, the nursing profession, at the systems level, and in the health policy arena.

#### **NSG 650 Clin Informatics Foundations**

*Recommended: Prior completion of: All MSN Core courses.*

Applies health information systems and information technology to advanced practice nursing. Issues addressed include scope and standards of informatics nursing practice, electronic health records, data standards, interoperability, systems safety and security.

#### **NSG 656 Systems Life Cycle**

Focus is on selecting and implementing clinical information systems beginning with feasibility studies, progressing through systems implementation using the structured systems analysis approach. Phases of the computer systems lifecycle are addressed including the importance of integrating evaluation through-

out all phases. Budgeting, use of project management tools and strategies are discussed.

#### **NSG 657 Clinical Database Systems**

Focus is on historical, theoretical, and application issues in the design and administration of clinical database management systems. Design techniques to support requirements are addressed with emphasis on understanding user views and translating them into data models, development of data dictionaries, analysis of processing and storage resources.

#### **NSG 658 Clinical Data Standards**

Standards of clinical and nursing data and information are explored as related to clinical systems design. Factors discussed include principles of interoperability, record preservation, security, confidentiality, and transportability of records. Terminology systems presented include SNOMED-CT, ICNP, NANDA, CCC. Students explore care delivery through nursing practice across multiple care settings.

#### **NSG 660 Clinical Decision Support**

A variety of systems designed to support nursing decision-making are explored. Strengths and limitations of human decision-making strategies and the need for decision support are presented. Topics include data analysis, information retrieval systems, expert systems and artificial intelligence systems. Design of expert systems is described.

#### **NSG 671 Leadership and Management**

*Prerequisites: Must have completed all MSN Core Courses.*

Critically examines leadership styles, strategies, and competencies required to lead in clinical care facilities. Emphasis is on ethical application of leadership and management skills, developing effective interdisciplinary work teams, and supporting collaboration in a patient-centric work environment. Students learn strategies for creating a work culture that supports safety and quality.

#### **NSG 672 Clinical Personnel Admin**

Effective human resources management is essential to providing safe, high quality patient care. Effective recruitment, retention, and management policies and procedures are addressed to develop a well-educated nursing workforce. Benefits and challenges of attaining Magnet status are considered.

#### **NSG 673 Fiscal Mgmt in Clin Operations**

*Prerequisites: NSG 672*

Focus is on the use of clinical facility budget as a tool for planning and control of operations with the goal of safe, thrifty, high quality patient care. Budgets of units, departments and special projects are considered as well as capital expenditures, zero-based budgeting, and variable budgeting.

#### **NSG 674 Clinical Operations Mgmt**

*Prerequisites: NSG 673*

The concepts of human resource management, clinical operations, and quality improvement strategies in nursing are examined in relation to the daily operations of a healthcare system. Tools and techniques which facilitate sound nursing management across the continuum of care are emphasized. Safe, high quality care and risk management are considered.

### **NSG 692A Informatics Practicum I**

*Prerequisites: All Core courses and Nursing Informatics courses minimum grade of B-*  
Students experience the informatics nurse advanced practice role within a selected health care or vendor setting. The course is designed as a capstone experience to integrate and apply competencies required in the informatics nurse specialist role. This is the first of two required practica. Grading is S/U only. Course is eligible for In Progress (IP).

### **NSG 692B Informatics Practicum II**

*Prerequisites: NSG 692A*  
Continuation of the experience begun in Practicum I, implementing the role of a Nurse Informaticist. The course is designed as a capstone experience which includes project completion, research, and final comprehensive paper. This is the second of the two required practica. Grading is S/U only. Course is eligible for In Progress (IP).

### **NSG 693A Admin Practicum I**

*Prerequisites: All MSN Core courses and Nursing Administration courses with a minimum grade of B-*  
Students experience the nursing administration advanced practice role within a selected health care setting. Integration and application of the competencies required in the Nurse Administrator advanced practice role are the focus. Students operationalize the role with supervision of an expert preceptor. Grading is S/U only. Course is eligible for In Progress (IP).

### **NSG 693B Admin Practicum II**

*Prerequisites: NSG 693A*  
Continuation of the experience begun in Practicum I, implementing a nursing administration role within a selected health care setting. This course is designed as a capstone experience which includes operationalizing the role with supervision of an expert preceptor. Also included are research activities appropriate for implementation of this role, and final comprehensive paper. Grading is S/U only. Course is eligible for In Progress (IP).

## **ODV - Organizational Development**

### **ODV 410 OD, Career Systems, & Training**

A survey of organizational development, career systems, and training and development practices. The course explores and defines the origin and interrelationship of the three areas under the auspice of Human Resource Development. The exploration examines these areas as they relate to helping practitioners achieve organizational goals and increase effectiveness. Students learn about both theory and practice as it relates to their ability to assist individuals while seeking greater consonance between individual, group, and organizational change and growth.

### **ODV 420 Intro to Organizational Behavior**

An introduction to the impact that individuals, groups, and structure have on behavior within organizations for the purpose of applying such knowledge toward improving an organizations effectiveness. The course will focus on work-related behavior with an emphasis on individual and group performance as it relates to organizational productivity and processes. A central theme will be the development of "people" skills to help all employees- staff, front-line supervision, and management- improve their effectiveness.

### **ODV 600 Theory & Practice of OD**

The course overviews how, why, and when to integrate the behavioral sciences with human resource management principles to increase individual and organizational effectiveness. Students will analyze, evaluate, and design relevant theories as they relate to practical application in the workplace.

### **ODV 601 Integrating Performance Mgt, Te**

This course examines and assesses how technology can best be integrated into and utilized in the workplace to maximize human performance. Implications for information management and organizational communication are investigated and classified. A key aspect is how the two components are impacted by organizational communication. It examines current trends in enterprise-wide technology solutions, specifically as they relate to HRM and OD, implementation of technology, productivity as it relates to use and misuse, and how it facilitates change in human performance and organizational growth.

### **ODV 606 Seminar in Training & Developm**

Employee development is the responsibility of the line manager, the human resources professional, and the employee. This course provides essential managerial-level comprehension of training theory and its practical applications in the business and management environment. Students learn the functions and duties of training: trainer/developer, the identification and assessment of training needs, program design and development, selection of delivery methods and means of instruction, the implementation of training programs, and evaluation. The course integrates training and development, organizational development and career development, critical components of Human Resource Development.

### **ODV 608 Research Sem in Current Issues**

This course is focused on a selected combination of published empirical research and current issues in organizational development interventions and strategies. Articles for discussion will be drawn from journals and popular press in several fields, including economics, the behavioral sciences, management science, business administration, and elsewhere as they relate to the practice of organizational development interventions and techniques. Faculty will guide students through written review of research and current practices, and seminar discussions in order to assist the HRM and ODV Professional in their service as a change agent to company management.

### **ODV 610 Adv Studies in Org Behavior in**

An in-depth review of current organizational behavior issues in the areas of workforce planning and performance management is covered as it relates to employee diversity. Using case studies, the course provides an integrated perspective of theory and practical aspects of interpersonal and group communication, organizational structures and system, and employee performance in the diverse workplace.

## **PAD - Public Administration**

### **PAD 100 Public Policy & Admin Basics**

A survey course of the crucial elements of the contemporary field of public administration. It includes vocabulary, critical concepts, history and development and

the field, major theories and theorists and principal sub-fields of public administration. It presents the student to program resources; develop critical thinking, reasoning skills, and permit students to investigate this field.

### **PAD 115 Leadership Skills in the Publi**

This course examines the theories of administrative leadership and the strategic application of leadership skills in an urban-government environment. In addition students will review current approaches to organizational excellence and its applicability to urban-government leadership.

### **PAD 205 Research Methods in Public Adm**

The purpose of this course is to acquaint students with major research and analytical techniques used in public policy and administration. The course is intended to both promote an understanding of the theories and approaches to public administration research and to assist the student to acquire a working knowledge of the skills involved in research analysis.

### **PAD 400 Intro to Public Administration**

A general survey course of the theory and practice of public administration, its legal and constitutional foundation and the role of the public administrator in public policy. The context of the discussions are based on the current issues facing administrators.

### **PAD 401 Public Policy Development**

This course discusses the public policy issues facing communities and the role of the public administrator in implementing policy. Examines the role of community action groups in developing and influencing policies. Evaluates the impact of policy decisions on communities and the ethical issues surrounding decisions.

### **PAD 402 Urban Environments**

This course explores the role urban environments play in the nation. Discusses the issues unique to cities and large metropolitan areas and the role of governments and public agencies in addressing the issues. Discusses the ethical issues facing public administrators in dealing with urban and rural environments.

### **PAD 403 Government Relations**

This course is an exploration of how to communicate with citizens in a positive and helpful fashion. Discusses how to interact with community groups and the press and how to promote public understanding of, and support for, government activities.

### **PAD 404 Nonprofit Management**

The course discusses the theories and roles of nonprofits in public administration. It explores the relationships between nonprofits and the public sector; and sources of revenue. Discusses the public policies towards the nonprofit sector and the ethical issues surrounding the sector.

### **PAD 405 Senior Research Project**

*Prerequisites: Satisfactory completion of 36qu of BPA major coursework.*

Supervised senior project undertaken by students of public administration when they have completed all core courses in the program. Coordinated by full-time faculty and chaired by a public administration faculty member chosen by the student from previous courses

taken within the program. Students select a viable topic in public administration to research and then meet with their chair once a week for two months. Upon completion, students present their project to chair, other faculty and peers in an open forum. Accelerated study is not permitted with this course. PAD405 is two months in length. Students who do not complete the Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one-time, six-month extension. Students who do not complete the project at the end of the extension period will need to retake the course. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

#### **PAD 620 Foundations of Public Admin**

A general survey course covering the role of the public sector manager in American society today. Studies current issues and leading concepts in the field of non-profit management.

#### **PAD 622 Seminar in Urban Affairs**

An examination of influences affecting decisions in the urban political arena. Covers segments of the community that impact the decision-making process (i.e., employee groups, labor influences, community groups, media and other special interests). Examines the relationship between intergovernmental agencies.

#### **PAD 626 Public Personnel Policy**

An examination of the important aspects of personnel management in government, including civil service procedures, affirmative action, employee motivation and organizational development.

#### **PAD 627 Quantitative Methods**

A practical study of graphical methods and statistical procedures specifically aimed at presenting, interpreting and solving problems related to public administration.

#### **PAD 628 Ethics**

Role, values, and issues of public management in democratic governance, citizen participation, power structures, and professional codes of conduct.

#### **PAD 631 Urban Planning & Redevelopment**

An examination of historical development of urban planning practices and concepts, general plans and their elements in the urban community. Also discusses the use of technology in planning. Students must complete a minimum of five Public Administration courses prior to taking this course.

#### **PAD 632 Finance Mgt & Grant Admin**

An exploration of current governmental fiscal management techniques and issues. Examines various types of financial and technical assistance to quasi-governmental and non-profit management organizations.

#### **PAD 640 Public Finance**

An overview of the fundamental microeconomic analysis of policy issues in public finance, emphasizing taxation. Major topics include public good and externalities, tax incidence and equity and fiscal federalism.

#### **PAD 641 Local Government Budgeting**

A comprehensive, straightforward look at local government budgeting. Topics deal with include the advantages and disadvantages of various approaches to revenue projection, the collection and review of departmental proposals, the development of capital budgeting policy and other budgeting tasks. Also considered are budget implementation, accounting and financial reporting. A variety of methods for maintaining budgetary balance, preventing overspending and dealing with contingencies are presented and discussed.

#### **PAD 642 Public-Private Financing**

An examination of financing partnerships between private businesses and public agencies such as school districts, college and university institutions and city and state governments. The course focuses on the design and construction of needed public facilities and the sponsoring of commercial redevelopment projects. Case studies provide detailed coverage of the complex process involve in taking a real estate project from conceptualization through construction.

#### **PAD 643 Contract Negotiations**

An analysis of bargaining and negotiation principles and practices in the public sector. The course focuses on the financial issues of contract negotiations and labor relations. Case studies, simulation exercises, research projects and group discussions complement the presentation of theory and practical experience in developing effective negotiation skills.

#### **PAD 644 MPA Project**

A project where students work in teams or individually under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates. Grading is H, S, or U only. PAD 644 is two months in length.

### **PED - School Psychology**

#### **PED 504 School Psychology Orientation (1.5 quarter units)**

An exploration of the field of School Psychology and its suitability as a personal career choice. Emphasis is on an understanding of the multiple roles of school psychologists that includes counseling, coordination and collaboration. Field experiences, using interviews and observations, will give students insight into their future vocations. Emphasis is placed on oral and written communication, and observational skills. Practicum experience is required. Grading is by S or U only.

#### **PED 625 Research Methods in Education**

*Prerequisites:* PED 665

An introductory educational research course designed to provide knowledge, skills, and dispositions required for students to understand and demonstrate quantitative and qualitative research. Emphasis is on the knowledge and skills required to be a competent consumer and producer of educational research.

#### **PED 637 School Psychology Research**

*Prerequisites:* PED 625

This course will provide knowledge and skills required to generate and evaluate research relevant

to School Psychology. School Psychology candidates prepare a research proposal, obtain appropriate approval, conduct the study and prepare an oral and written report. Maximum length of time is 12 months. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

#### **PED 652 Child Psychopharmacology**

*Prerequisites:* PED 666

Evaluates and lists the primary medications in use today; critiques pertinent research in psychiatric intervention as it relates to psychotherapy; analyzes selected issues in resolving possible conflict in treatment goals. School Psychology candidates learn to recognize signs and symptoms that might be amenable to medication. Many disorders are discussed.

#### **PED 665 Test and Measurements**

Covers concepts of validity, reliability, norms, item analysis, and standardization; selection, administration, and interpretation of published psychological and educational tests; development of measurable goals by decision makers for various evaluation purpose, and the development and /or selection of tests, and collection of data.

#### **PED 666 Human Neuropsychology**

*Prerequisites:* PED 504

Explores the theories and analysis of brain function, structure, and brain behavior relationships.

#### **PED 667 Developmental Psychopathology**

Addresses emotional and behavior pathology most likely to be encountered by school psychologists and School Counselors working in school settings. It examines human development, and the biological, psychosocial, and cultural variables in the etiology of these disorders. Students will become familiar with characteristics, classification, assessment and diagnosis of such disorders, as well as developmental theories and stages of human development.

#### **PED 670 Advanced Social Psychology**

Focuses on how individuals are affected by, in turn affect social processes. Topics include social cognition; social influences on beliefs, attitudes, attributions and identity; conformity, obedience and persuasion; culture and gender; small group influences and processes; stereotyping, prejudice, conflict, aggression and genocide; interpersonal attraction and love.

#### **PED 671 Cognitive Assessment**

*Prerequisites:* PED 665, PED 680

Practice in administration, interpretation and communication of results from the assessment of cognitive abilities. Emphasis is placed on interviewing, behavioral observation, interpretation, and integrating results into case studies, as well as implementing interventions and evaluating outcomes.

#### **PED 672 Psycho-Academic Assessment**

*Prerequisites:* PED 671

Introduces School Psychology candidates to the administration, interpretation, and communication of results from psycho-academic tests. Focus is on achievement and process measures, as well as the development of curriculum-based assessment. Continued emphasis on interviewing, behavioral obser-

vation, interpretation, integration of results, implementing interventions, and follow-up.

### **PED 673 Social/Emotional Assessment**

*Prerequisites: PED 672*

This course will support understanding in the knowledge and competencies that are required for proper administration and interpretation of standardized measures and other research-based evaluations of emotional and behavioral conditions.

### **PED 674 Special Populations Assessment**

*Prerequisites: PED 673*

Emphasizes eligibility for special education that includes assessment of preschool children, diagnosis of disabling conditions, remediation and IEP development. The course provides an introduction to the assessment of low incidence populations such as Visually Impaired, Deaf and Hard of Hearing, Autistic Spectrum Disorders, Physically Impaired, Traumatic Brain Injured and Dual Sensory Impaired.

### **PED 675 Alternative Assessment**

*Prerequisites: PED 674*

Course focuses on alternative assessment techniques, diagnosis of disabling conditions, and eligibility for special education, remediation and IEP development. School Psychology candidates will discuss the role of primary language and socio-cultural variables on cognitive development, the implications of assessment on placement and integrating assessment materials for the purpose of writing psychological test reports.

### **PED 676 Applied Behavior Analysis**

Applied Behavior Analysis is a scientific based method of understanding human behavior and using that understanding to change socially significant behaviors. This course provides an overview of the major components – philosophical as well as applied – of Applied Behavior Analysis, including assessment and intervention design.

### **PED 677 Curriculum Interventions (1.5 quarter units)**

The focus of this class is to introduce School Psychology candidates to a conceptual framework for assessing and evaluating a wide range of academic concerns within a problem solving approach using nontraditional academic assessment techniques and an RTI model.

### **PED 678 Practicum in School Psychology**

*Prerequisites: PED 673, PED 671, PED 672*

The purpose of the school-based practicum is to provide School Psychology candidates with an orientation to school and community professionals as well as to clarify the role of the school psychologist. Candidates are placed in a school setting and attend a university-based seminar. Placement consists of 450 hours. Grading is by S or U only.

### **PED 680 Roles, Issues and Ethics**

Introduction to professional, ethical, legal, theoretical, and practical aspects of School Psychology. School Psychology candidates will examine the roles and responsibilities of school psychologists, professional organizations, and associations. Historical and social context along with emerging professional is-

suess and directions are included. National Standards and ethical guidelines for practice are examined.

### **PED 683 Program Evaluation**

This course focuses on history and foundations of program evaluation, to perform a needs assessment, variety of program evaluation methodologies, and evaluation of current empirically-based programs that address student needs. School Psychology candidates will learn skills necessary to implement a program to meet the needs of the schools they are servicing.

### **PED 685 Internship Seminar**

*Prerequisites: Students must have completed all program prerequisites, completion of PED coursework, 450 hours of practicum and have permission of the faculty advisor*

Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Students will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is by H, S, or U only.

### **PED 687 School Psych Internship I**

*Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor*  
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

### **PED 688 School Psych Internship II**

*Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor*  
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

### **PED 689 School Psych Internship I**

*Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor*  
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

### **PED 690 School Psychology Intern II**

*Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor*  
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for

the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

### **PED 694 Thesis**

*Prerequisites: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course*  
This course is a supervised experience culminating in the completion of a thesis. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Grading is H, S, or U only.

## **PGM - Professional Golf Management**

### **PGM 100 History of Sport**

A survey of the history of American sport with a focus on European influences, as well as the influences of technological, cultural, racial, and economic diversity from Colonial American to present day.

### **PGM 101 Philosophy of Coaching**

A survey of basic coaching philosophies in sports. The concepts of motivation, planning, player development, and training will be explored. Historical examples will be used to highlight the importance and development of coaching techniques.

### **PGM 102 Facility Operations**

A survey of the principles of facility planning and operations. Analysis and discussion of the steps involved in the creation of a facility mission and the techniques and methods to develop financial forecasts and budgets will be discussed. Effective business practices and their differences in private, semi-private, and municipal facilities will be explored.

### **PGM 103 Acctg and Business Practices**

A survey of basic accounting theory and the application of accounting principles, including the recording of business transactions and preparation of financial statements within the golf industry. Analysis and interpretation of financial data will be used to assist users in decision-making. Case studies involving financial situations presently facing golf club management will be presented.

### **PGM 104 Tournament Operations**

An exploration into the operational development of tournaments and the rules of golf, planning and operations of tournaments, including budget, purpose, staff, facility, function, format, players, tickets, marketing, golf course preparation, prizes, media coverage, evaluation, and other logistical concerns. The history of the rules of golf and their application in tournaments and regulation play will be introduced and applied.

### **PGM 200 Personnel Dev & Human Relation**

*Prerequisites: (may only be taken by students in the Associate Programs in Professional Golf Management)*

Overview of human resources management and organizational development activities including employment, interviewing, career systems, com-

pensation, benefits, training, organizational change, performance evaluation, discipline and employee assistance, labor relations, affirmative action and equal employment opportunity considerations, and health and safety. (\*may only be taken by students in the Associate of Arts, Concentration in Professional Golf Management)

#### **PGM 201 Hospitality & Resort Mgmt**

Planning for the management of personnel, including the recruitment, selection, and evaluation of employees in the hospitality industry. This course will discuss resort management in the golf industry and how to address situations in day to day business.

#### **PGM 202 Sustainable Golf & Turf Mgmt (6 quarter units)**

*Prerequisites: (may only be taken by students in the Associate programs in Professional Golf Management)*  
A survey of basic science behind turf management and the application of sustainable technologies in golf facility management.

#### **PGM 203 Instruction & Player Dev**

An advanced look at the techniques employed by instructors to develop advanced players. This course will focus on mechanics, learning style, habits, fitness, and motivation utilized by the world's best teachers and players.

#### **PGM 204 Sports Marketing and Promotion**

Principles of sports marketing and the application of these principles to sports related organizations. The primary focus is on planning, with additional emphasis on promotions management.

#### **PGM 210 Modern Swing Concepts**

Survey on major concepts of the golf swing. Topics will range from exploring the philosophy of teaching, on course management, how fitness relates to the golf swing, and the use of technology to improve teaching.

#### **PGM 213 Merchandising & Invent Mgmt**

A survey of basic accounting, marketing, and inventory management theory. The course includes an analysis of an open-to-buy plan, the value of inventory management systems, successful marketing and pricing strategies, and the importance of merchandising benchmarks to evaluate financial performance.

#### **PGM 214 Supervising & Delegating**

A survey of basic managerial and leadership theory, with an emphasis on training for managers and development of leadership skills to help provide a teamwork philosophy in the workplace.

#### **PGM 215 Facilities Ops & Green Apps**

A seminar course in the organizational challenges and opportunities of facility operations and environmentally sensitive practices. An examination of business practices, personnel and human resources issues, organizational behavior, technology, and current research and practices in ecological golf course management.

#### **PGM 216 Mental Prep & Short Game**

An overview of basic concepts from sports psy-

chology as they apply to the game golf and the implementation of these concepts in all aspects of the game. An extensive exploration of the short game, including drills, mechanics, and the importance of mental preparation.

#### **PGM 220 Adv Sem. Instr. Player Develop**

*Prerequisites: PGM 203*

An advanced seminar into the instruction and development of intermediate and advanced players. Player development theory: the application of player development principles in teaching, and the mental aspects of the game of golf will be discussed.

#### **PGM 444 Instruction/Player Develop.**

*Prerequisites: satisfactory completion of 8 core courses*

Survey of major concepts on coaching, instruction, and player development. Topics will range from exploring the philosophy of teaching, how fitness relates to the golf performance, and the use of technology to improve teaching and performance.

#### **PGM 445 Player Development II Seminar**

*Prerequisites: PGM 447*

An advanced seminar into the development of instruction and player development. Focus of the course is on the application of instruction and player development principles, including the integration of applied sport psychology principles.

#### **PGM 447 Prof. Golf Management Seminar**

*Prerequisites: PGM 444*

A seminar in the principles of facility planning, operations, and management. Analysis and discussion of basic accounting theory and the application of accounting principles. The use of ethical business planning in the creation of a facility mission and the techniques and methods to develop financial forecasts and budgets will be discussed. Effective business practices and their differences in private, semi-private, and municipal facilities will be explored.

#### **PGM 448 Senior Project in PGM**

*Prerequisites: satisfactory completion of ALL Major requirements*

A two-month course in professional golf management. Students will use real-world experiences as a laboratory for understanding, developing, and advancing the principles of professional golf management.

#### **PGM 483 Coaching, Instruction, and Pla**

This class will survey the major concepts on coaching, instruction, and player development. Topics will range from exploring the philosophy of teaching, on course management, how fitness relates to the golf performance, applied sport psychology, and the use of technology to improve teaching and performance.

#### **PGM 600 General Management**

An exploration of common managerial challenges in the oversight of a golf facility. This course provides students with knowledge to recruit, select, train, evaluate and compensate employees. Students construct inventory management systems, successful marketing and pricing strategies, and merchandising benchmarks to evaluate financial performance in changing market environments.

#### **PGM 610 Turfscience and Sustainability**

This course explores advances in systems to manage a "green" facility and the importance of sustainability in the profitability of a public, private, resort, or municipal facility. Students will critique complex decisions related to the proper maintenance of the golf facility and evaluate issues of zoning and community relations in the development and successful operation of a facility.

#### **PGM 620 The Business of Instruction**

This course explores the role of the instructor at a golf facility and the best practices of world class instructors. Students will apply business planning strategy and theory in designing a teaching program, recognizing the importance of technological systems that advance the teaching agenda, grant opportunities, and the core competencies of instruction.

#### **PGM 630 Marketing and Profitability**

This course explores the principles of sports marketing, organizational efficiency, product placement, and the role of industry and larger economic trends as they influence an organization's marketing and operations. Students will evaluate the role of the golf industry and its core areas of equipment, instruction, real estate, tourism, food and beverage, and hotel and resort management in business decision. Students will choose a core area of the golf industry and develop a marketing strategy that incorporates sales, product/service positioning, a SWOT analysis, and the typical budget of a model facility or business.

#### **PGM 690 PGM Project**

A project where students work in teams or individually under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students will select a core area of the golf industry (equipment, instruction, real estate, tourism, food and beverage, or hotel and resort management), apply knowledge of management, financial planning and strategy, marketing, and sustainability and present their research in both written and oral form to faculty and classmates. PGM Project is two months in length.

### **PHL - Philosophy**

#### **PHL 100 Introduction to Philosophy**

*Prerequisites: ENG 100, and ENG 101*

A study of a variety of ways of thinking about such fundamental issues as the nature of knowledge and belief, human nature, the nature of reality, and the relationship between mind and body. Develops skills in thinking critically and reflectively. Fosters an awareness of world philosophies and diverse ontological perspectives.

#### **PHL 238 Logical & Critical Thinking**

*Prerequisites: ENG 100, and ENG 101*

Introduction to the fundamentals of logic and critical thinking. Focuses on the core skills of logical analysis, argumentation, recognition of fallacious reasoning, linguistic structural analysis, introductory levels of propositional and categorical argumentation, and various forms of inductive reasoning.

### **PHL 320 World Religions**

Prerequisites: ENG 100, and ENG 101

Major world religions, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam, are surveyed in their historical, literary, and historical contexts. The sociology of religion is extensively addressed, and parallels in myths, rituals, conversion, and rites of passage are compared. Recent and contemporary religious trends are also addressed.

### **PHL 326 Chinese Thought**

Prerequisites: ENG 100, and ENG 101

History of Chinese thought and religion from 5th B.C until 10th century A.D., with an emphasis on the continuing relevance of these traditions in China today. The course will focus on the following schools of thought and related religions: Confucianism, Moism, Daoism, Legalism, Buddhism.

### **PHL 332 Religion of Islam**

Prerequisites: ENG 100, and ENG 101

This course will deal with religion of Islam and its cultural influence in Central and South Asia, Africa, and the Near East. The course will examine the roots of Islam since Mohammed and its practices, literature, social and political movements of Islam later on. The issue of gender, treatment of other religions, and current Islam will be of special emphasis.

### **PHL 336 Philosophy of Science**

Prerequisites: ENG 100, and ENG 101

A survey of major theories of science. Considers the nature of scientific knowledge, the roots of science in our everyday cognition and behavior, the relation of theory to experimentation, the social implications of science, the relation of physical to social science and the relation of science to technology.

### **PHL 337 Ethics**

Prerequisites: ENG 100, and ENG 101

An examination of theories of value and ideological differences in practical applications to clarify ethical differences. Course emphasizes the dilemmas of personal and professional responsibility, including business and workplace circumstances, social relationships, and political practice.

### **PHL 339 Study of a Major Philosopher**

Prerequisites: ENG 100, and ENG 101

An in-depth analysis of the writings of a major figure in the history of philosophical thought. The particular emphasis will be determined by the instructor in the context of the specific thinker chosen.

### **PHL 375 Environmental Ethics**

Prerequisites: ENG 100, and ENG 101

An exploration of ethical theories as they inform and are applied to contemporary environmental issues such as animal rights, habitat loss, species extinction, pollution, industrialization, population control, ecofeminism and political ecology. Western cultural and ecological assumptions are examined through the lenses of humanitarian, eco-centric, utilitarian, deontological, and ethics-of-care perspectives.

## **PHS - Physics**

### **PHS 102 Survey of Physical Science**

An introduction to the basic principles and general concepts of the physical sciences. Develops selected topics from chemistry and physics. A general education course for non-technical majors.

### **PHS 104 Introductory Physics**

Prerequisites: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, and MTH 216B

Non-calculus based general physics course for earth and life science majors. Study of force, laws of motion, heat, fluid mechanics, electricity, magnetism, light (optics) and modern physics.

### **PHS 104A Introductory Physics Lab (1.5 quarter units)**

Prerequisites: PHS 104, or PHS 171 for science majors

Non-calculus based general physics course for earth and life science majors. Laboratory experiments/exercises, including data analysis on topics, including but not limited to: electricity, magnetism, light (optics) and nuclear physics.

### **PHS 130A Physics Lab for Engineering (1.5 quarter units)**

Non-calculus based general physics lab course for Master of Science in Environmental Engineering on-line program. The course includes interactive illustrations, explorations, and problems in major parts of General Physics: Kinematics, Dynamics, Electric current and Optics.

### **PHS 171 General Physics 1**

Prerequisites: MTH 215, or MTH 216A, and MTH 216B

Non-calculus based general physics course. Intended for Science majors. Study of one-dimensional and two – dimensional kinematics, dynamics, statics, work, energy, linear momentum, circular motion and gravitation.

### **PHS 172 General Physics 2**

Prerequisites: PHS 171

Non-calculus based general physics course for Science majors. Study of temperature, kinetic theory, gas laws, heat, oscillatory motion and waves, and electricity.

### **PHS 173 General Physics 3**

Prerequisites: PHS 171, PHS 172

Non-calculus based general physics course intended for Science majors. Extended study of magnetism, electromagnetic induction and waves, optics, relativity, quantum physics, nuclear reactions and elementary particles.

### **PHS 181 Physics for Non-Sci Majors I**

Prerequisites: 2 years of high school algebra, and MTH 204, or MTH 215, or MTH 216A, or MTH 216B

Non-calculus based general physics course for non-science majors. Study of one-dimensional and two – dimensional kinematics, dynamics, statics, work, energy, linear momentum, solids and fluids, temperature and kinetic theory, heat, vibrations and waves, and electrostatics.

### **PHS 182 Physics for Non-Sci Majors II**

Prerequisites: PHS 181

Non-calculus based general physics course for non-science majors. Study of electric current and resistance, magnetism, electromagnetic induction, optics, relativity, quantum physics, quantum mechanics and atomic physics, and nuclear physics.

### **PHS 231 Calculus-based Physics 1**

Prerequisites: PHS 104, and MTH 220, or CSC 208, and MTH 221, or CSC 209

Calculus-based physics course. Intended for Science majors and Engineering students. Study of one, two and three-dimensional kinematics including integral calculus, graphical analysis, numerical integration and vector kinematic, dynamics, uniform and non-uniform circular motion, gravitation, and Newton's synthesis, work and energy with vector algebra principles, linear momentum, rotational motion, statics including elasticity and fracture.

### **PHS 232 Calculus-based Physics 2**

Prerequisites: PHS 104, PHS 231, MTH 220 or CSC 208, and MTH 221 or CSC 209

Calculus-based physics course. Intended for Science majors and Engineering students. Study of different types of oscillations and wave motion, electrostatics with electric field calculations for continuous charge distribution, Gauss's law, electric potential due to any charge distribution, electric energy storage with applications, electric currents and resistance, magnetism and magnetic field, electromagnetic induction and transmission of power, DC and AC circuits, Maxwell's equations and electromagnetic waves

## **PLA - Paralegal Studies**

### **PLA 200 Legal Theory & Ethics**

Introduces the law and legal system and an overview of the major areas of legal practice. Focuses on legal problem-solving, case analysis, fact pattern analysis, selected topical surveys of law, and legal ethics and professional responsibility for the paralegal.

### **PLA 201 English for Professionals**

Teaches legal professionals to write well by examining English, composition, grammar, punctuation, and writing mechanics in the context of good legal writing. Students complete focused exercises designed to build their legal vocabulary and enable them to draft discourses.

### **PLA 202 Property**

Examines the law relating to the various types of real-property interests and estates, methods of transferring title, recording statutes and title searches, the nature and scope of easements, leasehold interests, the rights and obligations of landlords and tenants, the law of adverse possession, and covenants regarding title.

### **PLA 203 Leg Res Wrtg-Persuasive Wrtg.**

Develops legal research skills through focused exercises using print and computerized research. Exposes students to primary and secondary legal authorities, with an emphasis on practice and ethical rules. Develops legal writing skills by implementing the IRAC method, synthesizing various legal authorities, and applying proper legal citation.

### **PLA 303 Law Office Administration**

Explores the organization and functioning of a law office. Topics include financial planning and management, problem-solving techniques, personnel administration, job descriptions, hiring practices, new employee orientation and training techniques, salary administration, productivity measurement, and interpersonal considerations.

### **PLA 311 Internship**

Provides students with on-the-job experience in a private law firm, government agency, judicial setting, or corporate law department. Placements are available in a range of legal specializations. Ninety hours of fieldwork are required. Students unable to enroll in the credit course may apply for consideration as a non-credit intern.

### **PLA 314 Workers' Compensation**

A study of the basic principles of California Workers' Compensation law, including eligibility, compensation coverage, medical treatment, compensation payments, permanent disability, death benefits, settlement, vocational rehabilitation, benefits, procedural matters, and the preparation of documents and forms from both the applicant and defense positions.

### **PLA 315 Bankruptcy Law & Procedure**

A study of the substantive law of bankruptcy and its application, including voluntary and involuntary liquidations, discharge of debts, exemptions, creditors' claims, bankruptcy courts, officers and trustees, reorganizations, Chapter 13 plans, and alternate insolvency proceedings. Emphasis is on the preparation of documents and forms.

### **PLA 316 Entertainment Law**

A course designed to familiarize students with the legal aspects of the entertainment industry, emphasizing the role of the legal assistant in preparing and monitoring legal documents. Material covered includes documents used in the acquisition of music rights, agreements used during the production of a motion picture, analysis of distribution and exhibition contracts, financing agreements, and complete review of the "old" and "new" copyright laws.

### **PLA 317 Immigration Practice**

This course introduces students to the law regarding citizenship, naturalization, and immigrant and non-immigrant categories. The course also examines the grounds for removal prior and subsequent to entry, as well as relief from removal. After acquiring a foundation in the substantive law, students complete assignments designed to give them practical exposure to immigration forms and documents.

### **PLA 318 Remedies & Dispute Resolution**

*Prerequisites: PLA 202, PLX 1000X, and PLX 1002X*  
Examines the substantive and procedural aspects of remedies and enforcement of judgments. The first part of the course comprises a study of legal and equitable remedies, including damage, restitutionary, coercive, and declaratory remedies, prejudgment (provisional) remedies, and procedures for the enforcement of judgments. The second part of the course discusses various methods of resolving disputes, including negotiation, mediation, and arbitration.

### **PLA 325 Litigation I**

Explores civil procedure in both state and federal courts, including jurisdiction, venue, parties, pleadings, motions, and an analysis of civil-litigation strategies. Emphasizes the role of the paralegal in discovery and includes discussions of various types of discovery (including depositions, interrogatories, and demands for production of documents), the attorney-client privilege, the work product doctrine, and trial-setting matters.

### **PLA 329 Corporations I**

Covers the formation and structure of corporations, analysis of common corporate documents, initial and amended articles of incorporation, by-laws, meetings and minutes, initial stock-issuance documents, documents relating to internal management of corporate affairs, stock options, buy/sell agreements, resolutions, stock dividends and splits, and liquidation and dissolution.

### **PLA 333 Criminal Law I**

Examines criminal law, including the criminal legal system, what constitutes a crime, the elements of crimes, inchoate crimes, and criminal defenses.

### **PLA 335 Employment Law**

This course is designed to provide the student with an introduction and understanding of the laws concerning the employment relationship including what constitutes an employee, at-will employment, termination of employees, employee rights, wage and hour regulations and employee privacy issues. This course will also provide the student with an introduction to employment discrimination laws and regulations concerning sexual harassment, race discrimination, disability discrimination and age discrimination.

### **PLA 404 Wills, Trusts, & Estate Planni**

A study of the laws concerning intestate succession, wills, and trusts (with an emphasis on California law), the principles of federal estate and gift taxation, and the relationship of succession and taxes. Students learn how to draft wills, trusts, codicils, and trust amendments and how to do death tax projections.

### **PLA 407 Family Law I**

The law of family relations, including the law of marriage, annulment, dissolution, judicial separation, spousal and child support, legitimacy of children, custody, adoption, the classification of separate and community property, and problems arising from the dissolution of the marital community.

### **PLA 413 Juvenile Law and Procedure**

A study of procedural law and substantive law relating to the special status of minors in our society. The emphasis of this course is Juvenile jurisdiction in three areas: Incurability, Dependency, and Delinquency. Students learn the unique aspects of representation of juveniles, including interviewing, preparation of disposition reports, and development of files of alternative treatment programs. A term project and field trips to court and various juvenile facilities develop the skills needed for a legal assistant to work in this field.

### **PLA 421 Family Law II**

This course covers advanced issues of family law including marital settlement agreements, domestic vio-

lence, enforcement techniques, tax issues, prenuptial agreements, paternity law, the Uniform Child Custody Jurisdiction Act and the Uniform Interstate Family Support Act. Emphasis will be placed on familiarization with California Judicial Council Forms, pleading preparation, research, and internet tools.

### **PLA 426 Litigation II**

*Prerequisites: PLA 325*

Focuses on the trial process in civil litigation, with a discussion of the law of evidence. Includes a review of civil procedure before trial. Students examine the role of the paralegal at trial, analyze the use of testimony by expert witnesses, and discuss the practical problems associated with the use of documentary evidence at trial. Covers settlement and negotiation strategies, trial briefs, motions in limine, and other related documents, and includes a brief overview of the law of judgments and the process of appeals.

### **PLA 427 Probate and Estate Planning I**

*Recommended: Prior completion of: PLA 404*

This course covers the following: basic property concepts (the basic differences of community, quasi-community, and separate property; recognition of probate assets and non-probate assets; the differences between joint tenancy and tenancy-in-common; trust assets; fringe benefits; insurance proceeds); non-probate procedures (clearing title to joint tenancy, the various summary administration procedures, and spousal property petitions); and probate procedures (initiating administration; jurisdiction and venue; intestate succession; preparation of petition and other documents; review of will, notice requirements, Independent Administration of Estates Act, ancillary probate; and the necessity of maintaining a calendar or tickler system).

### **PLA 428 Probate and Estate Planning II**

This course covers the following material: Asset accumulation, management, and creditors' claims, location and marshaling of assets of the estate; preparation of inventories; function of probate referee; review of procedures for payment of debts and creditors' claims; study of management of estate assets; sales of real businesses; and family allowance. This course also covers miscellaneous court proceedings and termination of proceedings: will contests, contract to make a will, quiet title actions, buy-sell agreements, options, redemptions, and partition. Preparation of a court accounting and petition for final distribution, discharge of representation, and statutory fees. In addition, the course will review special petitions: Petition under Probate Code Sec. 9860, petition for instructions, petition to determine distribution rights, nunc pro tunc orders, settlements, preliminary distributions, and report of status of administration of estate.

### **PLA 430 Corporations II**

*Prerequisites: PLA 329*

Examines the regulation of the sale of securities (analysis of the requirements regarding the forms and supporting materials for the registration of securities for California, preparation of California exemption forms, and an overview of federal securities laws), and acquisition and merger agreements (analysis of different types of acquisitions and mergers, statutory requirements of such transactions, and the customary range of provisions that appear in such agreements).



### **PLA 431 Real Estate I**

*Recommended: Prior completion of: PLA 202*

The course covers ownership of real-estate leasing (extensive analysis and preparation of residential, commercial, and industrial leases); purchase and sale of real estate (analysis and study of common documents relating to the purchase and sale of real estate, including standard broker listing agreements, deposit receipts, offers to purchase, escrow instructions, deeds, title insurance, and surveys); financing and secured transactions (study of types and provisions of security devices, including deeds of trust and land-sale contracts; review of various methods of financing, including all-inclusive deeds of trust; analysis of various provisions of security devices, including due-on-sale, subordination, reconveyance, and prepayment; and the remedies available to holders of securities devices).

### **PLA 432 Real Estate II**

*Prerequisites: PLA 431*

This course covers condominiums, planned-unit developments and cooperatives (analysis of the basic law relating to these forms of ownership, the basic constituent documents and regulations by the Department of Real Estate); land-development regulation (study of zoning laws, Subdivided Lands Act and Subdivision Map Act, and the several forms relating to these regulatory schemes); and miscellaneous topics, such as mechanics' liens, the impact of the bankruptcy laws on lenders, landlord remedies, and toxic hazardous waste considerations.

### **PLA 434 Criminal Law II**

*Prerequisites: PLA 333*

Covers criminal procedure, including search and seizure, confessions and pretrial identification procedures, initial appearance, extradition, grand jury, pretrial conference, constitutional rights, sentencing, punishment, and review.

### **PLA 495 Objective Writing Capstone**

*Prerequisites: All other courses required for the major (except PLA 496) must be completed prior to enrolling in this course.*

Allows students the opportunity to conduct in-depth legal research using both print and online resources. Focuses on creating an objective legal document, such as an office memorandum or scholarly legal article, suitable for publication or use as a writing sample on a job interview.

### **PLA 496 Persuasive Writing Capstone**

*Prerequisites: All other courses required for the major must be completed prior to enrolling in this course.*

Allows students the opportunity to conduct in-depth legal research using both print and online resources. Focuses on creating a persuasive legal document, such as a motion, mediation brief, or appellate argument, suitable for publication or use as a writing sample on a job interview.

## **PMA - Property Management**

### **PMA 200 Property Management Concepts**

Introduction to the concept of property management, covering the essential elements of contracts and lease negotiation, risk management, marketing, maintenance and compliance, and stakeholder relations

### **PMA 210 Contracts & Lease Negotiations**

Overview of the management and administration of contracts made with property owners, tenants, vendors, and maintenance contractors. Negotiation skills and relevant compliance issues will be examined.

### **PMA 220 Risk Management**

Overview of the concept of risk from the owner's, property manager's, and stakeholder's points of view, emphasizing risk mitigation for litigation and insurance purposes.

### **PMA 230 Property Planning & Marketing**

Survey of the marketing and promotion of commercial and residential income property, including relevant revenue and cost calculations, market surveys, and capitalization rates.

### **PMA 240 Budgeting**

Explanation of the application of budgeting concepts to property management according to contractual parameters, dealing with revenue forecasts, and expense projections involved with the management of the property involved

### **PMA 250 Property Maintenance**

Examination of the elements involved with the maintenance of property, including disciplines of preventive and scheduled maintenance, as well as administration of service contracts with sub-contractors

### **PMA 260 Safety/Environment Compliance**

Study of the rules and regulations applicable to residential and commercial apartment and commercial property management involving safety issues, and environmental concerns.

### **PMA 270 Property Management Software**

Exposure and training to property management software systems that provides familiarity with relevant software systems used in the industry.

## **PMB - Project Management**

### **PMB 400 Project Management Essentials**

*Prerequisites: MGT 451*

Introduction to the concept of project management, covering the essential elements of planning a project, initiating the project, implementing the project, and the termination of the project, while emphasizing the importance of team building and leadership, as well as incorporating cost, scheduling and budgetary principles according to contractual terms.

### **PMB 410 Project Planning and Control**

*Prerequisites: MGT 451, PMB 400*

Examination of the elements of project planning and control by studying each element in depth. Addresses topics such as work breakdown structure, budgets, costs, resource planning and allocation, project monitoring and reporting, and project and process control methods, as well as the termination and audit of a project.

### **PMB 420 Program Management**

*Prerequisites: MGT 451, PMB 400*

Study the management of a portfolio of projects leading to organizational change, creation of a model

that compares the program with other segments in an organization using benchmarks, and develops a plan that builds an infrastructure of critical chains for parallel projects.

### **PMB 430 Project Accounting Fundamentals**

*Prerequisites: MGT 451, PMB 400*

Explanation of the application of cost accounting concepts to a project according to its contractual parameters. It develops alternative cost methods and outlines an approach to track and measure the progress of any project according to its contractual or planned milestones and measurement of value.

### **PMB 440 Contract Management**

*Prerequisites: MGT 451, PMB 400*

Overview of the management of contracts made with customers, vendors, or partners. Contract management includes negotiating the terms and conditions in contracts and ensuring compliance, as well as documenting and agreeing to changes that may arise during its implementation of execution.

## **PME - Advanced Project Management**

### **PME 601 Advanced Project Management**

*Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603*

Introduction to the in-depth theory and practice involved in the design and management of projects. It guides students through Concept, Study, Design, and Implementation. The latest developments in the field such as intricate framework of organizational behavior and structure, global project management, project management maturity model will be covered.

### **PME 602 Skills Management**

Focus on modern concepts and practical guidelines for leading people effectively and confidently towards challenging project and organizational objectives. The concepts behind dealing with diverse project teams, issues of delegation, empowerment, accountability, control, commitment, organizational linkages, alliances and intricacies of matrix management will be studied.

### **PME 603 Product Management**

*Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603*

Coverage of three major tasks facing today's product managers namely analyzing the market, developing objectives and strategies for the product or service in question, and making decisions about price, advertising, promotion, channels of distribution and service.

### **PME 604 Project Financing Management**

*Prerequisites: ENM 600, ENM 601, ENM 602, ENM 603*

Discussion of essential concepts in finance related to project management such as accounting statements and their interpretation, forecasting, risk and return, time value of money, project budgeting, and project finance management such as working capital, cash flow management, account receivables and inventory and global finance management.

## POL - Political Science

### POL 100 Introduction to Politics

*Prerequisites: ENG 100, and ENG 101*

A broad overview of the field of political science including main issues and central questions studied by political scientists and methods used to gain knowledge about politics. A survey course designed to acquaint the student with selective concepts, theories, and of political process.

### POL 201 American Politics

*Prerequisites: ENG 100, and ENG 101*

A critical introduction to the structure of American government. Topics include classical and modern democratic theories, constitutionalism and federalism; the political process, including the mass media, voting behavior and political parties and interest groups; the institutions of government; the courts, civil liberties and civil rights; and public policy. (Includes study of the Constitution)

### POL 320 Politics of Social Movements

*Prerequisites: ENG 100, and ENG 101*

Introduction to social movements and political action, covering several theoretical perspectives on how to understand and analyze social movements in recent global history, from their origins to their demise; a global survey of the processes of social and political awareness, mobilization and development of such movements.

### POL 330 Political Theory

*Prerequisites: ENG 100, and ENG 101*

Survey of political theory and major figures in the history of political philosophical thought. Questions concerning the role of government and the relationship between government and individuals are explored.

### POL 340 Comparative Politics

*Prerequisites: ENG 100, and ENG 101*

A study of selected foreign states from among industrial, developing, and under developing states, and their development, organization, administration, and politics; introduces students to analytical methods used to compare political systems and governments; explores several issues, including democratization, economic development, political culture and political change.

### POL 350 International Relations

*Prerequisites: ENG 100, and ENG 101*

A survey of the nature of the international system and the theoretical framework used by political scientists to examine it; in particular, this course focuses on the decision-making process within the international arena. International negotiation and decision-making are utilized.

### POL 360 Public Policy

*Prerequisites: ENG 100, and ENG 101*

An introduction to the public policy process in the United States, theory and practice of process of formulating public policy, why some problems reach the public agenda and why others are rejected, examination of policy making at the national, state and local level, and public policy in foreign political systems.

### POL 400 European Politics

*Prerequisites: ENG 100, and ENG 101*

This course provides an introduction to European poli-

tics, with emphasis on political institutions and politics of Western and Eastern European states, as well as the institutions and policies of the European Union (EU).

### POL 410 Middle Eastern Politics

*Prerequisites: ENG 100, and ENG 101*

Historical examination of the Middle East region, focusing on the key social forces and the sources of conflict; exploration of the Israeli-Palestinian conflict in-depth and the peace process; exploration of the U.S. involvement in Iraq and elsewhere in the Middle East.

### POL 415 Petroleum and the Persian Gulf

*Prerequisites: ENG 100, and ENG 101*

This course is an introduction to modern day issues in the Persian Gulf. Among the variety of issues presented and discussed, particular attention will be given to social, intellectual, and political contexts from which these works have originated.

### POL 418 Modern Economy & Govt of China

*Prerequisites: ENG 100, and ENG 101*

A survey of major political and economic events in China. The role of the Chinese Communist Party and the recent ideological shift from Marxism-Leninism towards Nationalism as its core ideology will be examined, as will the continuing domestic and international affects of ongoing Economic Reform and Opening Up policies.

### POL 490 Guided Study (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### POL 499 Capstone Seminar in Politics

*Prerequisites: ENG 240 and completion of at least 27 units of core courses in the major*

The subject of the capstone seminar is to emphasize the study of some aspect of the political science discipline. Students will critically review various concepts, theories, approaches and methodologies and will employ a particular theory and methodology to research and write a substantial research paper involving critical literature review. Grading is H, S, or U only.

### POL 539 Dynamics of World Politics

An examination of international relations and politics, the factors underlying international crises from different theoretical perspectives and the future of the global community. Explores the historical and intellectual antecedents of contemporary world events.

### POL 540 American Political System

A look into the origins and development of the American political system with special emphasis on aspects of democratic theory and practice, political parties, interest groups, public opinion and political ideology and political economy. Students are encouraged to pursue topics of particular interest.

## PSY - Psychology

### PSY 100 Introduction to Psychology

A survey of the field of psychology that provides an overview of the scientific principles and theories in psychology. Topics include: biological psychology, abnormal behavior, motivation, emotion, sexuality and gender, and personality theory.

### PSY 300 Social Psychology of Sport

*Prerequisites: ENG 100, ENG 101, PSY 100*

The relationship between psychology, social relationships, and sport. The concepts of group dynamics, motivation, social support, coaching relationships, and the wider social context's relationship to the individual and the sport will be explored. The course will utilize both theoretical and research findings to suggest practical applications in sports performance.

### PSY 301 Child Development

*Prerequisites: ENG 100, ENG 101*

Familiarizes students with the foundational theories of human development, current research directions in developmental psychology, major developmental perspectives and research approaches in developmental psychology and issues surrounding diversity, emphasizing an ecosystemic model of thinking about and understanding children and their development. In addition to the previous topics, the following areas will be discussed: the history of childhood; developmental theories and appropriate practices in education; play as a medium for learning and development; and the field of discipline particularly as it relates to development, behaviors and considering temperament in children.

### PSY 302 Foundation of Sport Psychology

*Prerequisites: ENG 100, and ENG 101, PSY 100*

Introduction and overview of the growing field of Sport Psychology, applying psychological principles to athletic performance. Topics will include theoretical foundations of behavior, psychological interventions for performance enhancement, adherence and maintenance of gains, and the impaired athlete.

### PSY 303 Motor Learning

*Prerequisites: ENG 100, and ENG 101, PSY 100*

Students will learn the major principles underlying the acquisition of motor skill and how control of skilled movements is gained, maintained, and adapted. This course covers the various way that people learn to move, learn skilled actions, and how the principles of motor performance and learning can be useful in teaching, coaching, and rehabilitation.

### PSY 340A Counseling Techniques I

*Prerequisites: ENG 100, ENG 101, and PSY 100*

An introduction to basic counseling techniques such as nonjudgmental listening, reflection, feedback, goal setting, and basic solution skills. Examines transference, countertransference, and therapist attributes such as empathy, congruence, acceptance, genuineness and respect. The online version has a significant live chat component that requires computer imaging and voice technology. Grading is H, S or U only.

### PSY 340B Counseling Techniques II

*Prerequisites: PSY 340A*

An examination of intermediate counseling techniques, including imagery, role-playing, confrontation, and crisis management. Focus is on application of techniques applied to clinical, non-clinical and culturally diverse populations. Students will gain practical experience through in-class demonstrations and role plays. Grading is S or U only.

### PSY 426 History of Psychology

*Prerequisites: ENG 100, ENG 101, and PSY 100*

Contemporary psychology derives from two main

sources: (1) the rise of the scientific method and worldview in Western Europe during the modern era and (2) perennial issues in philosophy throughout its entire history in the West. This course reviews influences from both sources on the development of psychology, especially in America.

#### **PSY 427 Biological Psychology**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

A study of the way in which the brain mediates behavior, emotion, and cognition. Topics include sensory systems, neural development, emotion, learning, memory, consciousness, reproduction, and neurological and psychological disorders.

#### **PSY 428 Developmental Psychology**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

An examination of the developing personality, including personal identity, cognition, language, social skills, relational capacities, gender and role learning and socialization for the entire life span.

#### **PSY 429 Intro to Personality Theory**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

The study of psychological characteristics of the individual that endure in stable form for substantial periods of time. Examines influential theories of personality and supporting research.

#### **PSY 430 Intro to Psychopathology**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

An overview of sociocultural views and scientific theories of normalcy and deviance. The major psychological, cognitive, and behavioral disorders and their classification are examined.

#### **PSY 431 Psychological Testing**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

An introduction to theories and principles of psychological testing and measurement and to a variety of standardized tests of intelligence, personality, achievement, interest, neuropsychology and other areas. Emphasizes the principles by which tests are constructed and validated. Also examines controversies regarding the valid, appropriate and fair use of psychological tests.

#### **PSY 432 Social Psychology**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

A study of the responsiveness of individuals to various sources and forms of social influence. Major areas of study include persuasion, conformity, obedience, prejudice, attitude formation and change, social behavior, altruism, aggression and the influence of the mass media. Emphasizes social circumstances rather than variations in personal characteristics, as in personality theory.

#### **PSY 433 Cognitive Psychology**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

The study of psychological functioning in the area of mental operations, largely uninfluenced by individual differences in personality or motivation. This encompasses the areas of attention, pattern recognition and other perceptual achievements, memory, problem solving, categorization and concept formation, language acquisition and use, textual interpretation and decision making.

#### **PSY 434 Psychological Research**

*Prerequisites: PSY 435*

A survey of core issues involved in scientific psychological research. Includes the study of the nature of explanation in psychology, the role of theory in research, the connection between research findings and theory, the distinction between experimental and other forms of research, the design of experiments, threats to the validity of research findings, operationalizing psychological concepts in a manner that yields quantitative data and ethical considerations in terms of confidentiality, informed consent and the possibility of doing harm to subjects.

#### **PSY 435 Analysis of Data in Research**

*Prerequisites: MTH 210, PSY 100, ENG 100, and ENG 101*

A study of how conclusions are made on the basis of submitting research data to statistical tests. The general area is called inferential or inductive statistics. Covers methods for analyzing parametric and non-parametric data, single-group and multiple-group sources of data and data derived from one source of information and multiple sources of information.

#### **PSY 436 Computer Apps in Psychology**

*Prerequisites: ILR 260, and PSY 435*

A survey of the uses of computers in psychology, including the application of computers in psychological research and the analysis of statistical packages for the social sciences. Also considers computer-aided instruction. Lecture and laboratory format.

#### **PSY 437 Theories of Psychotherapy**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

A presentation of clinical theories of treatment that correspond to theories of psychopathology, personality and development already encountered in courses under such titles. Topics include specific treatment approaches, the nature of the therapeutic relationship and how it effects change and therapeutic interventions

#### **PSY 438 Intro to Group Counseling**

*Prerequisites: PSY 340A, and PSY 340B*

A basic examination of the dimensions of group process, dynamics, and practice is the emphasis in this course. Focus is on effective strategies and procedures for facilitating group process practiced by clinicians in the counseling as well as practitioners in human services, criminal justice, behavioral analysis business and education. Opportunities to practice effective strategies with children, adolescents, adults and the elderly will be part of classroom experiences.

#### **PSY 439 Counseling Diverse Populations**

*Prerequisites: PSY 340A, PSY 340B, and PSY 438*

An introduction to diversity and multicultural perspectives in psychology, and their impact on counseling practices. Focus will be on dimensions of culture, ethnicity, life style, religion, gender, identity development models and the effects of privilege and oppression on individuals and groups. Basic multicultural counseling competencies will be presented, with opportunities for student self-examination and practice of strategies and techniques.

#### **PSY 440 Sport Psychology for Coaches**

*Prerequisites: PSY 100, PSY 302*

This course looks at the significant developments in the history of coaching and sport psychology. Contemporary research on successful coaching will be discussed and applied to athletic performance.

#### **PSY 441 Global Psychology**

*Prerequisites: PSY 100*

Covers the history, current status and future direction of cultural psychology theory and practice in the context of globalization. A critique of the Western bias of the field of psychology and of the effects of its application to non-European originated populations within the United States and around the world.

#### **PSY 442 Sem Applied Sport Psychology**

*Prerequisites: satisfactory completion of 10 courses in the major*

An advanced course in the application of psychological theories and research to sports and exercise behaviors. The seminar will focus upon skills in assessment, interviewing, case formulation, and interventions with athletes.

#### **PSY 443 Culture and Sport Psychology**

*Prerequisites: PSY 100, PSY 302*

This course looks at the importance of culture on the development of sports, performance, and sport psychology. Research and case studies will be used to study the importance of integrating a multicultural perspective when working with athletes.

#### **PSY 444 Wellness and Peak Performance**

*Prerequisites: ENG 100, ENG 101, PSY 100*

This course looks at the role of wellness and peak performance in athletic performance. Topics include fitness, physiology, weight management, stress management, personality, self-esteem, and motivation.

#### **PSY 445 Applied Sport Psychology**

*Prerequisites: PSY 100, PSY 302*

This course examines the application of psychological theories and research to sports and exercise behaviors. Case studies from a variety of sports will be explored to develop a set of psychological skills that can be applied across sports.

#### **PSY 446 Positive Psychology**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

Historical development of positive psychology and its applications to the practice of wellness, health, and peak performance. Topics include self-esteem, relationship building, happiness, and mindfulness.

#### **PSY 448 History of Sport & Sport Psych**

*Prerequisites: PSY 100, PSY 302*

This course looks at the interrelated historical development of psychology, applied psychology, and sport psychology. Topics include the role of the scientific method and applied methods in research and practice, the role of culture in sport and sport psychology, the history of sports, and current trends in sport and applied psychology

#### **PSY 449 Group Dynamics in Sport**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

This course looks at group dynamics in team sports and coaching relationships. Topics include the use of

self in groups, leadership styles in the team setting, features of a successful group or team environment, and the role of motivation in team sports.

#### **PSY 454 Psychology of Religion**

*Prerequisites: PSY 100, ENG 100*

The relationship between psychology, spirituality, and religion. Exploring the nature of religious experience, how religion and spirituality influence social and societal behaviors, and how religion and spirituality affects psychological and physical health will be examined.

#### **PSY 455 Psychology of Bereavement**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

An exploration of the basic psychological concepts associated with death, dying, and bereavement. Course work will include lectures, discussions, exams, research, and experiential exercises.

#### **PSY 457 Forensic Psychology**

*Prerequisites: ENG 100, PSY 100*

Survey of the application of psychological knowledge or methods to a task faced by the legal system. General areas to be covered include, but are not limited to, eyewitness testimony, trial consultation and syndrome evidence.

#### **PSY 458 Health Psychology**

*Prerequisites: ENG 100, ENG 101, PSY 100*

An examination of the relationship between behavior, psychological variables, and physical illness and health. A strong emphasis is placed on health psychology theory, research and applications focused on wellness promotion and the prevention and behavioral treatment of illness.

#### **PSY 460 Intro to Addictive Disorders**

*Prerequisites: ENG 100, ENG 101, and PSY 100*

An overview of the nature of addictive disorders, including the various theories regarding etiology, development and psychopathology of such disorders. Also covers the etiology, diagnosis, assessment and treatment of compulsive gambling and nicotine addiction.

#### **PSY 480 Senior Project**

*Prerequisites: All other courses required for the major must be completed prior to enrolling in this course.*

Development of a major cumulative paper integrating what students have learned in the program with an applied area of student interest. Covers empirical or theoretical study of specific topics in psychology with an emphasis on independent and creative activity. Students will be required to submit a portfolio for evaluation at the onset of the course. Students must earn a grade of "C" or better or must repeat the course.

#### **PSY 485 Sport Psychology Sr. Project**

*Prerequisites: satisfactory completion of ALL Major requirements*

A two-month course in applied sport and peak performance psychology. An applied exploration of how the mind influences performance in sports, business, health, and wellness. Students will use real-world experiences as a laboratory for understanding, developing, and advancing the principles of applied sport psychology.

#### **PSY 491 Guided Study for Honors Student**

(variable units)

*Prerequisites: Satisfactory completion of core courses with a GPA of 3.75 or higher*

In this capstone course students will design a research project under the direction and supervision of a faculty member. The research project will include data gathering, data analysis and interpretation of data and will be written in APA style and format. Grading is H, S, or U only.

#### **PSY 501A Foundations in Counseling I**

A study of the essential principles and theories of psychology. Topics include social, developmental, and cognitive psychology. Grading is S/U only.

#### **PSY 501B Foundations in Counseling II**

A study of the essential principles and theories in psychology. Topics include an overview of biological psychology, personality theory, and abnormal psychology. Grading is S/U only.

#### **PSY 602 Sport/Performance Psychology**

This course examines the history, purpose, discipline, and basic techniques of sport and performance psychology. Students will examine how foundational principles in psychology were applied to performance and sport settings, and how current practices are shaped by ongoing research, inquiry, and application.

#### **PSY 603 Performance Psy Alt Population**

This course is designed to provide a knowledge base for applying principles of performance excellence in performance areas other than traditional athletics. Topics include foundational skills for performance consulting, required domain specific knowledge, understanding the specific performance context, and how these factors impact effective strategies for working within those systems

#### **PSY 604 Performance Psy Corporate Pops**

This course examines how the principles of performance psychology can be applied to corporate settings. Themes include proper employee selection, training and development, guided change, leadership, morale, organizational behavior, and work/family issues.

#### **PSY 605 Lifespan Development**

*Prerequisites: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

This course examines the theories of development as applied to the clinical assessment, diagnosis, and treatment of children, adolescents, adults, and older adults. Areas considered will include diversity, gender, and multi-cultural issues as well as identifying normative developmental transitions and their differentiation from deviant developmental patterns

#### **PSY 606 Motor Behavior**

This course examines the role of motor and biomechanical factors in performance situations. Course content includes the biomechanics of performance, linear and angular kinetics, the role of torque and force in performance, and the risks associated with biomechanical stress.

#### **PSY 607 Ethics in Performance Psy**

This course examines the professional laws and ethics pertaining to the practice of counseling and psychotherapy, with an emphasis on the laws and ethics pertaining to therapy and consulting with individuals and groups in a wide variety of settings. The content of various relevant legal and ethical codes will be reviewed, and the similarities and differences in ethical practice between the contexts of psychotherapy and performance psychology consulting will be explored in depth.

#### **PSY 608 Evidence-Based Practice**

*Prerequisites: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

Examination of the concepts and controversies in evidence-based practice approaches to the evaluation of the effectiveness of psychotherapy. It covers the methods of assessing effectiveness, information research skills, and integration of various kinds of evidence relevant to the conduct of psychotherapy using critical thinking skills.

#### **PSY 609 Psychopathology**

This course explores relevant theory and research on the etiology and treatment of psychological disorders. Students are encouraged to critically evaluate the role of neurobiology, culture, and social context in the evaluation of mental disorders.

#### **PSY 610 Case Management**

*Prerequisites: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

This course examines the concepts and principles of case management practice emphasizing strength-based approaches, the bio-psycho-social-spiritual and recovery models. It introduces the role of mental health case management including strengths assessment, development, and delivery of mental health services.

#### **PSY 611A Counseling Paradigms I**

*Prerequisites: Bachelor's Degree in Psychology, or PSY 501A, and PSY 501B*

This course provides an overview of major current and evolving paradigms of psychotherapy and how they influence counseling theory and practice. Students acquire core skills related to effective therapeutic communication and to the therapist's role in promoting exploration, insight, and behavior change.

#### **PSY 611B Counseling Paradigms II**

This course focuses on integrating and applying the full range of theoretical models used in psychotherapy. Students gain practical experience with both process and content issues through in-class role playing and demonstrations and receive both instructor and peer feedback. Grading is H, S or U only.

#### **PSY 612A Clinical Assessment I**

This course discusses clinical assessment from the bio-psycho-social-spiritual, resiliency, recovery and medical models. Interviewing skills and the use of assessment instruments are covered. Assessment, diagnosis, and treatment approaches for adjustment, mood, and sleep disorders are introduced.

#### **PSY 612B Clinical Assessment II**

*Prerequisites: PSY 612A*

This course covers the assessment and diagnosis for Anxiety, Psychotic, Personality, Dissociative, and

Sexual and Gender Identity Disorders in the DSM and other assessment systems. Students will practice assessment skills and development of treatment plans during the course. Outcomes assessment and case conceptualization processes will be discussed.

### **PSY 613 Performance Consulting Skills**

*Prerequisites: PSY 602, and PSY 603*

Students will integrate their theoretical approach to consultation, knowledge of intervention strategies, and personal philosophy of performance enhancement in order to design and present appropriate performance psychology programs. Opportunities to develop both individual and group interventions for diverse populations are provided. An emphasis is placed on the students' professional development, experience as consultants, learners, and peer mentors, as well as the necessity of reflective practice. This is a 2-month course.

### **PSY 614 Counseling in Performance Psy**

This course offers an overview of major theoretical counseling orientations and techniques and their application in performance psychology settings. Emphasis is on basic interviewing, assessment, and counseling skills that facilitate the helping process through integration of various theoretical models.

### **PSY 615 Fieldwork**

*Prerequisites: Successful completion of all core requirements*

The fieldwork experience or internship provides practical application of performance psychology principles in a professional setting. A thesis consisting of the written report of an investigation or of a successful fieldwork project is required. This project must be initiated, executed, and reported by the student under the supervision of the faculty. The student must consult the lead faculty prior to beginning the fieldwork experience.

### **PSY 616 Counseling Theories**

Overview of major theories of counseling as they are applied to psychotherapy. Students are expected to acquire and practice knowledge and skills related to development of a good therapeutic relationship and the therapist's role in promoting communication, insight, and behavior change within the therapeutic setting.

### **PSY 617A Family Systems**

Part one of a two-part sequence. A comprehensive examination of the family as a social institution and how it shapes the course of human development. The student is exposed to models and systems of family development, the multifaceted dynamics of intrafamily relationships, and interactions of the family with various elements of the sociocultural environment. Attention is also focused on family interaction patterns, including communication processes, power relationships, open and closed family systems, parent-child relationships, and conflict resolution processes.

### **PSY 617B Advanced Family Systems**

*Prerequisites: PSY 617A*

Part two of a two-part sequence. Examines the various structures and roles of families, and explores what kinds of supports families need to optimize their successful functioning. Students increase efficacy in utilizing genograms as a clinical assessment

and intervention tool in helping to strengthen families. Students examine cultural context in which relationship problems are understood and from which solutions emerge. Emphasis will be on creating, selecting, and applying appropriate intervention tools from across the micro-macro spectrum, including those developed in other parts of the world.

### **PSY 623 Diagnosis and Assessment**

Explores the realm of mental illness from the perspectives of etiology, diagnosis, and assessment. Covers relevant contextual issues often considered to be related to etiology and treatment. These include neurobiology, culture, family and development. Also covers post-modern considerations regarding pathology and treatment.

### **PSY 623A Clinical Assessment I**

*Recommended Preparation: MA Counseling Psychology Student Group*

Explores the realm of mental illness from the perspectives of etiology, diagnosis, classification and treatment. Covers relevant contextual issues often considered to be related to etiology and treatment. These include neurobiology, culture, family and development. Also covers post-modern considerations regarding pathology and treatment. These two courses introduce students to central features of psychotherapy and assessment, with a particular focus on adult psychotherapy. Students are expected to acquire and practice knowledge and skills related to development of a good therapeutic relationship; assessment, including DSM diagnoses and case formulation; treatment planning which links case formulation, theory, and clinical research outcomes to the methods and goals of psychotherapy; and the therapist's role in promoting communication, insight, and behavior change within the therapeutic setting.

### **PSY 623B Clinical Assessment II**

*Prerequisites: PSY 623A*

Explores the realm of mental illness from the perspectives of etiology, diagnosis, classification and treatment. Covers relevant contextual issues often considered to be related to etiology and treatment. These include neurobiology, culture, family and development. Also covers post-modern considerations regarding pathology and treatment. These two courses introduce students to central features of psychotherapy and assessment, with a particular focus on adult psychotherapy. Students are expected to acquire and practice knowledge and skills related to development of a good therapeutic relationship; assessment, including DSM diagnoses and case formulation; treatment planning which links case formulation, theory, and clinical research outcomes to the methods and goals of psychotherapy; and the therapist's role in promoting communication, insight, and behavior change within the therapeutic setting.

### **PSY 624 Assess Techniques for MFT**

*Recommended Preparation: MA Counseling Psychology Student Group*

Acquaints students with the various information-gathering techniques used in clinical practice for the purposes of diagnosis and treatment planning. Emphasizes building conceptual and practical bridges between initial presenting symptoms, diagnosis and treatment planning.

### **PSY 624A Testing and Assessment**

Acquaints students with the various information-gathering techniques used in clinical practice for the purposes of diagnosis and treatment planning. Emphasizes building conceptual and practical bridges between initial presenting symptoms, diagnosis and treatment planning.

### **PSY 625 Counseling Techniques and Prac**

Overview of major theoretical concepts, techniques, and their applications the therapeutic setting. Emphasis is on basic interviewing, assessment, and counseling skills that facilitate the helping process through integration of various theoretical models.

### **PSY 626 Human Sexuality**

An exploration of human anatomy, physiology, sexual response cycle and the current theories and techniques used to treat sexual dysfunction. Provides students an opportunity to develop skills with these techniques and confront personal biases. Covers issues such as lifestyle, gender choice, gender roles, stereotyping, religion, contraception, HIV, AIDS and physical challenges.

### **PSY 627 Legal & Ethical Issues**

This course examines the laws and professional codes of ethics pertaining to the practice of counseling and psychotherapy. How legal and ethical issues impact the profession of counseling with an emphasis on current California law is discussed.

### **PSY 627A Legal and Ethical Issues**

Examines the professional laws and ethics pertaining to the practice of counseling and psychotherapy, with an emphasis on the laws and ethics pertaining to the practice of professional counseling, the content of these legal and ethical codes, and the underlying principles involved.

### **PSY 628 Group Therapy**

A comprehensive study of the major approaches, techniques and interventions used in group psychotherapy. Also emphasizes dynamics of group process including the types, stages and formation of groups.

### **PSY 629 Lifespan Development**

An examination of developmental theories from childhood through old age as they relate to the practice of psychotherapy. Areas considered will include diversity, gender, and multi-cultural issues as well as identifying normative developmental transitions and their differentiation from deviant developmental pattern

### **PSY 629A Adulthood and Aging**

An opportunity to examine major topics in adult development and aging as they relate to the practice of psychotherapy. Includes developmental challenges and tasks unique to adult life, theories which assist in understanding the adult experience, issues related to work and career and the impact aging has on individuals and society.

### **PSY 632A Family Therapy**

This course provides a comprehensive review of the theories, strategies, techniques, and critical issues involved in clinical work with families. This course will discuss various treatment approaches including

an emphasis on evidence-based, recovery, and resilience-based approaches. Students will have the opportunity to role play family sessions.

### **PSY 632B Couples Therapy**

This course provides a comprehensive look at the theories, techniques, and critical issues involved in treating couples. It will provide a focus on major approaches to the treatment of married and unmarried couples, including resilience and recovery models, as well as a survey of research on marriage and marital therapy. Students will have an opportunity to practice counseling sessions with couples in a role-play format.

### **PSY 635 Childhood and Adolescence**

A seminar focusing on the application of developmental theories and research to the clinical practice of assessment, diagnosis and treatment of children and adolescents. Considers all areas of the developmental process will be considered in addition to issues surrounding diversity, gender and other relevant contexts. Addresses differences between normal developmental transitions, adjustment reactions to life events and/or trauma and deviations in development.

### **PSY 636 Child and Adolescent Therapy**

This course examines assessment techniques, perspectives, and strategies essential to the treatment of children and adolescents. It also includes the therapeutic relationship, assessment and diagnosis, evidence-based treatment, family systems perspective, and legal/ethical concerns related to working with children and adolescents. Public settings and treatment based on cultural awareness as well as the recovery/resiliency model are covered.

### **PSY 637 Cultural Competencies**

Exploration of the role of culture in concepts of mental health practice. Students will examine how their own cultural background frames their understanding of themselves and others. Family heritage, culturally informed assessment and treatment, and the limitations of the dominant Eurocentric psychological world view to diverse populations is explored.

### **PSY 639 Consulting Practice Dev.**

Focuses on the development and production of a completed business plan for the purpose of starting a consulting business practice. Students will examine relevant issues such as vision, mission, marketing, profitability, technology, legal, and operational management. Covers ideas and tangible tools to develop a successful practice in today's business world.

### **PSY 642 Relational Violence**

An examination of child abuse, battering partners and abuse of the elderly as issues rooted in relationships of one form or another. This course covers classical, modern and post-modern identification, assessment and treatment of relational violence as well as preventive intervention. Addresses relevant cultural and gender issues.

### **PSY 643 Crisis Counseling**

*Prerequisites: Permission from lead faculty*

A multidisciplinary resilience-based approach to crises, emergencies, or disasters, including principles of intervention for individuals with mental or emotional

disorders during times of crisis. Course covers cognitive, affective, behavioral, neurological effects associated with trauma and the use of culturally appropriate brief, intermediate, and long-term counseling approaches to clients and communities dealing with crisis events, emergencies, and disasters.

### **PSY 650A School Counseling Practicum I (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 100 hours of supervised practice to be scheduled over a three month period. Students also participate in an academic seminar at the University. This three-month seminar may meet in the late afternoon outside of regular class hours Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

### **PSY 650B School Counseling Practicum II (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 100 hours of supervised practice to be scheduled over a three month period. Students also participate in an academic seminar at the University. This three-month seminar may meet in the late afternoon outside of regular class hours Students must maintain a grade of satisfactory throughout the internship series. Grading is by S or U only. Course is eligible for an "IP" grade.

### **PSY 650C School Counseling Practicum II (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 100 hours of supervised practice to be scheduled over a three month period. Students also participate in an academic seminar at the University. This three-month seminar may meet in the late afternoon outside of regular class hours Students must maintain a grade of satisfactory throughout the internship series. Grading is by S or U only. Course is eligible for an "IP" grade.

### **PSY 651A Counseling Practicum I (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Part one of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. On-site psychotherapy and supervision hours may

be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

### **PSY 651B Counseling Practicum II (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Part two of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

### **PSY 651C Counseling Practicum III (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Part three of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

### **PSY 651D Counseling Practicum IV (3 quarter units)**

*Prerequisites: Regional Lead Faculty Approval*

Part four of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research.

On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

#### **PSY 653 Research: Paradigms & Critique**

An overview of how to read and critically analyze psychological research. Discusses both modern and post-modern paradigms. Techniques of behavioral writing will also be discussed including process-notes, treatment goals and objectives, and other forms of clinical writing

#### **PSY 654 Career & Lifestyle Development**

Overview of career and lifespan development theories and skills, including how personal growth and life stages impacts individuals and society. Emphasis is on understanding career and job choices and personal strategies for career decision-making. Students become acquainted with print and electronic resources, counseling techniques, and assessment instruments.

#### **PSY 655 Psychopharmacology**

An examination of the biological basis of major psychoactive drugs used in the treatment of psychological and behavioral disorders. Special consideration is given to the integration of drugs and psychological therapies, the identification of drug interactions, and empirical evidence regarding the effectiveness of psychotropic drug therapies.

#### **PSY 678 Clinical Biopsychology**

This course explores the biological basis of human behavior as it pertains to professional counselors. An emphasis is placed on drugs used in the treatment of psychological disorders. Functional neuroanatomy and experience-dependent brain plasticity are explored.

#### **PSY 679 Psychology of Trauma**

This course is an examination of trauma with a focus on the sources of trauma and the distinctions between them. Relational violence is studied as a specific example of trauma. An emphasis is placed on empirically-based assessment and intervention of the different trauma-related disorders. Crisis counseling and multi-disciplinary treatment is also covered.

#### **PSY 680A Counseling Practicum I**

*Prerequisites: PSY 611B*

First of a two-course field practicum where students work as MFT or LPCC trainees. Students participate in an academic seminar for six months at the university. Students must complete a minimum of 125 hours of face-to-face work with clients at a clinical site. This class will meet outside of regular class hours.

#### **PSY 680B Counseling Prac II for MFTs**

*Prerequisites: PSY 680A*

Second of a two-course field practicum where students work as MFT trainees. Students participate in a four-month academic seminar at the university. Students must complete a minimum of 100 hours of face-to-face work with clients in a community agency. This course will meet outside of regular class hours.

#### **PSY 680C Counseling Prac II for LPCCs**

*Prerequisites: PSY 680A*

Second of a two-course field practicum where students work as LPCC trainees. Students participate in a six-month academic seminar at the university. Students must complete a minimum of 155 hours of face-to-face work with clients in a community agency. This course will meet outside of regular class hours.

#### **PSY 690 Guided Study (variable units)**

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### **RTT - Radiation Therapy**

#### **RTT 200 Introduction to Radiation Ther**

Foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices and policies of the educational program, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist.

#### **RTT 201 Introduction to Radiation Ther (2.25 quarter units)**

Foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices and policies of the educational program, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist.

#### **RTT 300 Medical Imaging**

*Prerequisites: RTT 200 or RTT 201. Acceptance into the Radiation Therapy Program.*

Designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology. General radiography, computerized tomography, sonography and nuclear medicine imaging modalities and equipment will be emphasized. An overview of radiation protection will be provided.

#### **RTT 305 Patient Care I (3 quarter units)**

*Prerequisites: BIO 201, and BIO 202, and BIO 203, and RTT 300*

*Corequisites: RTT 320*

Foundation in terminology, concepts and competencies in assessment and evaluation of the patient for service delivery. Examination of the psychological and physical needs and factors affecting treatment outcomes. Routine and emergency care procedures will be discussed.

#### **RTT 306 Patient Care II**

*Prerequisites: RTT 305*

Focuses on assessment, evaluation and treatment plans for treatment related side effects. Issues related to death and dying and practitioner self-care will be discussed. Course also includes an exploration of local, state and national cancer care resources.

#### **RTT 310 Sectional/Topographic Anatomy**

*Prerequisites: BIO 201, and BIO 202*

Identification of anatomical structures on a variety of medical imaging formats. Basic anatomical relationships will be compared and located using topographical and cross-sectional images.

#### **RTT 315 Clinical Concepts I**

*Prerequisites: RTT 305, and RTT 306*

Overview of cancer and the specialty of radiation therapy. The historic and current aspects of cancer treatment along with basic principles and practice of treatment and simulation will be emphasized.

#### **RTT 316 Clinical Concepts II (2.25 quarter units)**

*Prerequisites: RTT 315, and RTT 480 and*

*Corequisites: RTT 415*

Current principle and practice of treatment for cancers of the skin, brain, head and neck, thorax and gastrointestinal tract are emphasized.

#### **RTT 317 Clinical Concepts III (2.25 quarter units)**

*Prerequisites: RTT 316*

*Corequisites: RTT 416*

Current principle and practice of treatment for cancers of the genitourinary, lymphoreticular, musculoskeletal, integumentary, hematopoietic, endocrine systems and pediatric cancers are emphasized.

#### **RTT 320 Pro Ethics and Legal Issues (1.5 quarter units)**

*Prerequisites: RTT 300*

*Corequisites: RTT 305*

Designed to provide sequential development, application, analysis, integration and evaluation of ethical and legal concepts and theories as they relate to radiation therapy practice.

#### **RTT 410 Clinical Radiation Physics I**

*Prerequisites: MTH 215, PHS 171, and RTT 300*

Focus in on the characteristics and interactions of electromagnetic and particulate radiation. X-ray production, equipment, measurement and quality of radiation produced and radiation safety.

#### **RTT 411 Clinical Radiation Physics II**

*Prerequisites: RTT 410*

A clinical focus of radiation therapy physics that examines factors related to absorbed dose, calculation of dose from all sources of radiation, principles of treatment planning and an overview of advanced technologies.

#### **RTT 415 Clinical Oncology I (2.25 quarter units)**

*Prerequisites: RTT 305, RTT 306, RTT 310, and RTT 480*

*Corequisites: RTT 316*

A focus on cancer and current treatment modalities with emphasis on radiation therapy. Designed to examine and evaluate the management of neoplastic disease. Cancers of the skin, brain, head and neck, thorax, and gastrointestinal tract are emphasized. The epidemiology, etiology, natural history, diagnosis, treatment strategies, sequelae and prognosis are discussed.

#### **RTT 416 Clinical Oncology II (2.25 quarter units)**

*Prerequisites: RTT 415*

Further exploration of cancer and current treatment modalities with emphasis on radiation therapy. Cancers of the genitourinary, lymphoreticular, musculoskeletal, integumentary, hematopoietic and endocrine systems. The epidemiology, etiology, natural history, diagnosis, treatment strategies, sequelae and prognosis are discussed.

**RTT 420 Radiation Biology** (3 quarter units)

*Prerequisites:* RTT 410, RTT 411, RTT 415, RTT 416, and RTT 481

*Corequisites:* RTT 460

Principles and concepts to include radiation effects on cellular, organ, system and levels within the entire body. Emphasis of the theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship to clinical practice of radiation therapy.

**RTT 440 Research in Radiation Therapy** (2.25 quarter units)

*Prerequisites:* BST 322, RTT 315, RTT 316, RTT 317, RTT 410, RTT 411, RTT 415, and RTT 416

*Corequisites:* RTT 450

This course will address reading and conducting research in radiation therapy. Research approaches and procedures will be explored. Examples of various research methods and techniques will be discussed.

**RTT 450 Quality Management** (2.25 quarter units)

*Prerequisites:* RTT 410, and RTT 411

*Corequisites:* RTT 440

Content is designed to focus on the components of quality improvement programs in radiation oncology. Includes quality control and assurance checks for clinical aspects of patient care, medical records, treatment delivery and localization and treatment planning equipment. Legal and regulatory implications for maintaining appropriate quality care will be covered.

**RTT 455 Medical Dosimetry**

*Prerequisites:* RTT 315, RTT 316, RTT 317, RTT 410, and RTT 411

Content is designed to examine factors that influence and govern clinical planning of patient treatment. This encompasses isodose distributions, influence of beam modification, radiobiologic considerations, dosimetric calculations and clinical application of radiation. Electromagnetic and particulate beams as well as advanced and emerging technologies are covered.

**RTT 460 Operational Issues** (1.5 quarter units)

*Prerequisites:* RTT 316, and RTT 416

*Corequisites:* RTT 420

Management, assessment, quality improvement and evaluation techniques will be emphasized. Human resource concepts and regulations impacting the profession will be examined. Accreditation agencies and regulations, billing and reimbursement issues pertinent to the radiation therapy department will also be covered.

**RTT 480 Internship I**

*Prerequisites:* RTT 300, RTT 305, RTT 306, RTT 310, and RTT 320

Content is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Objectives and competencies in this course focus on patient – centered care, team work principles, introduction to and safety procedures for treatment and simulation equipment, and lower level treatment procedures. Requires 136 hours/quarter unit and 2 hours of classroom meeting/week. Grading is by S or U only.

**RTT 481 Internship II**

*Prerequisites:* RTT 480

Continuation of clinical internship practice. This course focuses on specific principles and techniques utilized for assigned cancer treatments. Students will demonstrate clinical competencies in the application of specific radiation therapy techniques. Requires 136 hours/quarter unit and 2 hours of classroom meeting/week. Grading is by S or U only.

**RTT 482 Internship III** (6 quarter units)

*Prerequisites:* RTT 481

Continuation of clinical internship practice. This course focuses on advanced principles and techniques utilized for specific cancer treatments. Students will demonstrate competence in the deliver and simulation of specific radiation therapy techniques and medical dosimetry. Requires 101 hours/quarter unit and 2 hours of classroom meeting/week. Grading is by S or U only.

**RTT 490 Advanced Capstone**

*Prerequisites:* Completion of major requirements.

A capstone course that examines historical and current issues within the profession as a radiologic professional. Preparation for entry into the profession and completion of capstone project will be accomplished. Professional roles, responsibilities and development will be emphasized.

## SCD - Social Transformations and Community Development

**SCD 600 Global Development**

This course explores the synchronic and diachronic context for understanding human social processes in colonialization, globalization, and the current world order. Colonial and postcolonial issues such as inequality, resource competition, ethnic and national conflict, migration, and the transition from traditional subsistence-based communities to market-driven consumerism are illustrated.

**SCD 610 Human Environments**

Social transformation and community development occurs within an ecological context. Development requires a holistic approach to the community, including natural resources, population dynamics, nutrition, disease, and quality of life. Social influences may include migration, urbanization, and technology. This course explores the relationships among natural environments, adaptive responses, and human societies.

**SCD 630 Culture and Change**

Methods for assessing cultural competency and comparing their own cultural values with those of various national and ethnic groups. Simulations will be used to illustrate the influence of stakeholder values in community development projects. Discussions focus on appropriateness and compatibility of outside development models and approaches to traditional communities.

**SCD 680 Planning and Evaluation**

Methods and processes for planning and managing development projects are discussed. Students develop a project plan, including effective use of resource

es, staff, schedules, development goals. Relationships with funding sources and strategies for creating self-sufficiency in the community are analyzed. Students apply models and processes for evaluating social transformation and community development.

**SCD 690 Strategies for Consulting**

Focus on perspectives and skills for advising and providing assistance. Models for change consulting, including appropriate ways to provide assistance in change and development initiatives. Simulations of community development situations are used to analyze change and development issues and problems. Needs assessment, resistance to change, conflict, and effective communication.

**SCD 699 Integrative Seminar**

*Prerequisites:* completion of two SCD courses

Content of previous courses integrated into a seminar format in order to promote dialogue and critical analysis of community issues. Appropriate topics and issues related to social transformation and community development analyzed. Students discuss how they will apply knowledge and skills learned in the program in their future professional experiences. Students will create dialogue, identify and frame complex issues and apply critical thinking to examples. Grading is H, S, or U only.

## SCI - Science

**SCI 300 Geography**

Integration of human cultural and physical geography, and the connections among the physical, biological and human realms. Examination of the relationships between the surface features of the earth, climate, ecosystems and human cultures (e.g., politics, languages, economics). Includes students' interactions with the world in which they live.

**SCI 303 GIS: Geographic Info Systems**

Interdisciplinary features in Geographic Information Systems. Aspects include geography, cartography, and computer science for scientific, business, and environmental applications. This will include teaching the student how to input spatial data into the computer, organize the data and perform basic spatial operations.

**SCI 400 History of Science**

*Prerequisites:* One 4.5 quarter unit science course from the natural sciences.

A study of the history of science throughout all human cultures. Emphasizes the mutual interaction between science and society, especially in modern times.

**SCI 490 Guided Study** (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

## SCR - Screenwriting

**SCR 650 Script Reading and Coverage**

This seminar focuses on screenplay analysis as an essential tool of the film and television industry. The core components of screenplays are explored includ-



ing the three act structure, characterization, dialog, tone, theme and voice. Students learn to write “coverage” including synopses and producer-appropriate commentary.

#### **SCR 665 Introduction to TV Writing**

This one-month seminar focuses on making students conversant in elements of series idea creation as well as offering a general overview of the history of television, how the TV business works and the differences between one-hour drama and sit-com writing.

#### **SCR 667 Marketing for Film & TV**

Overview of marketing in the entertainment industry, including analysis of studio blockbusters, independent films, network and syndicated Television, Internet, Transmedia and documentaries.

#### **SCR 668 Introduction To Transmedia**

This one-month seminar focuses on the current state of transmedia, its history, IP creation and pitching as well as exploring the components of transmedia-friendly properties.

#### **SCR 670 Dev-Prod Writing**

*Prerequisites: MDC 681, MDC 681P*

Covers the rewrite and notes stage of script development including receiving and interpreting notes, how creative executives and producers work with writers, and what happens once a project is “greenlit” and enters the production writing phase.

#### **SCR 670P Development/Production Practic (2.25 quarter units)**

*Prerequisites: MDC 681, SCR 670, and MDC 681P*  
*Corequisites: SCR 675*

This onsite “studio practicum” taken concurrently with SCR675 covers the various stages of project development including pitching projects, how creative executives work with writers, and what happens once a project is “greenlit” and enters the production/writing phase. Students learn firsthand from professionals in the film, television and/or transmedia business.

#### **SCR 671 Character and Dialog**

This seminar focuses on developing realistic characters and writing credible dialog for entertainment projects such as movies, TV series or any filmed media in which fictional characters exist.

#### **SCR 675 The Business of Screenwriting**

*Prerequisites: MDC 681, MDC 681P, SCR 670*

*Corequisites: SCR 670P*

This seminar explores the business side of film, TV and/or Transmedia writing and provides an in person experience. Professionals from the entertainment business such as screen and television writers, IP developers, development executives, producers, marketing strategists, agents and managers, studios, guilds and other entities integral to the entertainment industry deconstruct how they choose projects and engage in the business of Hollywood.

#### **SCR 682 Adv Screenwriting Workshop**

*Prerequisites: MDC 681, MDC 681P*

Building on core screenwriting courses, this advanced workshop focuses on creating an outline that employs more sophisticated structural and character elements. Students receive critical review of their

outline and in a consultation with the instructor will create an action plan for writing the screenplay.

#### **SCR 682P Adv Screenwriting Practicum (2.25**

**quarter units)**

*Prerequisites: MDC 681, MDC 681P, SCR 682*

Building on SCR682 Screenwriting workshop, this advanced studio practicum focuses on writing a feature length screenplay and, in consultation with the instructor, creating an action plan for future revision.

#### **SCR 683 Adaptation Workshop**

*Prerequisites: MDC 681, MDC 681P*

Building on core screenwriting courses, this advanced workshop focuses on creating an outline for a feature-length screenplay based upon source material from another medium such as short stories, news articles and other sources. Students receive critical review of their outline and in a consultation with the instructor will create an action plan for writing the screenplay.

#### **SCR 683P Adaptation Practicum (2.25 quarter units)**

*Prerequisites: MDC 681, MDC 681P, SCR 683*

Building on core screenwriting courses, this advanced studio practicum focuses on writing a feature length screenplay based upon the outline created in SCR683 and, in consultation with the instructor, will create an action plan for future revision.

#### **SCR 684 TV Pilot/Series Writing Workshk**

*Prerequisites: SCR 665*

This advanced workshop focuses on creating an outline for a television pilot and series based upon source material from another medium or an original idea. Students receive critical review of their outline and in a consultation with the instructor will create an action plan for writing the TV pilot/series.

#### **SCR 684P TV Writing Practicum (2.25 quarter units)**

*Prerequisites: SCR 665, SCR 684*

This advanced studio practicum focuses on writing a teleplay for a series pilot based upon the outline created in SCR684 and, in consultation with the instructor, planning for future revision and series bible.

#### **SCR 685 Transmedia Writing Workshop**

*Prerequisites: SCR 668*

This advanced workshop focuses on creating a transmedia project based upon source material from another medium or an original idea (IP). Students receive critical review of their outline and in a consultation with the instructor will create an action plan for the transmedia project.

#### **SCR 685P Transmedia Writing Practicum (2.25 quarter units)**

*Prerequisites: SCR 685, SCR 668*

This advanced studio practicum focuses on writing a transmedia project based upon the outline/prospectus created in SCR684 and, in consultation with the instructor, create an action plan for future revision.

#### **SCR 689 Advanced Rewriting**

*Prerequisites: SCR 675*

This seminar enables students to revise creative work prior to choosing projects for thesis. Course

is customized for film, TV and Transmedia projects based upon student area of focus.

#### **SCR 690 Screenwriting Thesis**

*Prerequisites: All other program courses.*

MFA candidates work independently with a thesis advisor and/or committee to develop the required components for Thesis. Thesis candidates have up to one year to develop a thesis portfolio that includes two full-length, polished original or adapted screenplays, an aesthetic statement discussing his/her evolution as an artist and a marketing plan for introducing their work to the entertainment industry. Grading is S, U only. Course is eligible for an “In Progress” (IP) grade after two months. Course may be repeated once.

#### **SCR 691 Thesis Qualification & Review**

*Prerequisites: SCR 690*

Candidate submits a thesis portfolio consisting of two polished, industry-ready original or adapted screenplays, an aesthetic statement discussing his/her evolution as an artist and a marketing plan and pitch. Course is eligible for an “In Progress” (IP) grade after two months. Course may be repeated once. The thesis review committee determines if the thesis meets the qualifications for the Master of Fine Arts. Grading is H, S, or U only. Thesis Qualification Review is the last phase of the thesis sequence completed in SCR690. The minimum requirements for Qualification Review are two professional level screenplays that tell complete, well-paced and structured story with complex and compelling characterizations.

#### **SCR 692 Graduate Internship**

*Prerequisites: SCR 675 For MFA in Professional Screenwriting students an internship can only be taken after onsite residency is completed., SCR 670P For MFA in Professional Screenwriting students an internship can only be taken after onsite residency is completed. or Recommended Preparation: MFA Students from other disciplines may be required to fulfill specific prerequisites prior to taking an internship. TBD by lead faculty for program.*

Combines work experience with college instruction. Educators and employers in the film, TV and transmedia industries cooperate to give students practical experience in the entertainment industry and to make vital contacts that may help with employment opportunities in the future.

#### **SCR 693 Guided Study**

*Recommended Preparation: Students must demonstrate advanced skills and talent in order to be considered for participation.*

Guided study is typically (although not exclusively) an extra-curricular course that deals with material not required in the MFA in Professional Screenwriting Program. Such courses may include (but not be limited to) Advanced Screenwriting Workshops by invitation only held in conjunction with film festivals and/or screenwriting conferences.

#### **SCR 693P Guided Study Practicum (2.25 quarter units)**

*Prerequisites: SCR 670P, SCR 675*

Guided study is typically (although not exclusively) an extra-curricular course that deals with material not required in the MFA in Professional Screenwriting

ing Program. Such courses may include (but not be limited to) Advanced Screenwriting Workshops by invitation only held in conjunction with film festivals and/or screenwriting conferences.

## SEM - Sustainability Management

### SEM 604 Life Cycle and Risk Assessment

Hands-on experience on how to conduct life cycle and risk assessments. Practical application of these methodologies into products and processes. Environmental management systems such as ISO 9000 / 14001 will be discussed.

### SEM 605 Energy Management

Overview of sustainable energy management practices in order to increase energy efficiency, and decrease the release of energy-related pollutants into the environment. Coverage materials related to not only energy from conventional sources but also renewable. Special focus on energy conservation will be discussed. Various techniques to lower energy use will be discussed.

### SEM 606 Environmental Management

Comprehensive overview of applicable air pollution, water pollution, drinking water and toxics environmental laws and regulations in the U.S. In addition, various pollution sources, and their impact are presented. Specific strategies to develop and implement environmental management practices are presented.

### SEM 607 Watershed Management

Overview of the watershed management and planning process. Relate interdisciplinary topics such as the use of public policies, regulations, and management tools to effectively manage water resources for a sustainable future. Specific case study examples will be used to illustrate the concepts.

### SEM 608 Sustainable Buildings

Examination of environmental, economic and social benefits of green building. Specifically addresses the various methodologies that can be integrated into the built environment for energy savings while maintaining the highest indoor environmental quality. Specific strategies to secure LEED certification will be presented.

### SEM 610A Project I

*Prerequisites: SUS 601, SUS 602, SUS 603, SEM 604, SUS 604, SEM 605, SEM 606, SEM 607, SEM 608*

Focus on the application of sustainability methods learned through this program. The students are to select research topics and conduct research and write a detailed report. During this part of this course, the students define the problem/hypothesis, and gather data from literature searches and/or client organization, if applicable. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

### SEM 610B Project II

*Prerequisites: SEM 610A*

This continuation course may focus on methodology, data analysis, results, modeling/simulation, conclusions and recommendations related to the project selected. Students are required to present their research

in both written and oral form to students and faculty and if applicable to client organization. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

## SEN - Software Engineering

### SEN 601 Software Eng Fundamentals

A survey of principles of modern software engineering; requirements analysis, development and maintenance of a software product and its supporting documents, software lifecycle and various models of development. Course also introduces students to tools and processes needed to develop a software product, system or application, in a systematic manner.

### SEN 602 Software Architecture Principl

*Prerequisites: SEN 601 or approval of lead faculty.* Software architecture and its components and relationships, functionality, specifications, properties, interfaces, and data models are examined during this course. Topics discussed include net-centric computing, cloud computing, distributed processes, open source programs and service-oriented architecture.

### SEN 632 Software Architecture Appl.

An in-depth study of software architecture. Defines and discusses object-oriented design, modeling and programming at an advanced level using UML. An advanced study of a standard implementation of a distributed, object-oriented middleware technology (e.g., J2EE, Microsoft.NET, etc.). Students design and implement an architecture using modern technologies such as J2EE, .NET.

### SEN 635 Software Testing

An overview of software testing strategies and software metrics. Develops topics on structured walk-through, unit, white and black box, integration, system, acceptance and regression testing. Formalizes process for requirements verification and software functional verification and validation. Introduces, examines and surveys advanced concepts of software engineering metrics and models from an application perspective.

### SEN 662 Engineering Software Quality

Emphasizes quality engineering approaches for software project management, planning, estimating, design, development and distribution. Analysis of Capability Maturity Models, ISO 9001 and IEEE 12207 Standards is also emphasized. Based on their operational concepts document, students develop a well-defined Software Quality Assurance plan.

## SMG - Sports Management

### SMG 432 Leisure Services Management

Examination of the organization and administration of the leisure service field, ranging from not-for-profit entities such as parks and libraries to businesses such as hotels, restaurants, amusement parks and country clubs. Students will analyze operating problems and propose solutions to enhance their knowledge and outlook on leisure facilities and operational management.

## SOC - Sociology

### SOC 100 Principles of Sociology

*Prerequisites: ENG 100, and ENG 101*

Critical introduction to basic sociology concepts. Examination of major theoretical perspectives and research methods. Topics include: economic stratification, race, gender, family, deviance, complex organizations.

### SOC 260 Cultural Anthropology

*Prerequisites: ENG 100, and ENG 101*

An introduction to the principles and processes of anthropology and culture. This course offers a mix of theoretical approaches that include evolutionism, historical particularism, diffusionism, functionalism and French structuralism, as well as methods of fieldwork and ethnography. Students explore the impact of culture on human behavior, the interrelationships among different parts of a culture and the adaptive quality of cultural systems.

### SOC 310 Cultural Workplace Dynamics

*Prerequisites: ENG 100, and ENG 101*

This course defines the relationship of the workplace to the community and examines the historical development and relevance of social and economic matters crucial to a healthy perspective for employers and employees.

### SOC 325 Popular Culture

*Prerequisites: ENG 100, and ENG 101*

Introduces students to the concept and origins of popular culture and to social theories used by academics to analyze its impact on self and culture in modern consumer societies. Topics include mass media, TV, the internet, video games, sports, leisure, fashion, celebrity, shopping, advertising, and youth culture.

### SOC 327 Arab Culture

*Prerequisites: ENG 100, and ENG 101*

This course will introduce the students to the major aspects of Arab culture, civilization, and history from pre-Islamic times to the present. Social composition of the Arab world and the issue of national identity will be stressed. The transformation of Arabic society will be considered in this course.

### SOC 328 Intercultural Thinking

*Prerequisites: ENG 100, and ENG 101*

An expansive overview of world consciousness, drawing upon the significant, creative contributions of men and women from varied cultures and different fields of learning. Emphasizes the approach of comparative synthesis. Studies the world's outstanding creative thinkers and the interconnectedness of their works.

### SOC 331 Sociology of Health & Illness

*Prerequisites: ENG 100, ENG 101, and SOC 100*

Employs "the sociological imagination" to explore issues of health, illness and medical practice. It examines the social contexts of physical and mental health, illness and medical care and gives prominence to the debates and contrasting perspectives which characterize the field of medical sociology. Exploring the social, environmental, and occupational factors in health and disease, the development of health professions and the health care workforce, doctor patient relationships, the structure and processes of health care organizations, health care and social change, it is designed

for students interested in the organization and analysis of health care in the U.S.

### **SOC 336 American Film and Society**

*Prerequisites: ENG 100, and ENG 101*

A critical examination of the complex relationship between film and society and the processes by which film both influences and is influenced by society. Emphasizes the importance of locating the meaning of film texts within social and historical perspective and identifies how the film industry influences the presentation of different groups of people and issues in society. Explores the interrelationship between film and technology, the impact of narrative and the institution of Hollywood on the sociological imagination and the nature of representation, particularly as it applies to race, class and gender.

### **SOC 338 Chinese Film and Television**

*Prerequisites: ENG 100, and ENG 101*

This course will briefly introduce students to the history of film in China prior to 1949, with a focus on the Shanghai scene, while the bulk of the course will concentrate on the development of film in the People's Republic of China since that time. Attention also will be given to influences of pre-1949 film and Hong Kong and Taiwan film and TV on the development of post-1976 cinematography and television in China, detailing the move away from political propaganda-based film and TV and the increasing importance of market-driven (both domestic and international) entertainment values.

### **SOC 344 Marriage, Sex and the Family**

*Prerequisites: ENG 100, and ENG 101*

Examines the institutions of marriage and family structures and their historical development. Topics include kinship, changing gender roles, changing family forms, divorce, domestic violence, economic structure.

### **SOC 350 Cultural Diversity**

*Prerequisites: ENG 100, and ENG 101*

Examines race, gender, ethnicity and class in 20th century American society. Introduces students to methods for studying the changing nature of our society and explores ways in which our increasingly urbanized and technological culture affects all aspects of professional and unskilled work. May involve work in oral history.

### **SOC 352 Modern Chinese Culture**

*Prerequisites: ENG 100, and ENG 101*

This course will introduce the students to the major aspects of modern Chinese culture since 1949. The changing social composition and the development of a modern popular culture since 1976 will be closely examined, as will the transformation of Chinese society from Maoist conformity to the cultural pluralism of today, as well as the new social problems these changes have brought.

### **SOC 365 Classical Social Theory**

*Prerequisites: SOC 100, and ILR 260*

This course examines the foundational theories that have engaged major social theorists. It analyzes the cultural, social, economic, political, intellectual, and biographical contexts within which they developed; and it appraises the extent to which they continue to inform sociological research and thinking.

### **SOC 375 Contemporary Social Theory**

*Prerequisites: ENG 100, ENG 101, and SOC 100*

Examines the major social theories that have engaged social theorists from the mid-twentieth century onward. The course also investigates the historical, sociological, intellectual, and biographical contexts within which contemporary social theories have developed and the extent to which they inform current sociological research and thinking.

### **SOC 385 Methods of Social Inquiry**

*Prerequisites: ENG 100, ENG 101, and SOC 100*

Research design and methods including survey, network, experiment, qualitative, quantitative, and collection, organization and interpretation of research data.

### **SOC 430 Culture, Technology & Society**

*Prerequisites: ENG 100, and ENG 101*

Examines the social, cultural and historical development of technology from the Industrial Revolution to today, and its consequences.

### **SOC 443 Sociology of Deviance**

*Prerequisites: ENG 100, ENG 101, and SOC 100*

Employs a critical sociological approach to deviance and social control in contemporary society. The topics to be considered include: the origins and functions of deviance in society; the institutional production and categorization of deviance; the impact of deviance on personal and social identity; deviant careers; and deviance and social change. We will consider several major theoretical perspectives on deviance within sociology, we will make use of current data on crime and current research in sociological and criminological journals and web sites, and we will examine portrayals of deviance and social control in literature, film and popular culture.

### **SOC 445 Contemporary Social Problems**

*Prerequisites: ENG 100, and ENG 101*

Uses the functionalist, conflict and interactionist perspectives, this course explains how human conditions come to be perceived as social problems, and how to evaluate their proposed solutions.

### **SOC 449 Sociology of Law**

*Prerequisites: ENG 100, ENG 101, and SOC 100*

Explores the social, political, and economic foundations of law, the study of punishment and criminality, formal systems of social control and their legitimacy in law, and the relationship of political agendas to victimization, human rights, and legalized oppression. Emphasis will be on explanations of social order, legal definitions of appropriate and inappropriate behaviors, the history of law, the political uses and structure of the law, criminal justice system components, and critical sociopolitical analyses of law. The impact of the legal system on society and the individual will also be explored. Assignments and readings are designed to connect historical understandings with present day knowledge about law.

### **SOC 455 Organizational Sociology**

*Prerequisites: ENG 100, ENG 101, and SOC 100*

A course about organizations and their behavior. The study of social structure is central to sociology and the study of formal organizations is fundamental to the study of contemporary society. Much of our educational and working lives are spent within and passing between organizations. This course foregrounds

the key issues in the sociology of organizations. The focus of the course is the major theoretical approaches and debates in organizational theory, an interdisciplinary field that is primarily grounded in sociology but that also has roots and practitioners in economics, political science, and management studies

### **SOC 460 The Individual and Society**

*Prerequisites: ENG 100, ENG 101, and SOC 100*

About social interaction: the behavior and cognitive processes that occur in groups. Students consider the individual as social actor and the development of self-image or identity and the socialization process. Students analyze group interactions including conformity, productivity, and leadership. The course examines links between the individual and society.

### **SOC 490 Guided Study** (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### **SOC 499 Sociology Senior Project**

*Prerequisites: SOC 100, and ENG 240 or equivalent*

Must be taken at the end of the program after completion of all requirements for the major and completion of six or more electives. Students produce an original sociological paper or project exemplified by extensive research, critical thought and intellectual engagement. Grading is H, S, or U only.

### **SOC 500 Cultural Pluralism in the USA**

*Prerequisites: ENG 100, and ENG 101*

Examines the origins of cultural pluralism in the USA and the valuing of diversity as a socio-cultural imperative. Explores voluntary and involuntary immigration, internal colonization, the implications of demographics, and the history of discrimination in the USA, based on race, ethnicity, religion, and gender.

### **SOC 540 Power and Social Change**

*Prerequisites: ENG 100, and ENG 101*

A critical examination of theories of power, including the relationship of power to culture, social class, the economic order, government, ideology, poverty, race, sex and other topics. Studies community, national and international power structures and institutional leaderships.

### **SOC 604 Culture and Socialization**

An in-depth examination of the concepts of culture and socialization, this course analyzes the socialization process as the key means through which culture is reproduced. Through a critical engagement with competing theories of socialization, students undertake advanced research projects, oral presentations and written assignments. Lecture and discussion topics include issues of ethnic identity and cultural diversity, socio-economic, gender and racial stratification, media representations, dress, language and religion and schooling and the reproduction of inequality. Issues are explored from a cross-cultural perspective.

## **SPD - Special Education**

### **SPD 404 Psychological Foundations**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

An examination of the learning processes in educational settings addressing human motivation; development of children and youth in affective, cognitive, social, and personal domains; individual differences; and implications of theory and research for teaching and learning. (NV TL: BI, II)

#### **SPD 408 Introduction to Special Ed**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

A survey course of history and definitions of special education and characteristics of student with various mild/moderate disabilities. Examines cultural and linguistic factors and policies of inclusion. (NV TL: B I, III)

#### **SPD 414 Classroom & Behavior Mgt**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

This course examines the principles of classroom management and student assessment. Best practices for classroom management, positive behavior support and the use of informal and formal assessments to plan for instruction are explored. (NV TL: B VII)

#### **SPD 416 Collab, Law, & Transitions**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

This course provides an overview of the professional, legal, and ethical practices for educators with an emphasis on law. Collaborative practices with peers, other service providers, community members and family members are examined. Partnerships and planning for transition to the next learning environment are explored. (NV TL: B VII, IX)

#### **SPD 422 Assessment of Diverse Learners**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

This course examines the use of formal and diagnostic assessments to determine strengths and weaknesses of students. Tests commonly used with students with Mild/moderate disabilities are administered and interpreted. Candidates will learn about selection, administration, and analysis of assessment instruments and to use the data to write a formal report, an IEP with goals and objectives, and to help prepare lesson plans. (NV TL: B V)

#### **SPD 428 Reading and Language Arts M/M**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

The course provides research-based instruction to teach reading/language arts to students with disabilities. Candidates demonstrate their ability to deliver a program of systematic instruction in reading, writing, listening, and speaking aligned to the adopted curriculum. They administer a variety of reading/writing assessments to diagnose students' reading/language arts abilities. (NV TL: B, VIII, X)

#### **SPD 430 Preparing Teachers to Use Tech**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

This introductory course is designed to provide candidates the skills needed to integrate technology in teaching and learning as required in the INTASC Standards including assessment, monitoring of student progress, evaluation of media and technology and plan instruction to meet the needs of diverse

learners, colleagues and families. (NV TL: B VII, X)

#### **SPD 432 Instructional Strategies**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

This course provides candidates with knowledge in identifying students with mild/moderate disabilities and their needs for service delivery, placement, IEP development and instruction. Positive behavior support, learning strategies, study skills, instructional and behavioral support partnerships with parents and establishing positive environments are also covered. (NV TL: B IV, VIII, X)

#### **SPD 436 Math/Writing for M/M**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

This course provides an overview of the educational demands experienced by K-12 students with M/M disabilities in all settings. This course focuses on planning for instruction in two areas: written expression and mathematics. The course emphasizes learning strategies, study skills, and core vocabulary development as they relate to the IEP and accessing the general education curriculum. (NV TL: B VIII, X)

#### **SPD 438 Differentiation of Instruction**

*Prerequisites: TED 320, and Completion of General Education Requirements Section of the program.*

An in-depth look at students with mild to moderate disabilities served both in and out of the general education classroom with an emphasis on differentiating instruction for successful learning. (NV TL: B I, II)

#### **SPD 481A Student Teaching**

*Corequisites: SPD 487*

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 481B Student Teaching**

*Prerequisites: SPD 481A, SPD 487*

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 487 Student Teaching Seminar (2.25 quarter units)**

*Corequisites: SPD 481A*

The Professional Portfolio is developed, completed and approved by the instructor in order to successfully pass this course. The course is graded satisfactory (S) or unsatisfactory (U) only. Eligible for In Progress (IP) grading.

#### **SPD 604 Psychological Fdns of Educ.**

An examination of learning processes in educational settings will address human motivation; development of children and youth in the affective, cognitive, social, and personal domains; individual differences; and implications of theory and research for teaching and learning.

#### **SPD 608 Exceptionalities**

An examination of four major types of learners: students with disabilities, English learners, students with gifts and talents, and students at risk. Explores how these groups of learners can best be served in general education using effective instructional strategies, including accommodations, modifications, and differentiated instruction.

#### **SPD 614 Classroom and Behavior Mgmt**

This course is designed to assist candidates in developing a practical working knowledge of the basic principles of classroom and behavior management. Candidates will examine the impact of classroom rules, consequences, procedures, physical layout, instructional pacing, diversity, and other topics. Candidates will analyze antecedents to behavior, remediation strategies for misbehavior, and promotion of positive behavior. Best practices for classroom management and positive behavior support will be reviewed.

#### **SPD 616 Law, Collaboration & Transition**

A comprehensive overview of the professional, legal, and ethical practices for educators. The focus is on special education law and issues, but also incorporates legal issues related to education in general. The candidate will also examine collaborative practices with all practitioners including community members and family members.

#### **SPD 618 Law, Transition, & Collab**

This course offers a heightened awareness of working with other professionals and parents of special needs students. It is designed to insure that each candidate will recognize his/her role in the understanding and practice of the professional, legal, and ethical practices for instructing students with disabilities.

#### **SPD 622 Assessment**

This course emphasizes the use of formal and diagnostic assessments to determine strengths and weaknesses of students. Tests commonly used for children and youth with a variety of suspected disabilities are administered and interpreted. Candidates will learn about the selection, administration, and analysis of assessment instruments and to use the data to write a formal report, an IEP with goals and objectives, and to help prepare lesson plans.

#### **SPD 624 Transition/Community Resources**

An overview of transition across all age groups and disability categories. Includes dealing with families, involving students, developing transition curriculum, collaborating with stakeholders for transition planning, working with community agencies and developing strategies for success at all transition stages. Career education, preparation for employment and strategies for adult adjustment are emphasized.

#### **SPD 626 Effective Clsrn & Beh Mgmt**

Course content focuses on effective classroom and behavior management emphasizing practical working understanding of the principles of classroom behavior management, positive behavioral supports, functional behavior analysis, and positive behavior intervention plans. Basic principles of behavior management and reinforcement are delineated. Emphasis is placed on effective classroom management and functionally-derived positive behavioral strategies for use in educational settings.

### **SPD 628 Teaching Reading/Lang Arts**

The course provides substantive, research-based instruction to teach reading/language arts to students with disabilities. Candidates will demonstrate their ability to deliver a comprehensive program of systematic instruction in reading, writing, listening, and speaking aligned to the English/Language Arts Content Standards and the Reading/Language Arts Framework. They will exhibit the ability to administer a variety of reading/writing assessments to diagnose students' reading/language arts abilities

### **SPD 630 Tech for Teaching & Learning**

This introductory course is designed to provide special education candidates with the skills needed to integrate technology in teaching and learning as required in the INTASC Standards including assessment and monitoring of student progress, evaluation of media and technology, the use of technology to effectively plan instruction to meet the needs of diverse learners, colleagues, and families. Course content includes designing lesson plans for integration of technology in classrooms serving students with mild/moderate disabilities, respond to case study utilizing technology to assess, monitor progress, and provide targeted support for a student with special needs, a research paper on the selection of effective media and technology resources, a PowerPoint presentation on the legal, and ethical use of information and technology including social media and development of newsletter or video as a communication tool to engage learners, families and the global community.

### **SPD 632 Charac/Instr Stds w/ M/M Disab**

This course provides candidates with knowledge in identifying students with mild/moderate disabilities and their needs for service delivery, placement, IEP development and instruction. Positive behavior support, learning strategies, study skills, instructional and behavioral support partnerships with parents and establishing positive environments are also covered. Candidates will recognize how mild/moderate disabilities affect students in their ability to learn the California core curriculum.

### **SPD 634 Assess of Std w/ M/M Disab**

This course is designed to provide the candidate with knowledge and skills required for assessing children and youth with disabilities and special needs with mild/moderate disabilities using formal and informal assessment techniques. The course also provides knowledge and skills required for linking assessment findings to instructional planning, including development, implementation and communication of the Individualized Education Program.

### **SPD 636 Teaching Math/Writing for M/M**

This course provides an overview of the educational demands experienced by K-12 students with M/M disabilities in all settings. Candidates will develop skill in planning and evaluating curriculum, methods, techniques, strategies, materials and media for teaching students. This course focuses on planning for instruction in two areas: written expression and mathematics. The course emphasizes learning strategies, study skills, and core vocabulary development as they relate to the IEP and accessing the general education curriculum.

### **SPD 638 Content Differentiation**

An in-depth look at students with mild to moderate disabilities served both in and out of the general education classroom with an emphasis on differentiating instruction for successful learning.

### **SPD 642 Academic Instruction M/S**

This course covers identifying and teaching academic content for students with severe disabilities across the educational placement continuum, including instruction in the general curriculum, use of Universal Design principles, and a functional skills approach. The course presents methods for determining functional skills, curriculum selection, development and adaptation to approximate the general education curriculum using the California curriculum frameworks and State standards. Assessment in all areas of academic instruction is emphasized.

### **SPD 644 Life Skills & Transitions M/S**

Life Skills and Transitions for Learners with Moderate/Severe disabilities. This course is advanced methodology designed to ensure that candidates will be able to meet curriculum needs of their students with moderate/severe disabilities in the areas of teaching life skills, self-advocacy, and transition to post-secondary school needs. Issues regarding parent involvement, IEPs and ITPs, Community Living, recreation and leisure are included.

### **SPD 646 PBS, Comm & Social Skills M/S**

This course prepares candidates to meet the communication, behavior, and social skill needs of students with moderate/severe disabilities. Candidates conduct behavioral assessments and plan behavior interventions for the behavioral needs of these students. They learn strategies to meet the communicative needs of their students, including using AAC devices. Methods for improving social skills of these students in all settings are presented. Collaboration, assistive technology, and functional communication training are emphasized.

### **SPD 648 Medical & Asst Tech Issues M/S**

In this course candidates will demonstrate knowledge and ability to support the movement, mobility, sensory and specialized health care needs required for students to access school and the community to the fullest extent of their ability through utilizing appropriate techniques, procedures, materials, assistive technology, and adaptive equipment. Candidates will also demonstrate mandated considerations for assistive, augmentative, alternative, and sign language communication technology for students with moderate/severe disabilities and their application to facilitate communication, improved academic performance, and skill.

### **SPD 660 Clear Orientation (2.25 quarter units)**

*Prerequisites: Education Specialist Preliminary Credential*

Initiation of the Clear Authorization Program for M/M, M/S or DHH occurs in this Orientation and Planning Seminar. Candidates will develop an IIP with 2-4 competency objectives (application skills), in conjunction with their employer and National university. Competency objectives in their area of specialization may be completed via coursework or professional development. Required: completed first in the program.

### **SPD 661 Special Topics**

*Prerequisites: SPD 660*

Candidate explores a special topic of interest as identified in the candidate's Individual Induction Plan. Candidate can waive course by completion of 45 hours of non-university activities in a specialized area that supports students with special needs. A strong emphasis is placed on evidenced based instruction in one's specialized area.

### **SPD 662 Plan Mgt & Instruction**

*Prerequisites: SPD 660*

Designed for the candidate to gain specialized knowledge in classroom management and enhanced curriculum planning based on assessment driven Individual Education Plans and evidence based curriculum.

### **SPD 663 Student Environment**

*Prerequisites: SPD 660*

Designed to enhance and provide specialized knowledge for candidates to create a safe and productive learning environment. Topics such as working effectively with parents, collaboration with professionals, and laws, policies and trends governing students with special needs will be explored.

### **SPD 664 Capstone (2.25 quarter units)**

*Prerequisites: SPD 660 Plus all courses in the program. A "B" grade average is required to complete the program.*

Completion seminar for the Clear Education Specialist Induction Program for M/M, M/S or DHH. Candidates will complete the Signature Assignment (IIP Evidence File). The IIP Evidence File will consist of documentation of and reflection on each Competency Objective in the IIP and scored against a rubric. Required course and must be the last course in the program.

### **SPD 672 Intro to ECSE**

*Prerequisites: SPD 672 Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.*

This course surveys current knowledge of young children with disabilities within the context of development and learning, birth to five. It examines historical factors, legislation affecting service delivery, etiology, characteristics and needs of young children who are at-risk for or who have identified disabilities. From a cultural diversity perspective, the role of family-professional partnerships, educational strategies, and models of service delivery are explored. Field experience is required.

### **SPD 674 Collaborative Partners**

*ECSE Added-Authorization Candidates: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.*

*Autism Added-Authorization Candidates: Candidates completing the Add-on Authorization for Autism through CTC must hold a Special Education credential for this completed sequence to apply.*

*Moderate/Severe Authorization Candidates: Must take this course as the last course in the Moderate/Severe program of study.*

Examination of interpersonal and interactive techniques required of the special education teacher

when working with parents and families of young children and students with special needs and other professionals. This course addresses the sharing of knowledge and mutual efforts between professionals and parents to effectively serve youngsters with special needs. Problem solving, decision-making, and collaborative strategies for working with parents, professionals, and agencies when implementing services are explored. Field work is required.

#### **SPD 676 ECSE Assessment & Intervention**

*Prerequisites: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.*

This course is designed to provide knowledge of a wide range of ECSE assessment instruments, administration and the skills to analyze results across developmental domains. Candidates translate assessment information into functional goals and objectives (IFSP, IEP) to meet the individualized needs of young children with disabilities and their families, including synthesize of data from other professionals and adaptation of assessments. Assessment results are utilized to develop individualized teaching and learning strategies, adaptations/modifications, and inclusion strategies in a natural environment. Field Experience is required.

#### **SPD 678 ECSE Field Experience**

*Prerequisites: SPD 672, SPD 674, SPD 676*

This course must be taken as the final course in the ECSE program, candidates complete observations and teach children with disabilities through in-depth experiences (80 hrs total) with children are culturally diverse in in-home and preschool settings in small and whole groups. Candidates arrange ECSE field experiences and participate in reflective supervision with a site supervisor. At least 10 hours must be at a site where you do not work and the ECSE Exit Exam is taken in this course.

#### **SPD 681A Nevada Student Teaching M/M**

*Prerequisites: SPD 604, SPD 608, SPD 614, SPD 618, SPD 622, SPD 628, SPD 630, SPD 632, SPD 636, SPD 674, Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681 A, Student teaching candidates must have successfully completed all coursework in the licensure program (Corequisite, Core and Advanced Specialization Courses) with an overall GPA of 3.0 or better.*

The student teaching experience requires candidates to be placed in a special education program that serves student with Mild/Moderate disabilities for 9 weeks or 40 days of full-day supervised teaching. Candidates are supervised/supported by a classroom teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 681B Nevada Student Teaching M/M II**

*Prerequisites: SPD 681A, SPD 687A*

The student teaching experience requires candidates to be placed in a special education program that serves student with Mild/Moderate disabilities for 9 weeks or 40 days of full-day supervised teaching. Candidates are supervised/supported by a classroom teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 682A Student Teaching M/M**

*Corequisites: SPD 688A*

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 682B Student Teaching M/M**

*Corequisites: SPD 688B*

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 684A Student Teaching M/S**

*Corequisites: SPD 688A*

Six weeks or 30 days of full-day supervised teaching with Moderate/Severe special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified university supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 684B Student Teaching M/S**

*Corequisites: SPD 688B*

Six weeks or 30 days of full-day supervised teaching with Moderate/Severe special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified university supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

#### **SPD 687A Portfolio Clinical Seminar (2.25**

**quarter units)**

*Prerequisites: Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681A*

SPD 687A is taken concurrently with Student Teaching (SPD 681A) to support the development of the Clinical Practice Portfolio submitted the last week of SPD 681B. During SPD 687A, candidates will focus on 10 INTASC Standards create or revise artifacts reflecting their knowledge and skills in each of the standards. These artifacts and reflections will be uploaded into their Professional Portfolio within the eCompanion Course. The completed Portfolio must be approved by the instructor in order to successfully pass this course. Grading is Honors, Satisfactory, Unsatisfactory

#### **SPD 688A Clinical Practice Seminar (2.25 quarter units)**

*Corequisites: SPD 682A, or SPD 684A, or SPD 692, or SPD 694, DHH 682A, or DHH 692*

Focus on three CTC Teaching Domains. Create or revise artifacts reflecting knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

#### **SPD 688B Clinical Practice Seminar (2.25 quarter units)**

*Corequisites: SPD 682B, or SPD 684B, or SPD 692, or SPD 694, or DHH 682B, or DHH 692*

Focus on three of CTC Teaching Domains, and creating or revising artifacts reflecting their knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

#### **SPD 692A Internship M/M**

*Prerequisites: SPD 608, SPD 614, TED 621B,*

*Candidates must be admitted to the University Internship program*

The National University Special Education Internship for Mild/Moderate disabilities is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn fulltime salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 3 months while completing required coursework for authorization to teach students with mild/moderate disabilities. Does not grant graduate units towards graduate degree.

#### **SPD 692B Internship M/M**

*Prerequisites: SPD 692A*

The National University Special Education Internship for Mild/Moderate disabilities is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn fulltime salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 3 months while completing required coursework for authorization to teach students with mild/moderate disabilities. Does not grant graduate units towards graduate degree.

#### **SPD 694A Internship M/S**

*Prerequisites: SPD 608, SPD 616, TED 621B,*

*Candidates must be admitted to the University Internship program*

The National University Special Education Internship for Moderate/Severe disabilities is designed as an alternative route for the preparation of Preliminary Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn fulltime salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 3 months while completing required coursework for authorization to teach students with moderate/severe disabilities. Does not grant graduate units towards graduate degree.

#### **SPD 694B Internship M/S**

*Prerequisites: SPD 694A*

The National University Special Education Internship for Moderate/Severe disabilities is designed as an alternative route for the preparation of Preliminary Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn fulltime salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 3 months while completing re-

quired coursework for authorization to teach students with moderate/severe disabilities. Does not grant graduate units towards graduate degree.

### **SPD 695 Understanding Edu. Research**

This course is designed to provide the student with the basic knowledge and skills required to read, interpret and evaluate both quantitative and qualitative educational research in order to determine if research results have implications for program, curriculum or instructional decisions.

### **SPD 696 Capstone Project**

*Prerequisites: SPD 695*

Apply knowledge, skills, and dispositions to complete a culminating project. Candidates will identify a topic of interest in their classroom, school, or district; conduct a review of the literature on the topic of their choice; and design a process to gather information on the topic. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

## **SPN - Spanish**

### **SPN 100 Beginning Spanish I**

Introduction to Spanish and to the culture of its speakers. Facilitation of the application of the language in both oral and written modes. Activities include chat live discussions, links to cultural sites, and exposure to daily life situations through assignments corresponding to each unit.

### **SPN 101 Beginning Spanish II**

*Prerequisites: SPN 100*

Sequel to beginning Spanish I. Further application of the language in both oral and written modes. Activities include chat live discussions, links to cultural sites, and exposure to daily life situations through assignments corresponding to each unit.

### **SPN 200 Intermediate Spanish I**

*Prerequisites: SPN 101*

Intermediate Spanish and the culture of its speakers. Facilitation of the application of the language in both oral and written manners in a more advanced form. Activities include chat live discussions, links to cultural sites, and exposure to daily life situations through assignments corresponding to each unit.

### **SPN 201 Intermediate Spanish II**

*Prerequisites: SPN 200*

Sequel to the Intermediate Spanish I course. Continued practice in the oral-aural skills, with increasing importance placed on acquiring Spanish grammatical skills, while extending and enhancing vocabulary and insight into the Spanish-speaking world through a study of its culture.

### **SPN 300 Advanced Spanish I**

*Prerequisites: SPN 201*

Integration of speaking, listening, reading, and writing within a cultural context by immersion in the target language. Designed to give further insight into the Spanish-speaking world through a study of its culture, society, history, and politics.

### **SPN 301 Advanced Spanish II**

*Prerequisites: SPN 300*

A sequel to Advanced Spanish I. It continues to develop student skills in idiomatic and conversational forms of speech, and proficiency in moderately complex written structures. Studies and grammar review supplemented with readings, media and computer based materials.

### **SPN 310 Literary Readings in Spanish**

*Prerequisites: LIT 100, SPN 301*

Introduction to a variety of prominent 20th century Latin American literary texts in their original language. Readings will come from a variety of Spanish-speaking countries and historical movements. Discussions, collaborations, and writing assignments will be in English.

### **SPN 320 Advanced Spanish Conversation**

*Prerequisites: SPN 201 or 3 semesters of college level Spanish language.*

Focus on intensive oral practice obtained through the use of video programs, class discussions, and other interactive activities. Students will put into practice key elements of communication in standard spoken Spanish, with some focus on dialectal variations.

### **SPN 330 Intro Lat Am Cultures**

*Prerequisites: SPN 301*

The Spanish-speaking world is a rich tapestry of cultures and histories. The aim is to overview this heterogeneous reality through a survey of some of its significant cultural, historical, social, and political themes. Introduction to strategies of cultural analysis. discussions, collaborations, and writing assignments will be in Spanish.

### **SPN 340A Spanish for the Work Place**

This course provides English-speaking students the necessary tools for communication with Spanish speakers in the work place.

### **SPN 341 Cross-Cultural Communication**

An examination of the basic cultural differences generally encountered in the workplace. Especial emphasis is given to cross-cultural communication in the workplace.

### **SPN 350 Film and Culture**

*Prerequisites: SPN 301*

Films and documentaries from and about the Spanish-speaking world serve as the basis for lectures, discussions, and class projects. Diverse topics will be explored along with a range of cultural social issues. This course also introduces strategies of cultural analysis. Discussions, collaborations, and writing assignments will be in Spanish.

### **SPN 420 Literature and Culture I**

*Prerequisites: SPN 310, and SPN 330*

Introduction to cultural productions from the Pre-Columbian period to the mid-19th century in Spanish. Readings will come from a variety of regions and historical and cultural movements. Discussions, collaborations, and writing assignments will be in Spanish.

### **SPN 430 Literature and Culture II**

*Prerequisites: SPN 420*

Introduction to Latin American literature and culture during the late 19th and 20th century with a focus on key aspects (analysis of genre, form, structure,

language, history, society, politics, gender, sexuality, etc.) necessary to the understanding of Latin American culture. Discussions, collaborations, and writing assignments will be in Spanish.

### **SPN 450 Identity and Multiculturalism**

*Prerequisites: SPN 310, and SPN 330*

Introduction to prominent Latin American and Hispanic cultural productions that deal with identity and multicultural issues. Most of the readings will deal with Hispanic/Latino authors. Readings will come from a variety of countries and historical and cultural movements. Discussions, collaborations, and writing assignments will be in Spanish.

### **SPN 490 Guided Study in Spanish**

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

### **SPN 499 Spanish Capstone**

*Prerequisites: SPN 430*

In this two-month seminar students will demonstrate the knowledge they have learned in their core courses. Students will develop a portfolio consisting of their revised papers and new essays to create a final project. There will be a final capstone paper for this course.

## **SSE - Safety and Security Engineering**

### **SSE 602 Evaluation of Safety Programs**

Comprehensive coverage of occupational safety and health field concepts including new hazards in the workplace; proliferation of health and safety legislation; interest in ethics and corporate responsibility; work place safety; and product safety. Introduces concepts through case study analysis and provides examples in developing a modern safety program.

### **SSE 604 Security - Planning and Design**

Provides a comprehensive coverage of security planning in both new and existing facilities. Covers concepts such as Security Design Concepts, Building Hardening, Security Technology, Biochemical and Radiological Protection, Security and Emergency Operations.

### **SSE 605 Chemical Plant Process Safety**

*Prerequisites: SSE 602*

Provides an overview of safety evaluation of a chemical and mechanical engineering plants. Introduction to concepts such as process hazards checklists, hazards surveys, hazards and operability studies and risk assessment techniques using probability theory, event trees, and fault trees.

### **SSE 606 Managing Information Security**

Introduces computer security issue in traditional centralized systems to distributed networks and the Internet. Covers cryptography; program and operating system security; administration; legal, privacy, and ethical issues. Lays out the security vulnerabilities and threats, and follows countermeasures to address them.

### **SSE 607 Fire and Explosion Engineering**

Introduction to fire science; fire prevention, containment and extinguishment; methods of assessment of fire risks; hydrocarbon fires and explosions; meth-

ods of estimating explosion overpressures; dynamic response of structures to sudden overpressures; explosion detection, control and mitigation techniques; active and passive fire protection systems; escape routes; legal requirements.

### **SSE 608 Explosives and Bio Materials**

Introduction to classification and detection of explosives, tagging of explosives, the detection of hidden explosives in airfreight, luggage, vehicles, and on suspects. Also covers biological threat materials and their assessment and control.

### **SSE 610A Capstone Course**

*Prerequisites: SSE 602, SSE 604, SSE 605, SSE 606, SSE 607, SSE 608, SSE 613, SSE 614, SSE 615*  
Focus on the application of safety and security engineering methods and processes learned through this program. Working in teams or as individuals under the guidance of their assigned faculty advisor, students select a research topic, and gather data. The duration of this course is one month. Course is eligible for an "IP" grade.

### **SSE 610B Second Capstone Course**

*Prerequisites: SSE 610A*  
Continuation of SSE 610A project course. Specific focus is on the analysis of data collected including problem solutions. Students present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. The duration is two months. Course is eligible for an "IP" grade.

### **SSE 611 Emergency Management**

Details the Federal Emergency Management Agency (FEMA) (U.S), the Federal Response Plan (FRP), and the roles, responsibilities, and interrelationship between FEMA and state and local emergency management systems. Covers the changes in emergency management since the events of September 11, 2001.

### **SSE 613 Policies of Homeland Security**

This course introduces the student to legal, policy, and ethics issues inherent in the security of the United States. Laws and policies affecting this area have been in place for years; however, the events of 9/11 introduced a flood of Acts, regulations, and directives that play a critical role in supporting evolving policy. Conflicts between Federal and State law make for volatile and challenging study.

### **SSE 614 Infrastructure Protection**

This course introduces the student to Critical Infrastructure and the necessary security for its protection. Critical Infrastructure is systems and assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction

### **SSE 615 Fundamentals of Recovery**

*Prerequisites: SSE 611*  
This course addresses the concepts, operational procedures, and authorities involved in recovering from major disasters. Federal, State, and local government roles and responsibilities in major disaster recovery

work will be covered, as well as government coordination and the solution of problems frequently arising in recovery operations. Preliminary damage assessment, disaster recovery centers, and special needs of victims and disaster workers are discussed.

## **SUS - Sustainability Management Business**

### **SUS 601 Introduction to Sustainability**

An introduction to sustainability concepts. An interdisciplinary approach is used by combining environmental, economic and social dimensions of sustainable development by looking into relevant local, and global environmental issues. Various sustainable forces that may impact an organizational operation will be discussed.

### **SUS 602 Enterprise Excellence**

*Prerequisites: CSC 220 or permission from lead faculty.*  
Overview of statistical tools needed to measure business improvement related to sustainability. Step-by-step guide to develop and institute metrics for sustainability improvement will be provided. Enterprise excellence including process improvement analysis and management systems for business, industry, academic, government and military organizations will be covered.

### **SUS 603 Sustainable Innovation**

Presentation of the concepts of sustainable innovation though culture, innovation network and leadership. Specifically, concepts such as innovation leadership are addressed. The focus is on innovation drivers and their implications in stimulating and managing innovation in the workplace. Relevant case studies will be used.

### **SUS 604 Sustainable Supply Chain**

Examination of how supply chain can be used to improve the sustainable operations of an organization. Specific topics would include the development and implementation of supply chain and organizational policies to meet the global requirements.

## **SYE - Systems Engineering**

### **SYE 600 Introduction to Systems Design**

Detailed overview of the nature of systems and the systems engineering design process of human-made systems. The main emphasis is on the four phases of systems design: conceptual design, preliminary design, detail design, and evaluation and testing. Life cycle engineering and requirements analysis are introduced.

### **SYE 601 Systems Analysis & Design Eval**

*Prerequisites: SYE 600*  
An in depth study of system analysis and design evaluation. The emphasis is on using various modeling tools to predict system performance and evaluate various system alternatives under multiple design criteria and conditions of risk and uncertainty. Use of calculus and MS Excel are required.

### **SYE 602 Advanced System Design**

*Prerequisites: SYE 601*  
Advanced system design concepts and details the methodologies of design for operational feasibility: system reliability, maintainability, usability (human factors), supportability (serviceability), producibility and disposability, and affordability (life-cycle costing). The course also provides an introduction to systems engineering management, including planning, organization, and program control and evaluation.

### **SYE 603 System Dynamics**

*Prerequisites: SYE 602*  
Analysis of complex systems, system behavior, and system of systems. Includes the concept of intended and unintended consequences, systems thinking, modeling dynamic systems and decision making, system instability and oscillation, and testing of system models. System dynamic programming software is provided with the text.

## **TED - Teacher Education**

### **TED 100 Intro to P-12 Education System**

Foundational information regarding the public educational system: its history and goals. Pertinent laws, regulations, policies and procedures, including knowledge of health, safety and emergency procedures and their relationship to the role of paraprofessionals will be addressed.

### **TED 102 Professional/Ethical Practices**

An exploration and examination of roles, responsibilities and dispositions of paraprofessionals related to professional and ethical practices. Topics will include: confidentiality, legal rights, district policies, roles, procedures and dispositions appropriate to being part of an instructional team.

### **TED 208 Reading/Writing Instr. Support**

A review of competencies necessary for literacy development. The role of standards, instructional methodology and educational technology will be introduced. This will include strategies for effective teaching and the role of the paraprofessional in supporting instruction under the supervision of a credentialed teacher. Strategies for working with individual students and small groups will be addressed.

### **TED 210 Math/Sci. Instruction Support**

A review of competencies necessary for supporting mathematical and science instruction. The role of standards, instructional methodology and educational technology will be introduced. Strategies for working with individual students and small groups will be addressed.

### **TED 212 ELL & Students w/Special Needs**

Foundational information regarding language development and the needs of English Language Learners (ELL) will be presented. A second part of the course will cover foundations of special education and the variety of learning needs of student with Special Needs. Strategies for effective teaching with individual students and small groups under the supervision of a credentialed teacher will be addressed.



### **TED 214 Classroom Environment**

Strategies for establishing and maintaining positive classroom environments that maximize student achievement for all learners will be addressed. Strategies will include a focus on teaching social skills, self-control and self-management.

### **TED 216 Student Assessment Support**

Assessment strategies used in public school classrooms will be studied. These will include both formal and informal assessments used to determine appropriate instruction for students. Candidates will collect, analyze and report data in a variety of simulations.

### **TED 218 Learner Growth & Development**

Study of learner characteristics, learning styles and factors that influence behavior, motivation and learning. Study will include attention to the variety of learners in public schools, including diversity of abilities, languages, ethnicity, special needs, socio-economic status and gender. Both typical and atypical development will be addressed.

### **TED 300 Fundamentals of Education**

*Prerequisites: TED 320, or or TED 305, or TED 306*  
Examines the role and nature of schools in the United States through an exploration of a range of cultural, philosophical, historical, legal, political, and ethical perspective.

### **TED 305 Teaching as a Profession**

First course in California Teacher Credentialing program, candidates introduced to California Standards of the Teaching Profession (CSTP), Teaching Performance Expectations (TPEs) and California Teaching Performance Assessment (TPA) process. Candidates explore role of teachers within schools, community, society, and in world; and an understanding of the commitment, rewards and responsibilities of a teaching career, as well as the process and procedures for creating a Professional Electronic Portfolio. Includes 15 hours of field experience. Course will be offered over a 2 month format and must be completed prior to enrollment in other TED courses.

### **TED 306 21st Century Teaching Methods**

Preparation of pre-service teachers for 21st Century culturally and technologically enriched classrooms. Strategies will include how teaching, learning, and technology work together to develop a holistic view of education.

### **TED 310 Development and Learning**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Focuses on the cognitive, social, and emotional development of children from both theoretical and practical perspective. This course includes an introduction to learning theory and practice and its relationship to student achievement and motivation.  
TED 320 Introduction to Teaching 1.5 quarter units  
Introduces teacher candidates to teaching as a profession. Included in this course is the process and procedures for creating an ePortfolio. Course is offered over a 2 month period to be completed prior to enrollment in other TED courses.

### **TED 320 Introduction to Teaching**

Introduces teacher candidates to teaching as a profession. Included in this course is the process and proce-

dures for creating an ePortfolio. Course is offered over a 2 month period to be completed prior to enrollment in other TED courses.

### **TED 330A Reading and Lang. Arts Methods**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Includes content, methods and materials for teaching reading in an integrated elementary classroom. Teacher candidates will learn strategies for managing classroom instructional activities to enhance student achievement. Teacher candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

### **TED 330B Reading and Language Arts**

*Prerequisites: TED 305, or TED 320*  
Includes content, methods and materials for teaching reading in a secondary classroom. Candidates will learn strategies for management of activities/materials, planning lessons, using technology, evaluating learning, and integrating reading into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

### **TED 340 Content Area Reading Methods**

*Prerequisites: TED 305 or TED 320*  
Includes content, methods, and materials for teaching reading across the curriculum. Teacher candidates will learn instructional strategies for integrating reading in the content area. Teacher candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

### **TED 350 Math and Science Methods**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Includes content, methods, and materials for teaching mathematics and science in an integrated elementary classroom. Strategies for implementing and assessing student achievement will be introduced.

### **TED 351 Teaching STEM Methods**

*Prerequisites: TED 305, or TED 306, or TED 320*  
This eight week course is designed to prepare pre-service teachers with the knowledge and skills necessary to teach students in grades K-8 science, technology, engineering, and mathematics(STEM). This includes developing rigorous, standards-based lessons that are engaging, enjoyable, and meaningful to students. Opportunities will also be provided to explore, analyze, and incorporate digital resources for teaching STEM methods.

### **TED 355 Hist/Social Science Methods**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Includes content, methods and materials for teaching history-social science in the elementary classroom. Candidates will learn classroom management of activities/materials, planning lessons, using technology, evaluating learning, and integrating history and social science into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a classroom as directed by the instructor.

### **TED 380 Arts/PE/Health Methods**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Includes content, methods, and materials for teach-

ing visual and performing arts, physical education, and health in the elementary classroom.

### **TED 410 Survey of Multicultural Lit.**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Provides K-12 teacher candidates with knowledge of the wide-range of genres of multicultural literature. Teacher candidates will learn instructional methodologies and strategies for selecting appropriate literature that reflects the interests and reading abilities for diverse student populations.

### **TED 420 Diversity in Schooling**

*Prerequisites: TED 305, or TED 320*  
Provides teacher candidates with background knowledge on how to ensure parity of treatment of students who differ in race, class, exceptionality, ethnicity, culture, gender, and religion. Teacher candidates must complete five hours observing and assisting within diverse classrooms in a public school classroom as directed by the instructor.

### **TED 430 Special Needs Students**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Provides instructional strategies and methodologies for adapting content, assessment and pedagogy that ensures every student with exceptional learning needs is taught under optimal conditions for learning.

### **TED 434 Methods of Teaching Social Sci**

*Prerequisites: TED 305*  
Prepares candidates in History/Social Science to be effective and reflective teachers, emphasizing current research. Comprehensive study of teaching methods in the social sciences: economics, history, political science, and geography. Candidates learn pedagogical content knowledge, methods of teaching and learning, classroom management strategies, lesson planning, and assessment of student learning.

### **TED 440 Leadership and Assessment**

*Prerequisites: TED 305, or TED 320, or TED 306*  
Provides teacher candidates with classroom leadership strategies to create a classroom environment that is conducive to teaching and learning. Teacher candidates will also learn how to determine students' abilities through formative and summative assessments and to use this information to provide appropriate instructional strategies to enhance student learning.

### **TED 450 Methods of Teaching English**

*Prerequisites: TED 305, or TED 320*  
Prepares prospective English language arts teachers to be accomplished teachers in present day diverse middle or secondary school classrooms. Fundamental language skills including reading, writing, listening, speaking, viewing and visually representing will be studied. Prospective teachers will display knowledge and mastery of these skills and demonstrate how to imbue these concepts across the English language arts curriculum through rigorous and varied teaching methods. Opportunities will be provided to explore and analyze resources and to demonstrate and celebrate a commitment and responsibility to developing teaching skills.

**TED 455 Methods of Teaching Science**

*Prerequisites:* TED 305, or TED 320

Prepare prospective science teachers to be accomplished teachers in present day diverse middle or secondary school classrooms by creating a vision for successful science teaching. Candidates will deliver pedagogical content knowledge through appropriate instructional materials and by creating context for meaningful learning methods, strategies, and best practices.

**TED 461 Mathematics Teaching Methods**

*Prerequisites:* TED 305, or TED 320

A critical inquiry into present-day tendencies in teaching mathematics in order to help prospective mathematics teachers to acquire their professional skills in the teaching of mathematics in secondary school. Fundamental concepts of mathematics and effective approaches to their teaching will be discussed.

**TED 464 Mths Teach Sec Health Sci**

*Prerequisites:* TED 305, TED 300, TED 310, TED 430, HED 351, COH 100

*Recommended:* Prior completion of: TED 330B, TED 420, COH 320, COH 416, COH 317, COH 318, COH 319, HED 308, HED 311, HED 414, COH 321

Prepares individuals seeking a single subject teaching credential in Health Science to be effective and reflective teachers in middle or secondary schools. Candidates will learn pedagogical content knowledge, methods of teaching and learning, classroom management strategies, lesson planning, and assessment of student learning.

**TED 465A Student Teaching I**

*Prerequisites:* Completion of all upper division course requirements, including all TED coursework. Elementary and secondary teacher candidates, who have met the university student teaching requirements, will be assigned for student teaching in an accredited school where they will implement the state approved content standards for their subject area(s) and the content performance standards for the teaching profession. Grading is by S or U only.

**TED 465B Student Teaching II**

*Prerequisites:* Completion of all upper-division course requirements, including all TED coursework. Teacher candidates, who have successfully completed Student Teaching I, will enter their second phase of supervised fieldwork where they will continue to implement the state approved content standards for their subject area(s) and the content performance standards for the teaching profession. Grading is by S or U only.

**TED 465C Student Teaching III**

*Prerequisites:* Completion of all upper-division course requirements, including all TED coursework. Teacher candidates who have successfully completed Student Teaching II will continue to implement the state approved standards for their subject area(s) and the content performance standards for the teaching profession for student teaching that includes assessing their readiness for assuming responsibility for daily classroom instruction. Grading is by S or U only.

**TED 465D Student Teaching IV**

*Prerequisites:* Completion of all upper-division course requirements, including all TED coursework. Teacher candidates, who have successfully completed Student Teaching III, will continue to implement the state approved standards for their subject area(s) and the content performance standards for the teaching profession including assessing their readiness for daily classroom instruction. Grading is by S or U only.

**TED 470 Student Teach/E-Portfolio (3 quarter units)**

*Prerequisites:* Completion of all course requirements and Admission to Student Teaching, this course must be taken concurrently with TED 465A-D

The Student Teaching Seminar is designed to assess teacher candidates' development as professional educators. Teacher candidates will be guided through their student teaching seminar to demonstrate their professional education competency by successfully completing a Professional Electronic Portfolio. The ePortfolio is aligned with the six Teaching Performance Expectation Domains cited in the Student Teaching Handbook. The Student Teaching Seminar Syllabus is designed for either an online or face-to-face (on-site) delivery mode. The online Threaded Discussion Topics and Assignments can be adapted for small or large group discussions within a face-to-face (on-site) classroom setting. When the delivery mode for this course is online, students must upload their artifacts/reflections in two places: 1) the Seminar Course electronic drop-box and 2) the ePortfolio (foliotex). Grading is by S or U only.

**TED 530A Student Teaching I**

*Corequisites:* TED 531A

TED 530A: Student Teaching comprises the first half of a semester long Student Teaching experience. Candidates are placed with certified, P12, Supervising Teachers. Candidates must successfully demonstrate competency in the six Teaching Performance Expectations (TPE) Domains. Grading is S or U.

**TED 530B Student Teaching II**

*Prerequisites:* TED 530A

*Corequisites:* TED 531B

TED 530B: Student Teaching II comprises the second half of a semester long Student Teaching experience. Candidates are placed with certified P12 Supervising Teachers. Candidates must successfully demonstrate competency in the six Teaching Performance Expectations (TPE) Domains. Grading is S or U.

**TED 531A Student Teaching Seminar I (2.25 quarter units)**

*Corequisites:* TED 530A

This course is taken concurrently with TED 530A: Student Teaching I and provides student teachers with opportunities to integrate and reflect on knowledge, skills, abilities, and dispositions acquired during their clinical experiences. Candidates focus on assessing PK12 student learning and using the evidence to structure instruction for all students.

**TED 531B Student Teaching Seminar II (2.25 quarter units)**

*Prerequisites:* TED 530A, and TED 531A and

*Corequisites:* TED 530B

This course is taken concurrently with TED 530B: Student Teaching II. Student teachers will have op-

portunities to integrate and reflect on designing effective differentiated instruction for diverse PK12 learners, using student work to analyze instructional and assessment decisions, as well as manage safe learning environments for all PK12 students.

**TED 601 Teaching and Credentialing (1.5 quarter units)**

Designed as the first course in the multiple and single subjects California Teacher Credentialing program. Candidates are introduced to the California Standards of the Teaching Profession (CSTP), the Teaching Performance Expectations (TPEs) and the California Teaching Performance Assessment (TPA). (This course must be taken within the first three courses.)

**TED 602 Educational Foundations**

Theoretical foundations of education with emphasis in the historical, legal, ethical, philosophical, and political areas. Emphasis on the intersection of legal, political, historical, social, and philosophical contexts of both areas. A field experience is required.

**TED 605 The Diverse Classroom**

Complexity of today's classroom through cultural diversity, student development, curriculum planning, including curriculum development, design, implementation and evaluation.

**TED 606 Equity and Diversity**

Examination of experiences of diverse groups in American society and California schools. Principles of education equity and practices that maximize student achievement are reviewed. The course includes instruction in understanding and acceptance of differences in culture, cultural heritage, ethnicity, language, age, religion, social economic status, gender identity/expression, sexual orientation, and abilities and disabilities of individuals serve. Culturally relevant learning pedagogy to meet individual and collective learners' academic and social equity needs are addressed.

**TED 610 Best Internship Practices**

*Prerequisites:* Admission to the intern program

This course is designed to provide learning opportunities for candidates to integrate and reflect on the knowledge, skills, abilities and dispositions acquired in the pre-service coursework with their student teaching experience.

**TED 611 Educational Psychology**

TED 611 examines how educational psychology is applied to learning and teaching. Learning theories, instructional approaches, learning environments and student assessment are studied.

**TED 612 Curric, Assess, & Instruction**

Students in this course will learn the theoretical foundations of curriculum, instruction, and assessment. Students will apply the key principles in designing effective curriculum, instruction, and assessment strategies for diverse learners in a variety of settings. This course is one of six Core courses and serves those students not interested in earning a PK12 teaching credential.

### **TED 615 The Foundations of Education**

TED 615 is the first course in the Teacher Preparation Program. The role and nature of schooling is explored through a range of philosophical, historical, legal, and sociological perspectives within the context of our society.

### **TED 616A C&I I:History & Social Science**

Elementary education curriculum development and teaching History and the Social Sciences using Nevada content standards. Content specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

### **TED 616B C&I II: Math & Science**

Elementary education curriculum development and teaching Mathematics and Science using Nevada content standards. Content specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

### **TED 616C C&I III:V & P Arts Health & PE**

Elementary education curriculum development and teaching the Visual & Performing Arts and Health and Physical Education using Nevada content standards. Content specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

### **TED 621A Lang. Dev. Methods: Elem. Sch.**

*Prerequisites: SPD 604, SPD 608, TED 602, TED 606, Pass CBEST and CSET*

Designed for multiple subject credential candidates and focuses on current theories and research in language structure and use, and in language learning, particularly those in the first and second language development. Considers social, cultural, political, legal, psychological, general pedagogic and specific methodological factors affecting the first and second language development. Addresses application of these theories, strategies and techniques of second language learning across content areas in diverse educational environment in elementary schools.

### **TED 621B Reading/Lang. Arts Methods**

*Prerequisites: TED 621A*

Multiple Subject Candidates use research-based theories and strategies to design and implement a balanced and comprehensive program of instruction in reading, writing, speaking, and listening based on state adopted Content Standards and Reading/Language Arts Framework for California Public Schools. Prepares candidates for TPAs and RICA. It is strongly recommended students take RICA examination after completion of this course.

### **TED 622A Curr-Assess-Inst:Soc.St/PE/Art**

*Prerequisites: TED 621A*

Multiple subject curriculum development and teaching History, Social Science, Physical Education, Visual and Performing Arts using State of California content standards. Content-specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

### **TED 622B Curr-Assess-Inst:Math&Science**

*Prerequisites: TED 621A*

Multiple subject curriculum development and teaching math and science using State of California content standards. Content-specific teaching practices, lesson design and assessment of student learning are emphasized to provide access to the curriculum for all students.

### **TED 623 Lang. Dev. Methods: Secondary**

*Prerequisites: TED 602, SPD 604, TED 606, SPD 608, Pass CBEST and CSET*

Designed for single-subject candidates, course focuses on current theories and research in language structure and use, language learning, L1 & L2 development; social, cultural, political, legal, psychological, pedagogic and methodological factors; and application of strategies and techniques of L2 learning across content areas in diverse classrooms.

### **TED 624 Literacy for Content Areas**

*Prerequisites: TED 623*

This is course is aligned with the California Board of Education adopted academic content standards in English Language Arts and the Reading/Language Arts Framework for students who are speakers of English, English language learners (ELLs) and students with special needs and is designed to assist Single Subject Credential Candidates in developing the background and skills necessary to teach literacy in the content areas to middle/junior and/or senior high school students in the culturally and linguistically diverse classrooms in the California public schools.

### **TED 625A Curriculum Design Sec. Learner**

*Prerequisites: TED 623*

Integration of California's K-12 SACs, student learning data, research-based curriculum development, learner assessment strategies and instructional principles in designing short and long-term learning plans for each middle/high school learner. In actual G7-12 school activities, teacher candidates are guided in the application of these concepts, skills and dispositions.

### **TED 625B Instruction and Classroom Mana**

*Prerequisites: TED 632*

This course builds on TED 625A by incorporating within a well-designed learning plan, effective instructional and classroom management strategies needed to engage each middle/high school learner. Teacher candidates develop classroom management plans and skills, use the plans in decision-making scenarios and apply the skills in various classroom situations.

### **TED 626 Classroom Management**

*Prerequisites: TED 623, or TED 621A*

Preferably, for candidates planning to student teach in the near future. Candidates apply research-based models and strategies in creating and maintaining effective learning communities in K-6 or G7-12 classroom settings. There is an emphasis on preventing and managing common classroom situations as well as working with disruptive students. Requires four-hours of work in a K-6 or G7-12 classroom.

### **TED 628A Internship Clinical Practice I**

*Corequisites: TED 610, TED 628A, TED 631A*

This clinical practice course is taken concurrently

with TED 631A Internship Seminar and it provides interns with opportunities to apply, examine, integrate and reflect on knowledge, skills, abilities, and dispositions as they analyze and assess their teaching performances in their K12 classrooms as teachers of record.

### **TED 628B Internship Clinical Pract. II**

*Prerequisites: TED 628A*

*Corequisites: TED 631B*

This clinical practice course is taken concurrently with TED 631AB Internship Seminar and provides interns with opportunities to apply, examine, integrate and reflect on knowledge, skills, abilities, and dispositions as they analyze and assess their teaching performances in their K12 classrooms as teachers of record.

### **TED 629 Student Teaching Seminar (3 quarter units)**

*Corequisites: TED 630A, and TED 630B, and TED 630C, and TED 630D*

Integrates theory and practical approaches to situations experienced by candidates during their Student Teaching experience. Content areas include: (1) School/Classroom Culture and Professional Responsibilities, (2) Learning Environment and Classroom Management, (3) Assessment and Evaluation, (4) Lesson Design and Differentiated Instruction. Grading is H, S, or U only.

### **TED 629I Intern Teaching Seminar (3 quarter units)**

*Prerequisites: May only be taken by students approved for the internship program.*

*Corequisites: TED 628I*

Designed for interns to learn and apply developmentally appropriate pedagogy; planning for and implementing differentiated instruction; and exploring principles of assessment and potential adaptations in response to k-12 students. Grading is S or U only.

### **TED 630A Student Teaching I**

(Note: This course does not grant graduate level credit) TED 630A comprises the first month of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) school site classroom orientation and responsibilities, (2) observations, (3) professional dispositions and (4) lesson plan design, implementation and reflection. Grading is H, S, or U only.

### **TED 630B Student Teaching**

*Prerequisites: TED 630A*

(Note: This course does not grant graduate level credit) TED 630B, C, D comprises the second, third and fourth months of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) classroom responsibilities and professional dispositions, (2) learning environment and classroom management, (3) assessment and evaluation, and (4) lesson design and differentiated instruction. Grading is S or U.

### **TED 630C Student Teaching**

*Prerequisites: TED 630B*

(Note: This course does not grant graduate level credit) TED 630B, C, D comprises the second, third and fourth months of the semester-long Student

Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) classroom responsibilities and professional dispositions, (2) learning environment and classroom management, (3) assessment and evaluation, and (4) lesson design and differentiated instruction. Grading is S or U.

### **TED 630D Student Teaching**

*Prerequisites:* TED 630C

(Note: This course does not grant graduate level credit) TED 630B, C, D comprises the second, third and fourth months of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) classroom responsibilities and professional dispositions, (2) learning environment and classroom management, (3) assessment and evaluation, and (4) lesson design and differentiated instruction. Grading is S or U.

### **TED 631A Internship Seminar I (2.25 quarter units)**

*Prerequisites:* TED 610

This seminar is taken concurrently with TED 628A Internship Clinical Practice and provides interns with opportunities to integrate and reflect on knowledge, skills, abilities, and dispositions acquired during their clinical practice experiences. Candidates focus on providing safe and engaging learning environments for K12 students through differentiated instruction and purposeful assessment.

### **TED 631B Internship Seminar II (2.25 quarter units)**

*Prerequisites:* TED 631A, TED 628A

*Corequisites:* TED 628B

This seminar is taken concurrently with TED 628B Internship Clinical Practice and provides interns with opportunities to integrate and reflect on knowledge, skills, abilities, and dispositions acquired during their clinical practice experiences. Candidates focus on assessing student needs and designing purposeful assessment adaptations that best support differentiated instruction.

### **TED 632 Content Area Curriculum**

*Prerequisites:* TED 623

This course provides teacher candidates with the knowledge and skills required to design effective subject-specific short and long-term planning needed to assist G7-12 diverse learners in achieving state-adopted standards. Emphasis is placed on student learning and evidence. Four-hours of work in a G7-12 classroom are required.

### **TED 633 Content Area Instruct-Assess**

*Prerequisites:* TED 623

This course focuses on content area, subject-specific instruction and assessment strategies effectively engaging all G7-12 students in learning. Candidates will develop a repertoire of content area specific materials, instructional methods, and standards-based assessment strategies for all diverse learners. This course requires four-hours of work in a G7-12 classroom.

### **TED 634 Content Area Literacy**

*Prerequisites:* TED 623

This course is aligned with the California Board of Education adopted academic content standards in English Language Arts and the Reading/Language Arts

Framework for students who are speakers of English, English language learners (ELLs) and students with special needs and is designed to assist Single Subject Credential Candidates in developing the background and skills necessary to teach literacy in the content areas to middle/junior and/or senior high school students in the culturally and linguistically diverse classrooms in the California public schools.

### **TED 635 Methods:History/SS-Heal-PE-Art**

*Prerequisites:* TED 621A

Multiple subject curriculum development in teaching History, Social Science, Health, Physical Education, Visual and Performing Arts using State of California content standards. Content-specific teaching practices, lesson design, and assessment of student learning are emphasized to provide access to the curriculum for all students. Four-hours of field experiences in a K-6 classroom are required.

### **TED 636 Methods: Mathematics-Science**

*Prerequisites:* TED 621A

Multiple subject curriculum development in teaching math and science using State of California content standards. The course emphasizes content-specific teaching practices, lesson design, and assessment of student learning used to provide access to the curriculum for all students. This course requires four-hours of field experiences in a K6 classroom.

### **TED 638 Spanish for the Math and Scien**

Development of relevant Spanish vocabulary, comprehension and speaking skills to effectively support student learning in Mathematics and Science. Learning through the use of instructional scaffolds, teachers incorporate the strategies into their teaching repertoire and enhance their sensitivity to second language learners. Not recommend for BTE students.

### **TED 639 Spanish for the Humanities Cla**

Development of relevant Spanish vocabulary, comprehension and speaking skills to effectively support student learning in the Humanities. Learning through the use of instructional scaffolds, teachers incorporate the strategies into their teaching repertoire and enhance their sensitivity to second language learners. Not recommended for BTE students.

### **TED 640A Student Teaching I (6 quarter units)**

Focuses upon the practice and development of teaching skills in the classroom in a full day, eight-week term at a school site. Elementary education candidates meet the requirements of the Teacher Performance Expectations and are mentored by a university supervisor and a master teacher at the school site. Students attend the seminar coincidentally with the student teaching experience. Grading is by S or U only.

### **TED 640B Student Teaching II (6 quarter units)**

A continuation of TED 640A, and as such, continues to focus upon the practice and development of teaching skills in the classroom in a full day, eight-week term at a school site. Elementary education candidates continue to meet the requirements of the Teacher Performance Expectations as they are mentored by a university supervisor and a master teacher at the school site. Students continue to attend the seminar coincidentally with the student teaching experience. Grading is by S or U only.

### **TED 649 Student Teaching Seminar**

Merging coursework knowledge and teaching practice in relation to classroom management and appropriate student behavior. Problems met within the student teaching experience are discussed, and conflict resolutions skills are practiced. Assessment of teaching practice before and during student teaching occurs through completion of the e-portfolio. Grading is by S or U only.

### **TED 665 Cognition, Lang. & Cult**

Research, theory, and practices related to the learning and development of the bilingual, bicultural, and bi-cognitive child. The course explores theories on culture, cognition, bilingualism, bi-culturation, and psychological dynamics of positive self-esteem and academic development.

### **TED 666 Cultural and Linguistics**

Examine of the cultural, social, economic, and cognitive factors of language and its importance in social interactions. Development of the necessary knowledge, skills, and dispositions to teach in culturally and linguistically diverse classrooms. Analysis of language proficiency and understanding the variations found in languages.

### **TED 667 Diversity and Change**

Designed to communicate the dynamics and challenges of educating our ever-increasing diverse population. Leads educators to explore and exchange ideas of what is important in the lives of students and teachers, the school community and society in the move toward transformative education.

### **TED 668 Multicultural Literature**

Emphasizes key issues, challenges and strategies for integrating multicultural literature into classrooms in a culturally proficient manner. Fosters reading for enjoyment and understanding and encouraging critical skills in selecting and assessing literature for multicultural learners.

### **TED 670 Educational Research**

*Prerequisites:* TED 602, SPD 604, TED 606, SPD 608, TED 612

This course provides an overview of educational inquiry approaches. Students will select an area of interest and demonstrate research and evaluation competencies in completing an educational inquiry project.

### **TED 680 Dev as a Professional Educator**

*Prerequisites:* California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position

A continuation of professional development for beginning teachers. Teachers will review their learning from their professional preparation program, explore professional standards for the teaching profession and design a growth plan to meet their needs and the needs of the students they serve. This is the first course for the Clear Credential program.

### **TED 682 Instructional Technology**

*Prerequisites:* TED 680 California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-ap-

*proved long term substitute position*

An examination of technology used in classrooms with particular attention to maximizing available resources for communication and collaboration with a variety of stakeholders as well as assessing, planning and delivering instruction.

#### **TED 684 Using Standards and Frameworks**

*Prerequisites: TED 680 California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position and*

Beginning teachers will review, select, utilize and reflect upon appropriate content standards and other instructional materials in order to meet the learning goals for the class/ school/ district.

#### **TED 686 Assessment and Instruction**

*Prerequisites: TED 680 Full-time teaching position in a public, charter or private school. A long-term substitute position may be used but needs pre-approval.*

Beginning teachers will focus on the types of assessments used at their school, in district, state and national levels. Strategies for strengthening the use of assessment data for instructional planning will be researched, applied and reflected upon.

#### **TED 688 Meeting Needs of All Learners**

*Prerequisites: TED 680 Full-time teaching position in a public, charter or private school. A long-term substitute position may be used but needs pre-approval.*

This course covers background information on and strategies for use with a variety of learners including those with special needs, gifted and talented, English learners and struggling readers.

#### **TED 690 Capstone**

*Prerequisites: TED 530B, or TED 628I, or TED 640B* M.Ed. degree's culminating course. Candidates build a professional development portfolio based on P12 student learning evidence and other data. Then, use educational research in creating, implementing, and evaluating their professional development projects. Students work in a community of learners to plan and share evidence-based research-based practices, strategies, and findings.

#### **TED 699 Clear Credential e-Portfolio (1.5 quarter units)**

*Prerequisites: TED 680 satisfactory completion of three of the four elective courses as well as a full-time teaching position in a P-12 school or a pre-approved long term substitute position*

Candidates will integrate their experiences in and reflection upon their first two years of teaching. Growth and development will be based upon the California Standards for the Teaching Profession.

### **THR - Theater**

#### **THR 200 Theater Arts**

An introduction to theater as a dramatic medium, focusing on performance and production skills in a variety of genres and contexts.

### **TMG - Technology Management**

#### **TMG 610 Global Trends in Technology**

This course focuses on our current technology trends that support the global economy. Students will gain understanding of the factors that drive this ever changing technological environment and why it is so important to transfer and apply the cost effective technological solution to their own organization. The economic, political and technological processes that impact our global organizations must be understood. Therefore, students will examine transnational corporations and organizations that are engaged in this dynamic technological environment. The problems, issues, and solutions must be analyzed by students because we live in a diverse cultural economy with global technological applications requirements.

#### **TMG 620 Principles of Technology Mgmt.**

This course provides an in-depth analysis allowing students to apply the key concepts in technology management and the role of technology managers in both private- and public- sector organizations. It provides an understanding of how organizational entities can be structured and managed to respond effectively to dynamic changes caused by technology and international competition.

#### **TMG 625 Systems Analysis and Design**

Students apply the fundamentals of systems analysis and design. The purpose is to provide an understanding of the systems view of a product, service, or process to include a generic representation of its elements, security, and dynamics. The skills, tools and methodologies needed to quantitatively analyze and optimize systems, and to make decisions as technology managers are provided.

#### **TMG 635 Mgmt. of Tech & Innovation**

Students apply strategic analysis techniques to business policy and organizational development. Emphasis is placed on linking technology policy with corporate strategy and the identification of technology options appropriate for the business or organizational strategy being executed.

#### **TMG 640 Managing Technology Change**

This course provides students with skills and knowledge that will help them introduce new technology or continuous improvement initiatives smoothly and effectively. During this course, students learn a structured approach for dealing with the organizational and human aspects of technology transition, including the key concepts of change management, communication, and managing resistance.

### **WCM - Wireless Communications**

#### **WCM 600 Signal Processing Theory**

Students master key Digital Signal Processing concepts and wireless signal filtering using mathematical models of continuous-time and discrete-time signals and linear systems. Analyze and simulate communication systems using MATLAB. Employ concepts of probability, functions of random variables, and Poisson distributions through analysis of wireless signals using the MATLAB programming language.

#### **WCM 601 Digital Wireless Fundamentals**

*Prerequisites: WCM 600*

Course focuses on basic analog and digital principles and their application to the analysis and design of real-world communication systems.

#### **WCM 602 Wireless Principles/Standards**

This course covers major topics in wireless communication systems, including analysis of modern wireless communication system infrastructures, the cellular concept and system design fundamentals, mobile radio propagation, multiple access techniques for wireless communications, and wireless networking.

#### **WCM 604 Coding and Modulation for W/C**

*Prerequisites: WCM 601, WCM 602*

This course describes the coding and modulation techniques, and comparative studies of different coding and decoding schemes including Trellis and Turbo coding. Studies of different modulation formats and their effects on wireless channels, analysis of different modulation schemes applied to the current wireless standards.

#### **WCM 605 Wireless Systems Security**

*Prerequisites: WCM 602*

Security and privacy issues in wireless voice and data. Ensuring confidentiality, integrity, availability and non-repudiability. Identification, authentication, and encryption protocols. Data Encryption Standard (DES), Advanced Encryption Standard (AES) and Public Key Infrastructure (PKI). Secure distribution of encryption keys. Use of WPA in Wireless LANs. Ethical issues in wireless communications.

#### **WCM 606 CDMA Wireless Systems**

*Prerequisites: WCM 604*

Analysis of CDMA (code division multiple access) concepts, models and techniques. An overview of second- and third-generation (3G) air interfaces. Direct-sequence spread spectrum (DSSS); physical and logical channels; CDMA IS-95 call processing, diversity, combining and antennas; access and paging channel capacity; planning of a CDMA system.

#### **WCM 607 3G & 4G Wireless Networks**

*Prerequisites: WCM 604*

Evolution of Time Division Multiple Access (TDMA)-based 2G cellular systems to 3G systems. Evolution of 3G systems to all-Internet Protocol (IP) based 4G systems; Universal Mobile Telecommunications System (UMTS) architecture including W-CDMA air interface. High Speed Downlink Packet Access (HSDPA) technologies and uplink technologies including Orthogonal Frequency Division Multiplexing (OFDM) and Orthogonal Frequency and Code Division Multiplexing (OFCDM) for high-speed cellular wireless data. Wireless Local Area Network technologies, including 802.11, 802.16 (WiMax) alternative to cellular, and beyond. Bluetooth, RFID and emerging Near Field Communications (NFC) technologies

#### **WCM 608 Wireless Engineering Software**

*Prerequisites: WCM 604*

Hands-on strategic analysis tools designed to help planners, engineers, and technologists rapidly, but thoroughly, develop wireless, wired, and broadband network and service plans including detailed technical and business analysis.

### **WCM 609 Radio Systems Modeling**

*Prerequisites: WCM 604*

Course focuses on simulation models built with MATLAB programming software that can serve as virtual laboratories for predicting the impact of system design changes for advanced digital communication systems.

### **WCM 611A Master's Research Project I**

*Prerequisites: Satisfactory completion of a minimum of eight out of ten courses, WCM 601 through WCM 609, WCM 612*

This is the first course of the Master's Research project. It focuses on the selection on an appropriate topic on one area of research or an applications in wireless communication systems. Student project teams research the topic of the project and complete the project proposal and timeliness for project completions. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

### **WCM 611B Master's Research Project II**

*Prerequisites: WCM 611A*

Two-month course, meets once a week. A continuation of WCM 611A. Students complete the project including all required documentation and formally present their final product to a review panel for evaluation. Grading is H, S, or U only. Course is In Progress (IP) grade eligible.

### **WCM 612 Wireless Economics Topics**

*Prerequisites: WCM 601, WCM 602, WCM 604, WCM 605, WCM 606, WCM 607, WCM 608, and WCM 609 or approval of lead faculty*

This course will teach students how to evaluate the impact of continually advancing wireless technologies on the varied perspectives of competitors and consumers. Students will study these impacts from the perspectives of wireless service providers, wireless equipment providers, wireless application providers, and consumers. Different business models employed by the various industry segments will be studied to gain insight into the interplay between business models and advances in technology. Finally, the course will study the impact of global competitive pressures and both national and international regulatory bodies on technology choices.



# INDEX

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## A

Academic/Admissions Advising . . . . .	56, 68
Academic Dismissal . . . . .	71
Academic Dishonesty . . . . .	51
Academic Disqualification, Reinstatement . . . . .	64, 71
Academic Information for	
Graduate Degrees & Credentials . . . . .	68-72
Undergraduate Degrees . . . . .	56-66
Academic Probation . . . . .	64, 71
Academic Progress . . . . .	64, 70
Accelerated Studies . . . . .	47
Acceptance, Provisional . . . . .	56, 69
Accreditation, Memberships . . . . .	18
Administration . . . . .	12
Admission, Graduate . . . . .	68
Prior to Bachelors Completion . . . . .	69
Probationary . . . . .	68
Admission, Undergraduate . . . . .	56
Conditional . . . . .	57
Probationary . . . . .	57
Advanced Placement Exams . . . . .	59
Alternative Educational Funding . . . . .	36
Aid for Native Americans . . . . .	36
Army and Air Force Reserve Officer Training (ROTC) . . . . .	36
California State Rehabilitation . . . . .	36
Corporate Tuition Assistance . . . . .	36
Private Lenders . . . . .	36
Alumni Relations . . . . .	27
Animals on Campus . . . . .	45
Appellate Procedures . . . . .	50, 51
Application for Graduation . . . . .	65, 72
Associate of Arts	
Communication . . . . .	86
Creative Writing . . . . .	86
Digital Media Design . . . . .	225
Early Childhood Education . . . . .	169
General Education . . . . .	85
Hospitality and Customer Service . . . . .	136
Property Management . . . . .	136
School Site Paraprofessional . . . . .	170
Associate of Science	
Alcohol and Drug Abuse Counseling . . . . .	87
Business . . . . .	137
Criminal Justice Administration . . . . .	284
Engineering Technology . . . . .	225
Health Informatics . . . . .	252
Human Biology . . . . .	87
Paralegal Studies . . . . .	284
Professional Golf Management . . . . .	88

Attendance Procedures . . . . .	42
Auditing Courses . . . . .	45

## B

Bachelor of Arts and Sciences Degrees	
See specific programs under “Major In”	
Bachelor of Business Administration . . . . .	140
Bachelor of Public Administration . . . . .	286
Bar From Attendance . . . . .	44
Board of Trustees . . . . .	11
Bookstore . . . . .	25

## C

Calendar . . . . .	2-3
California Community College Student Information . . . . .	27
California Community College Scholarships . . . . .	27
California State Rehabilitation . . . . .	36
California State University General Ed Breadth	
Certification . . . . .	27, 65, 76
Campus Administration . . . . .	10
Campus Directory . . . . .	6-8
Campus Security . . . . .	21
Cancellation of Classes or Programs . . . . .	44
Career Center . . . . .	26
Catalog Rights . . . . .	64, 71
Center for Cultural and Ethnic Studies . . . . .	85
Certificate Programs	
Accountancy . . . . .	158, 160
Advanced Professional Golf Management . . . . .	129
Alcohol and Drug Abuse Counseling . . . . .	126
Alternative Dispute Resolution . . . . .	299
Applied Behavioral Analysis . . . . .	207
Autism . . . . .	207
Autism Education . . . . .	304
Basic Human Resource Management . . . . .	159
Basic Sales and Marketing . . . . .	159
Basics of Casino Management . . . . .	159
Best Practices . . . . .	208
Clinical Informatics . . . . .	278
Criminal Justice Administration . . . . .	299
DOD Architecture Framework . . . . .	307
e-Teaching and Learning . . . . .	208
Early Childhood Education . . . . .	208
Educational Technology . . . . .	209
Emergency Medical Technician . . . . .	308
Executive Business Management . . . . .	303
Federal Enterprise Architecture . . . . .	307
Finance . . . . .	159
Forensic and Crime Scene Investigations . . . . .	128

Health Coaching . . . . .	278	Course Waivers	
Hospitality and Casino Management . . . . .	160	Undergraduate . . . . .	61
Human Resources Management . . . . .	160	Graduate . . . . .	69
Information Technology Management . . . . .	244	Prerequisite Waivers . . . . .	69
International Business . . . . .	160	Special Consideration Waivers . . . . .	69
LVN “30 Unit” Option . . . . .	277	Time Limits . . . . .	69
Marketing . . . . .	160	Unit Transfer Limits . . . . .	69
Marine Technology . . . . .	308	Course Withdrawal . . . . .	43
Medical Billing and Coding . . . . .	307	Credential Information . . . . .	211
National Board Certified Teacher . . . . .	209	Education Specialist . . . . .	213
Nursing Administration . . . . .	278	Ed Admin & School Counseling/Psychology . . . . .	212, 216
Nursing Informatics . . . . .	279	General Information . . . . .	212
Paralegal Specialists . . . . .	303	Teacher Education . . . . .	218
Professional Golf Management . . . . .	129	Teaching Performance Assessments . . . . .	218
Project Management . . . . .	245	Credential Programs, School of Education	
Reading Certificate (Added Authorization) . . . . .	209	Career Technical Education . . . . .	305
Teaching Mathematics . . . . .	210	Clear Administrative Services Credential . . . . .	196
Challenge by Examination . . . . .	61, 70	Clear Level II Education Specialist:	
Change of Academic Program . . . . .	48	Deaf and Hard-of-Hearing . . . . .	197
Civil Rights Policies and Procedures . . . . .	50	Mild/Moderate Disabilities . . . . .	197
Appellate Procedures for Civil Rights Issues . . . . .	50	Moderate/Severe Disabilities . . . . .	197
Discrimination and Sexual Harassment . . . . .	50	Clear Multiple or Single Subject Credential . . . . .	198
Formal Procedures for Civil Rights Issues . . . . .	50	Early Childhood Special Education Add-on Authorization . . . . .	206
Grievance Procedures for Civil Rights Violations . . . . .	50	Preliminary Administrative Services Credential . . . . .	198
Informal Procedures for Civil Rights Issues . . . . .	50	Preliminary Education Specialist Authorization:	
Class Calendar . . . . .	2-3	Deaf and Hard-of-Hearing with Intern Option . . . . .	199
Class Schedules . . . . .	2	Mild/Moderate with Intern Option . . . . .	200
Classroom Etiquette . . . . .	52	Moderate/Severe with Intern Option . . . . .	201
CLEP (College Level Examination Program) . . . . .	58	Preliminary Multiple Subject Teaching with Intern Option . . . . .	202
College of Letters and Sciences . . . . .	79	Preliminary Single Subject Teaching with Intern Option . . . . .	203
Degree Programs Offered . . . . .	80	Pupil Personnel Services Credential School Counseling	
Committee on the Application of Standards (CAS) . . . . .	49	(PPSC) . . . . .	203
Discrimination or Sexual Harassment		Subject Matter Authorization . . . . .	127
Complaints Relating to . . . . .	50	University Internship for PPSC . . . . .	205
How to File a Claim . . . . .	50	Credit by Examination . . . . .	60
Computer Lab Regulations		Credit, Sources of	
Ethical Usage . . . . .	46	Graduate . . . . .	69
Illegal Usage . . . . .	46	Undergraduate . . . . .	57
Network Security Terms of Use Policies . . . . .	46	<b>D</b>	
Computer Software and E-mail Policies . . . . .	46	DANTES . . . . .	58
Computing Grade Point Averages . . . . .	63, 70	Degree Conferral . . . . .	66, 72
Concurrent Enrollment at Other Institutions . . . . .	49	Degree Offerings . . . . .	14-16
Conditional Admission, Undergraduate . . . . .	57	Disabilities . . . . .	25
Conference Services . . . . .	21	Dismissal . . . . .	52
Corporate Tuition Assistance . . . . .	36	Disqualification . . . . .	64, 71
Course Descriptions . . . . .	339	Doctor of Nursing Practice . . . . .	275
Course Drop . . . . .	43	Drug and Alcohol Policy . . . . .	51
Course Numbering System . . . . .	340		
Course Scheduling . . . . .	43		

## E

E-Mail Address	56, 68
English Language Proficiency	28
English Language Programs	25, 334
English Placement	57
Enrollment Agreement	20
Evaluation	
Graduate	69
Undergraduate	57
Excelsior College Examinations	58
Extended Learning	301
Course Descriptions	312
Course Numbering System	340

## F

Faculty	see individual schools
Faculty Advising	56, 68
Familiarity with University Regulations	19
Family Educational Rights and Privacy Act of 1974 (FERPA)	46
Fees, General	19
Finance Committee	43
Financial Aid	31-39
Calendar	36
Dependency Status	32
How to Apply	32
Loan Deferment Procedures	33
Programs	37-39
Refund Policy	42
Satisfactory Academic Progress (SAP) Policy	32
Scholarships	33
Student Eligibility Requirements	32
Student Loan Deferment	33
Foreign Credential Bridge Program	110
Full-Time Student Status	44

## G

General Education	74-78
Approved Courses	74-78
General Ed Certifications (IGETC & CSU Breadth)	65, 76
Program Requirements	74-76
General Fees	19-20
General Information	13-21
Global Master of Business Administration (Spanish)	148
Grade Appeals	47
Grade Point Average	
Computing GPA	63, 70
Grade Points Awarded	63, 70
Requirements for	64, 71

## Grades

Change of	63, 70
Definition of	63, 70
Reporting	44
Grading System	63, 70
Graduate Class Schedules	5
Graduate Degrees Offerings	14-15
Graduate Degrees, Academic Information	68, 72
Graduation Requirements, Graduate	71
Residency	71
Unit and GPA Requirements	71
Graduation Requirements, Undergraduate	64-65
General Education Requirements	65
Major, Minor, and Concentration Requirements	65
Residency Requirement	64
Total Units	64
GPA Requirements	64
Upper Division Unit Requirement	64
Graduation with Honors	65, 72
Granting of Credit	19
Grievance Procedures	50
Guided Study	48

## H

Hearing Procedures	53
Hearing Rights	53
Honors	65, 72

## I

Incomplete Grades, Excessive	64, 71
Independent Study	48
Institutional Learning Outcomes	18
Institutional Review Board	49
Intersegmental General Education Transfer Curriculum (IGETC)	27, 34, 58, 65
International Baccalaureate (IB)	60, 61
International Students Support Services	28-29
Activity Fee	29
Admission	28
English Language Program (ELP)	28-29, 334
International English Language Testing System (IELTS)	28
Language Proficiency	28
Medical Insurance Requirement	29
Orientation	29
Prepayment and Refund Policy	42
TOEFL	28
Transcript Evaluation	28
Internet and Wireless Student Access	25
Internships	(see specific program information)

**L**

Leave of Absence .....	43
Library Resources .....	24
Library System .....	24
Borrowing Privileges and Fines .....	46
LVN “30 Unit” Option Certificate .....	277

**M**

## Majors (Undergraduate)

Accountancy .....	144
Allied Health .....	253
Biology .....	107
Biomedical Engineering Technology .....	227
Clinical Laboratory Science .....	254
Computer Science .....	228
Construction Engineering Technology .....	229
Construction Management .....	230
Criminal Justice Administration .....	287
Digital Journalism .....	285
Digital Media Design .....	226
Early Childhood Development with CA Preliminary Credential .....	170
Early Childhood Education .....	171
Electrical and Computer Engineering .....	231
Elementary Education (Nevada) .....	326
English .....	89
English with Single-Subject Matter Preparation .....	91
English with Preliminary Single Subject Credential .....	90, 173
Financial Management .....	145
General Studies .....	92
Global Studies .....	92
Health Sciences with a Preliminary Single Subject Credential (CA) .....	174, 252
Healthcare Administration .....	255
History .....	94
Homeland Security and Emergency Management .....	288
Hospitality and Casino Management .....	146
Information Systems .....	232
Information Technology Management .....	232
Integrated Marketing Communication .....	137
Interdisciplinary Studies .....	95
Interdisciplinary Studies with a CA Preliminary Multiple Subject Credential .....	95, 175
Management .....	138
Manufacturing Design Engineering .....	233
Mathematics .....	108
Mathematics Education (Nevada) .....	325
Mathematics with Preliminary Single Subject Credential .....	98, 176
Nursing (CA) .....	256-264
Organizational Behavior .....	109

Organizational Leadership .....	147
Paralegal Studies .....	289
Political Science .....	100
Pre-Law Studies .....	285
Psychology .....	101
Public Health .....	264
Radiation Therapy .....	265
Social Science w/Single Subject Teaching Cred (CA) .....	101, 177
Sociology .....	102
Spanish .....	104
Spanish w/Single Subject Teaching Credential (CA) .....	104, 179
Sport Psychology .....	105
Strategic Communication .....	106
Master of Accountancy (MAcc) .....	149
Master of Arts Degree Programs	
Applied Linguistics .....	113
Counseling Psychology (CA) .....	114
Counseling Psychology (NV) .....	321
Digital Journalism .....	291
Education .....	180
English .....	116
Film Studies .....	118
Gerontology .....	118
History .....	119
Human Behavior .....	121
Human Resource Management .....	150
Performance Psychology .....	121
Strategic Communication .....	122
Teaching .....	182
Master of Business Administration .....	151
Master of Criminal Justice .....	291
Master of Education	
with Nevada Elementary Licensure .....	327
with Nevada Secondary Licensure .....	329
With Preliminary Multiple or Single Subject Teaching Credential with Intern Option .....	186
Master of Fine Arts	
Creative Writing .....	122
Digital Cinema .....	292
Professional Screenwriting .....	294
Master of Forensic Sciences .....	124
Master of Global Management .....	155
Master of Healthcare Administration .....	267
Master of Public Administration .....	297
Master of Public Health .....	268
Master of Science Degree Programs	
Applied School Leadership .....	189
Biology .....	125
Clinical Affairs .....	269
Clinical Regulatory Affairs .....	270

Computer Science . . . . .	235	Pre-Law Studies . . . . .	290
Cyber Security and Information Assurance . . . . .	236	Psychology . . . . .	113
Data Analytics . . . . .	238	Sociology . . . . .	113
Educational Administration . . . . .	189	Technology . . . . .	235
Educational Counseling . . . . .	190	Mission Statement . . . . .	18
Educational and Instructional Technology . . . . .	191		
Engineering Management . . . . .	238	<b>N</b>	
Environmental Engineering . . . . .	240	National Board Certified Teacher Leadership Certificate . . . . .	209
Health Informatics . . . . .	271	National University Community Research Institute (NUCRI) . . . . .	19
Health and Life Science Analytics . . . . .	271	National University Golf Academy . . . . .	129
Higher Education Administration . . . . .	192	National University Language Institute . . . . .	333
Homeland Security and Safety Engineering Management . . . . .	241	Certificate and Course Offerings . . . . .	334
Innovative School Leadership . . . . .	193	Course Descriptions . . . . .	336
Instructional Leadership . . . . .	193	English Language Programs . . . . .	334
Juvenile Justice . . . . .	298	National University Polytechnic Institute . . . . .	308
Management Information Systems . . . . .	156, 242	Native American, Aid . . . . .	36
Mathematics for Educators . . . . .	125	Nevada Programs . . . . .	16, 319
Nurse Anesthesia . . . . .	272	Non-Degree Students . . . . .	44
Nursing . . . . .	274	Nursing Programs Information . . . . .	256
Organizational Leadership . . . . .	157		
School Psychology . . . . .	194	<b>O</b>	
Special Education . . . . .	195	Online Information Centers . . . . .	18, 24
Special Education (with Nevada Licensure) . . . . .	330	Online Student Code of Conduct . . . . .	52
Sustainability Management . . . . .	158, 243	Online Technical Requirements . . . . .	24
Wireless Communications . . . . .	243		
Mathematics and English Evaluation . . . . .	57	<b>P</b>	
Mathematics Placement . . . . .	57	Payments and Release of Records . . . . .	20
Mathematics Tutoring . . . . .	24	Plagiarism . . . . .	51
Memorial Degree . . . . .	64	Policies and Procedures . . . . .	41-54
Military Community and Campuses . . . . .	7, 20	Practicums, Internships and Residencies . . . . .	48
Military Education Credit . . . . .	59	Prefix/Subject Area by School . . . . .	340
Military Tuition Assistance . . . . .	36	Private Lenders . . . . .	36
Minor Programs		Probation . . . . .	52
Accountancy . . . . .	147	Professional Development and Seminars . . . . .	21
Alternative Dispute Resolution . . . . .	290	Promising Scholar Award . . . . .	34
Business Administration . . . . .	148	Provisional Acceptance . . . . .	56, 69
Business Law . . . . .	290		
Business Studies . . . . .	148	<b>Q</b>	
Computer Science . . . . .	234	Qualifications, Undergraduate and Graduate . . . . .	56, 68
Creative Writing . . . . .	111		
Criminal Justice Administration . . . . .	290	<b>R</b>	
Economics . . . . .	148	Readmission Procedures . . . . .	57, 69
English . . . . .	112	Refund Policy . . . . .	42
Global Studies . . . . .	112	Refund Policy for Nevada Onsite Only . . . . .	320
History . . . . .	112	Reinstatement . . . . .	71
Information Technology Management . . . . .	235	Repetition of Courses . . . . .	62, 70
Journalism . . . . .	290	ROTC . . . . .	45
Mathematics . . . . .	112		
Political Science . . . . .	112		

**S**

Safety Program	20
Satisfactory Academic Progress	64, 70
Scholarship Programs	33-34
Collegiate Honor Award	33
Community Scholarship	34
Externally Funded Scholarships	34
Military Tuition Scholarship	34
Presidential Tuition Scholarship	33
Promising Scholar Award	34
Transfer to Triumph Scholarship	34
University Scholarships and Grants	33
Scholarship Rules and Policies	34
Second Degree from National University	64, 71
Security	21
Servicemembers Opportunity College Agreement (SOC)	61
School of Business and Management	131
Degree Programs Offered	132
School of Education	163
Degree Programs Offered	164
School of Engineering, Technology and Media	221
Degree Programs Offered	222
School of Health and Human Services	247
Degree Programs Offered	248
School of Professional Studies	281
Degree Programs Offered	282
Single Subject Matter Authorization (Mathematics)	127
Smoking Policy	45
SOAR Student Portal	25
Social Security Number, use of	56, 68
Sources of Credit	57
State Regulatory Information	19
Student Concierge Services	25
Student Discipline	52
Appellate Procedures	53
Hearing Procedures	53
Hearing Rights	53
Reasons for Probation, Suspension, and Dismissal	52
Student Records	44
Student Relations Coordinator	26
Student Support Services	23-29
Students with Disabilities	25
Suspension	52

**T**

Transfer Credit, Undergraduate	57
Teaching Performance Assessment (TPA)	218
Testing Services	27

## Transcript Request

Issuance	44
Other Institution	57
Transfer to Triumph	27, 34, 58
Transition Program Information	44
Tuition Fees	20

**U**

Undergraduate Class Schedules	4
Undergraduate Degree Offerings	14
Undergraduate Degrees, Academic Information	56-66
Unit Transfer Limit (Graduate)	69
University Administration	11-12
University Departments	9

**V**

V.A. Educational Benefits	34
Chapter 30 (New G.I. Bill)	35
Chapter 31 (Vocational Rehabilitation)	35
Chapter 32 (VEAP)	34
Chapter 33 (Post 9/11)	35
Chapter 34 (G.I. Bill)	35
Chapter 35 (Dependents Benefits)	35
Chapter 1606	35
Chapter 1607	35
Visitors	45
Vocational Rehabilitation (Chapter 31)	35

**W**

Withdrawal from the University	44
Writing Across the Curriculum	24
Writing Centers	25

**Y**

Yellow Ribbon Program	35
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