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2007

General Catalog

Volume 70

September 2006

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Volume 70, Published September 2006

The University of Values



A Message from Chancellor Lee

Dear Student,

On behalf of the Board of Trustees, staff, faculty, alumni and your fellow students, I am pleased to welcome you to National University.

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. That commitment to our students has made National University the second-largest, private, nonprofit, institution of higher learning in California.

National University is unique because of its intensive one-course-per-month format and flexible online degree programs which enable students to complete graduate and undergraduate programs in an accelerated time frame while maintaining family and work responsibilities.

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 at National University 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 eBooks in the United States. National University offers more than 35 online programs, allowing students locally, nationally, and globally to pursue a broad range of degrees and credentials.

National University is proud of what it has accomplished in the past 35 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.

Sincerely,



Jerry C. Lee



Jerry C. Lee

Chancellor
National University System

President
National University

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, 2006

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Vice Chancellor, Business Development

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Associate Regional Dean, Online

Mahvash Yadegarpour, Ed.D.
Associate Regional Dean, Los Angeles and Sherman Oaks

Calendar and Class Schedules

Fall 2006

Fall Quarter Begins: Monday, September 25
Thanksgiving: Thursday, November 23 and Friday, November 24
Fall Quarter Ends: Saturday, December 16

Winter 2007

Winter Quarter Begins: Monday, January 8
Martin Luther King's Birthday: Monday, January 15
President's Day: Monday, February 19
Winter Quarter Ends: Saturday, March 31

Spring 2007

Spring Quarter Begins: Monday, April 9
Memorial Day: Monday, May 28
Spring Quarter Ends: Saturday, June 30

Summer 2007

Summer Quarter Begins: Monday, July 9
Labor Day: Monday, September 3
Summer Quarter Ends: Saturday, September 29

Fall 2007

Fall Quarter Begins: Monday, October 1
Thanksgiving: Thursday, November 22 and Friday, November 23
Fall Quarter Ends: Saturday, December 22

Winter 2008

Winter Quarter Begins: Monday, January 7
Martin Luther King's Birthday: Monday, January 21
President's Day: Monday, February 18
Winter Quarter Ends: Saturday, March 29

Spring 2008

Spring Quarter Begins: Monday, April 7
Memorial Day: Monday, May 26
Spring Quarter Ends: Saturday, June 28

Summer 2008

Summer Quarter Begins: Monday, July 7
Labor Day: Monday, September 1
Summer Quarter Ends: Saturday, September 1

Fall 2008

Fall Quarter Begins: Monday, September 29
Thanksgiving: Thursday, November 27 and Friday, November 28
Fall Quarter Ends: Saturday, December 20

Winter 2009

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

Spring 2009

Spring Quarter Begins: Monday, April 6
Memorial Day: Monday, May 25
Spring Quarter Ends: Saturday, June 27

Summer 2009

Summer Quarter Begins: Monday, July 6
Labor Day: Monday, September 7
Summer Quarter Ends: Saturday, September 26

Fall 2009

Fall Quarter Begins: Monday, September 28
Thanksgiving: Thursday, November 26 and Friday, November 27
Fall Quarter Ends: Saturday, December 19

Winter 2008

Winter Quarter Begins: Monday, January 7
Martin Luther King's Birthday - Monday, January 21
President's Day - Monday, February 18
Winter Quarter Ends: Saturday, March 29

Spring 2008

Spring Quarter Begins: Monday, April 7
Memorial Day - Monday, May 26
Spring Quarter Ends: Saturday, June 28

Summer 2008

Summer Quarter Begins: Monday, July 7
Labor Day - Monday, September 1
Summer Quarter Ends: Saturday, September 27

Fall 2008

Fall Quarter Begins: Monday, September 29
Thanksgiving - Thursday, November 27 & Friday, November 28
Fall Quarter Ends: Saturday, December 20

Winter 2009

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

Spring 2009

Spring Quarter Begins: Monday, April 6
Memorial Day - Monday, May 25
Spring Quarter Ends: Saturday, June 27

Summer 2009

Summer Quarter Begins: Monday, July 6
Labor Day - Monday, September 7
Summer Quarter Ends: Saturday, September 26

Fall 2009

Fall Quarter Begins: Monday, September 28
Thanksgiving - Thursday, November 26 and Friday, November 27
Fall Quarter Ends: Saturday, December 19

Class Calendar at a Glance

○ denotes starting dates of classes.

□ denotes national holiday. The University will be closed on this day.

September 2006						
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 2006						
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 2006						
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 2006						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2007						
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 2008						
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 2008						
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	

Onsite Undergraduate Class Schedule

Onsite Undergraduate Classes (4.5 quarter units, 45 contact hours)

Online classes follow the same beginning date as onsite classes. 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 10:00 p.m. Undergraduate students generally attend two Saturday sessions from 8:00 a.m. to 12:30 p.m. or 1:00 p.m. to 5:30 p.m. Graduate students meet for a final session on the last Saturday of the 4-week term, either from 8:30 a.m. to 12:30 p.m. or 1:00 p.m. to 5:00 p.m.

Undergraduate day classes are held either Monday and Wednesday or Tuesday and Thursday from 9:00 a.m. to 2:30 p.m.

Eight-week class schedules are listed in SOAR.

Weekday	Time	Saturday Schedule
Monday/Wednesday (8 sessions)	5:30 p.m.-10:00 p.m.	8:00 a.m.-12:30 p.m. or 1:00 p.m.-5:30 p.m.; Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.
Tuesday/Thursday (8 sessions)	5:30 p.m.-10:00 p.m.	8:00 a.m.-12:30 p.m. or 1:00 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 Monday/Wednesday

Fall 2006

September 25, 27, October 2, 4, 7(8:00-12:30), 9, 11, 16, 18, 21(1:00-5:30)
October 23, 25, 30, November 1, 6, 8, 11(8:00-12:30), 13, 15, 18(8:00-12:30)
November 20, 22, 27, 29, December 2(8:00-12:30), 4, 6, 11, 13, 16(1:00-5:30)

Winter 2007

January 8, 10, 17, 20(1 - 5:30), 22, 24, 27(8 - 12:30), 29, 31, February 3(8-12:30)
February 5, 7, 10(8-12:30), 12, 14, 21, 24(1-5:30), 26, 28, March 3(1-5:30)
March 5, 7, 12, 14, 19, 21, 24(8-12:30), 26, 28, 31(8-12:30)

Spring 2007

April 9, 11, 16, 18, 21(8-12:30), 23, 25, 30, May 2, 5(1-5:30)
May 7, 9, 12(8-12:30), 14, 16, 19(1-5:30), 21, 23, 30, June 2(8-12:30)
June 4, 6, 11, 13, 16(8-12:30), 18, 20, 25, 27, 30(1-5:30)

Summer 2007

July 9, 11, 16, 18, 23, 25, 28(8-12:30), 30, August 1, 4(8-12:30)
August 6, 8, 13, 15, 18(8-12:30), 20, 22, 27, 29, September 1(1-5:30)
September 5, 8(8-12:30), 10, 12, 17, 19, 22(8-12:30), 24, 26, 29(8-12:30)

Fall 2007

October 1, 3, 8, 10, 13(8-12:30), 15, 17, 22, 24, 27(1-5:30)
October 29, 31, November 5, 7, 12, 14, 17(8-12:30), 19, 21, 24(8-12:30)
November 26, 28, December 3, 5, 8(8-12:30), 10, 12, 17, 19, 22(1-5:30)

Winter 2008

January 7, 9, 12(8-12:30), 14, 16, 23, 26(8 - 12:30), 28, 30, February 2(8-12:30)
February 4, 6, 9(8-12:30), 11, 13, 20, 23(1-5:30), 25, 27, March 1(1-5:30)
March 3, 5, 10, 12, 17, 19, 22(8-12:30), 24, 26, 29(8-12:30)

Spring 2008

April 7, 9, 14, 16, 19(8-12:30), 21, 23, 28, 30, May 3(1-5:30)
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)

Summer 2008

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(8-12:30), 22, 24, 27(8-12:30)

Fall 2008

September 29, October 1, 6, 8, 11(8-12:30), 13, 15, 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)

Onsite Undergraduate Class Schedule Tuesday/Thursday

Fall 2006

September 26, 28, October 3, 5, 10, 12, 14(8:00-12:30), 17, 19, 21(8:00-12:30)
October 24, 26, 31, November 2, 4(8:00-12:30), 7, 9, 14, 16, 18(1:00-5:30)
November 21, 28, 30, December 2(1:00-5:30), 5, 7, 9(8:00-12:30), 12, 14, 16(8:00-12:30)

Winter 2007

January 9, 11, 16, 18, 20(8-12:30), 23, 25, 30, February 1, 3(1-5:30)
February 6, 8, 13, 15, 20, 22, 24(8-12:30), 27, March 1, 3(8-12:30)
March 6, 8, 13, 15, 17(8-12:30), 20, 22, 27, 29, 31(1-5:30)

Spring 2007

April 10, 12, 17, 19, 24, 26, 28(8-12:30), May 1, 3, 5(8-12:30)
May 8, 10, 15, 17, 19(8-12:30), 22, 24, 29, 31, June 2(1-5:30)
June 5, 7, 12, 14, 19, 21, 23(8-12:30), 26, 28, 30(8-12:30)

Summer 2007

July 10, 12, 17, 19, 21(8-12:30), 24, 26, 31, August 2, 4(1-5:30)
August 7, 9, 14, 16, 21, 23, 25(8-12:30), 28, 30, September 1(8-12:30)
September 4, 6, 11, 13, 15(8-12:30), 18, 20, 25, 27, 29(1-5:30)

Fall 2007

October 2, 4, 9, 11, 16, 18, 20(8-12:30), 23, 25, 27(8-12:30)
October 30, November 1, 3(8-12:30), 6, 8, 10(8-12:30), 13, 15, 20, 24(1-5:30)
November 27, 29, December 4, 6, 11, 13, 15(8-12:30), 18, 20, 22(8-12:30)

Winter 2008

January 8, 10, 15, 17, 22, 24, 26(1-5:30), 29, 31, February 2(1-5:30)
February 5, 7, 12, 14, 19, 21, 23(8-12:30), 26, 28, March 1(8-12:30)
March 4, 6, 11, 13, 15(8-12:30), 18, 20, 25, 27, 29(1-5:30)

Spring 2008

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)

Summer 2008

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, 13(8-12:30), 16, 18, 23, 25, 27(1-5:30)

Fall 2008

September 30, October 2, 7, 9, 14, 16, 18(8-12:30), 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)

Onsite Graduate Class Schedule

Onsite Graduate Classes (4.5 quarter units, 40 contact hours)

Online classes follow the same beginning date as onsite classes. Ending dates vary by program.

Weekday	Time	Saturday Schedule
Monday/Wednesday (8 sessions)	5:30 p.m.-10:00 p.m.	8:30 a.m.-12:30 p.m. or 1:00 p.m.-5:00 p.m.; Normally one Saturday, two Saturdays if weekday holiday makes it necessary.
Tuesday/Thursday (8 sessions)	5:30 p.m.-10:00 p.m.	8:30 a.m.-12:30 p.m. or 1:00 p.m.-5:00 p.m.; Normally one Saturday, two Saturdays if weekday holiday makes it necessary.

24 month calendar follows:

Onsite Graduate Class Schedule Monday/Wednesday

Fall 2006

September 25, 27, October 2, 4, 9, 11, 16, 18, 21(1:00-5:00)
October 23, 25, 30, November 1, 6, 8, 13, 15, 18(8:30-12:30)
November 20, 22, 27, 29, December 4, 6, 11, 13, 16(1:00-5:00)

Winter 2007

January 8, 10, 17, 22, 24, 27(8-12:30), 29, 31, February 3(8:30-12:30)
February 5, 7, 10(8-12:30), 12, 14, 21, 26, 28, March 3(1-5:00)
March 5, 7, 12, 14, 19, 21, 26, 28, 31(8:30-12:30)

Spring 2007

April 9, 11, 16, 18, 23, 25, 30, May 2, 5(1-5:00)
May 7, 9, 12(8-12:30), 14, 16, 21, 23, 30, June 2(8:30-12:30)
June 4, 6, 11, 13, 18, 20, 25, 27, 30(1-5:00)

Summer 2007

July 9, 11, 16, 18, 23, 25, 30, August 1, 4(8:30-12:30)
August 6, 8, 13, 15, 20, 22, 27, 29, September 1(1-5:00)
September 5, 8(8-12:30), 10, 12, 17, 19, 24, 26, 29(8:30-12:30)

Fall 2007

October 1, 3, 8, 10, 15, 17, 22, 24, 27(1-5:00)
October 29, 31, November 5, 7, 12, 14, 19, 21, 24(8:30-12:30)
November 26, 28, December 3, 5, 10, 12, 17, 19, 22(1-5:00)

Winter 2008

January 7, 9, 12(8-12:30), 14, 16, 23, 28, 30, February 2(8-12:30)
February 4, 6, 9(8-12:30), 11, 13, 20, 25, 27, March 1(1-5:30)
March 3, 5, 10, 12, 17, 19, 24, 26, 29(8-12:30)

Spring 2008

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

Summer 2008

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

Fall 2008

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

Onsite Graduate Class Schedule Tuesday/Thursday

Fall 2006

September 26, 28, October 3, 5, 10, 12, 17, 19, 21(8:30-12:30)
October 24, 26, 31, November 2, 7, 9, 14, 16, 18(1:00-5:00)
November 21, 28, 30, December 5, 7, 9(8:00-12:30), 12, 14, 16(8:30-12:30)

Winter 2007

January 9, 11, 16, 18, 23, 25, 30, February 1, 3(1-5:00)
February 6, 8, 13, 15, 20, 22, 27, March 1, 3(8:30-12:30)
March 6, 8, 13, 15, 20, 22, 27, 29, 31(1-5:00)

Spring 2007

April 10, 12, 17, 19, 24, 26, May 1, 3, 5(8:30-12:30)
May 8, 10, 15, 17, 22, 24, 29, 31, June 2(1-5:00)
June 5, 7, 12, 14, 19, 21, 26, 28, 30(8:30-12:30)

Summer 2007

July 10, 12, 17, 19, 24, 26, 31, August 2, 4(1-5:00)
August 7, 9, 14, 16, 21, 23, 28, 30, September 1(8:30-12:30)
September 4, 6, 11, 13, 18, 20, 25, 27, 29(1-5:00)

Fall 2007

October 2, 4, 9, 11, 16, 18, 23, 25, 27(8:30-12:30)
October 30, November 1, 6, 8, 10(8-12:30), 13, 15, 20, 24(1-5:00)
November 27, 29, December 4, 6, 11, 13, 18, 20, 22(8:30-12:30)

Winter 2008

January 8, 10, 15, 17, 22, 24, 29, 31, February 2(1-5:30)
February 5, 7, 12, 14, 19, 21, 26, 28, March 1(8-12:30)
March 4, 6, 11, 13, 18, 20, 25, 27, 29(1-5:30)

Spring 2008

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

Summer 2008

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

Fall 2008

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

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Headquartered in San Diego, National University has 28 campuses throughout California and Nevada and an admissions office in Hawaii.

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Camp Pendleton, CA 92055-5020
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Marine Air Ground Task Force
Training Center
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Twentynine Palms, CA 92278-1118
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GL Naval Base Bremerton
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Building 853, Room 106
Bremerton, WA 98314
(360) 476-8428

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OT Ontario Campus
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Ontario, CA 91764-5904
(909) 919-7600

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(714) 429-5100

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Fresno, CA 93720-1551
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San Jose, CA 95128-2541
(408) 236-1100

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SQ Stockton Campus
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(209) 475-1400

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ST Sacramento Campus
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Sacramento, CA 95826-2558
(916) 855-4100

SHASTA COUNTY

SR Redding Campus
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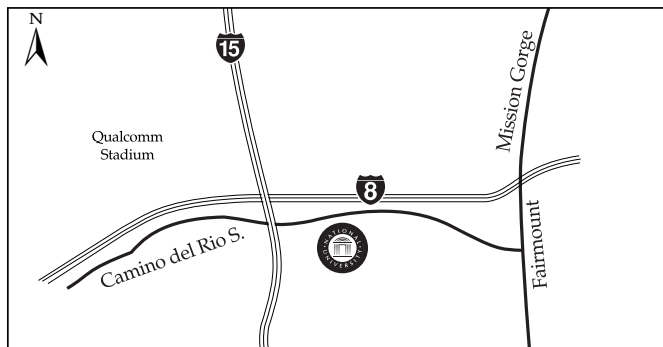
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HI Hawaii Admissions Office
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Honolulu, HI 96813-5021
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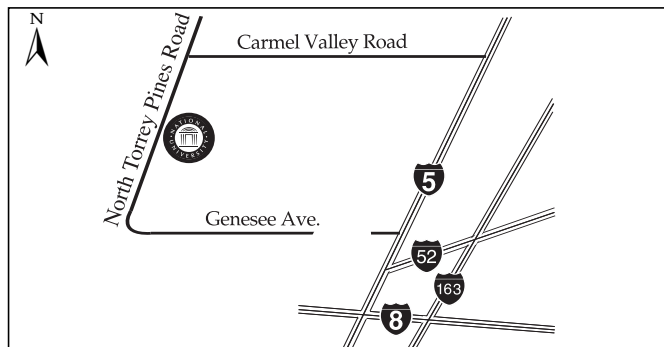
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GN National University Nevada
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(702) 531-7800

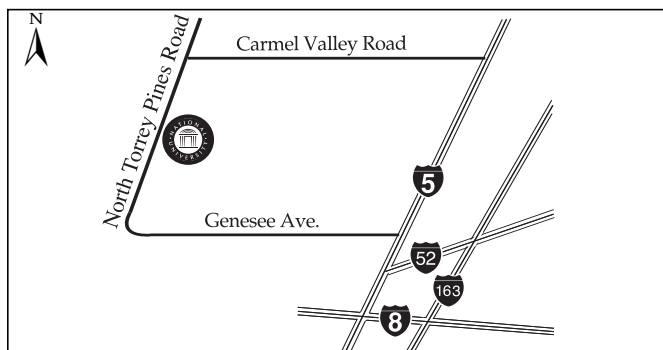
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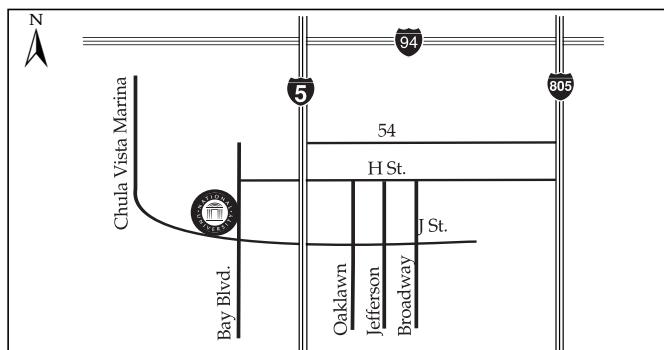
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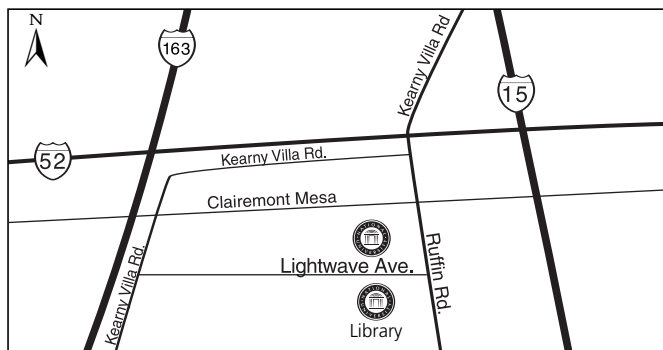
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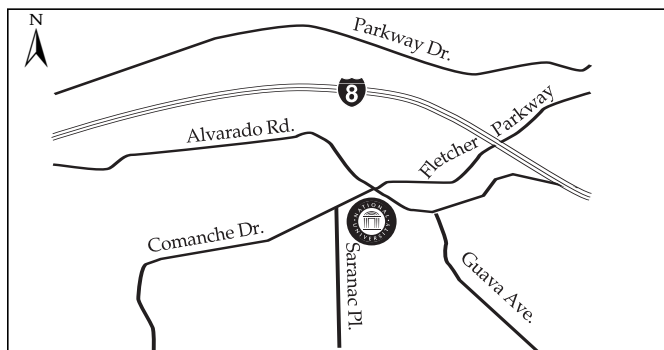


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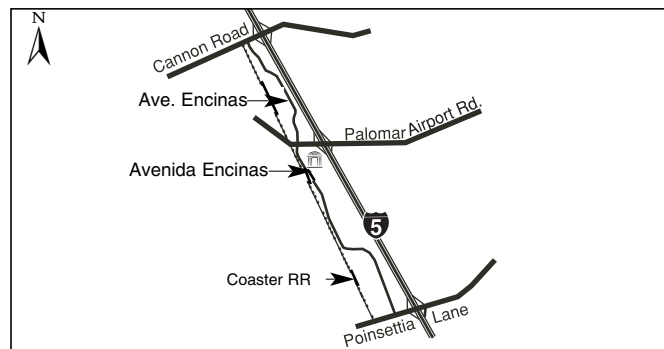
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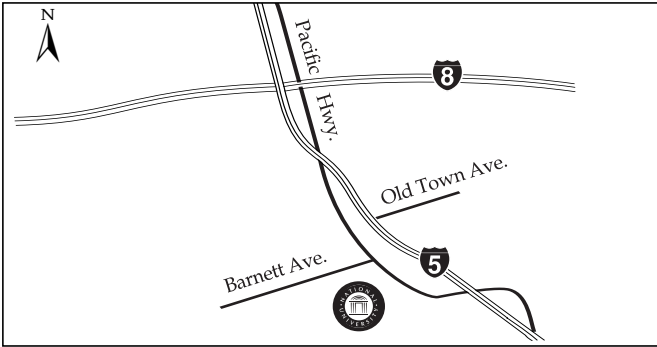


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San Diego, CA 92127-1675
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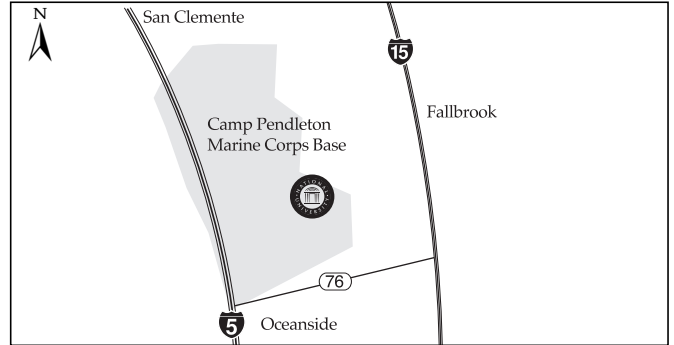


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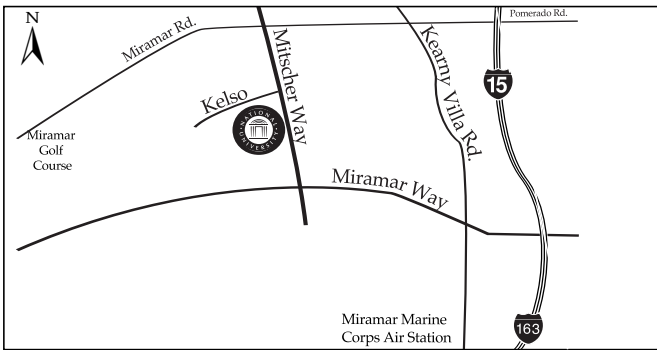
Location Maps



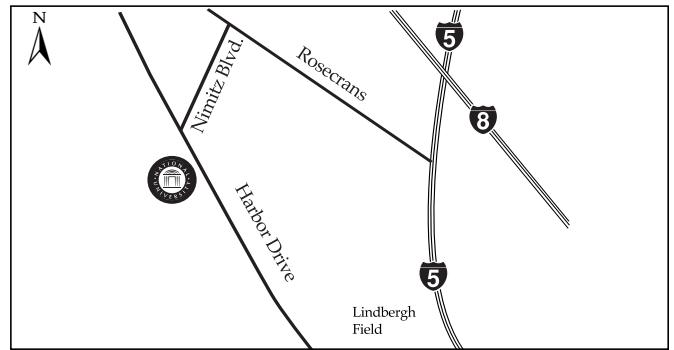
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(619) 563-7482



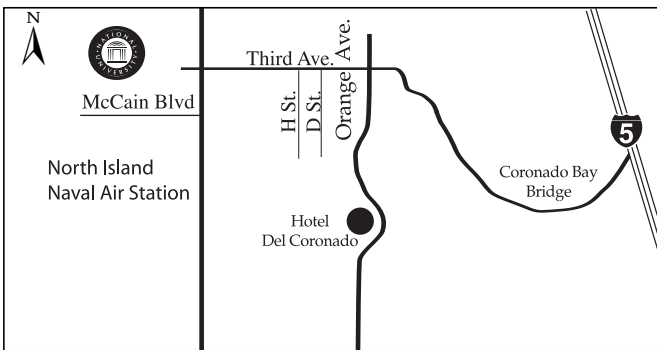
VV Marine Corps Base Camp Pendleton Learning Center
Building 1331
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(760) 268-1533



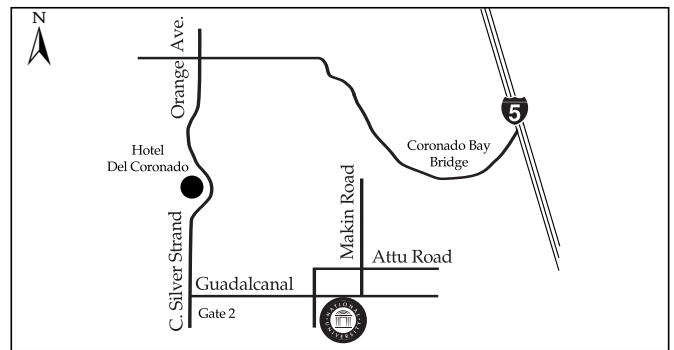
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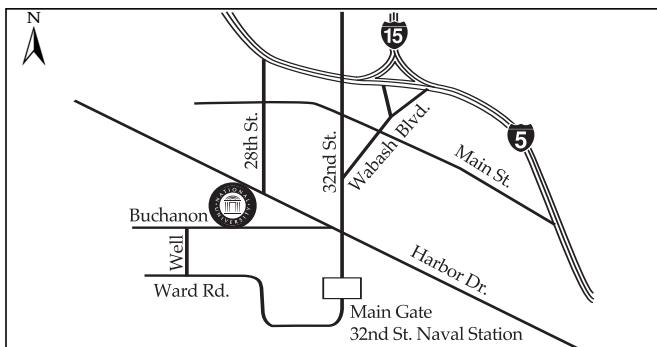
V6 Fleet AntiSubmarine Warfare Training Learning Center
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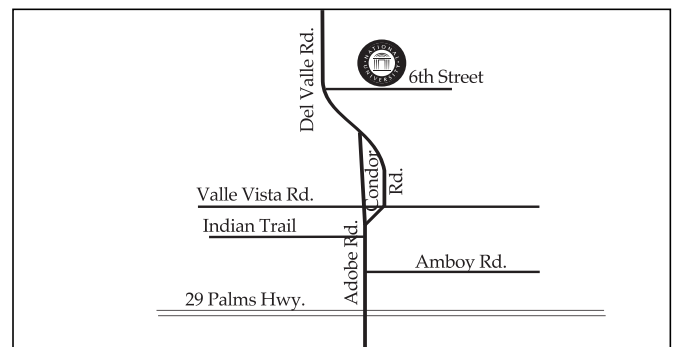
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E-mail: registrar@nu.edu

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Dominick Giovannello
Associate Regional Dean,
San Diego
M.A., National University
9388 Lightwave Avenue
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(858) 541-7701

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Naval Air Station North Island
Building 650
San Diego, CA 92135-7024
(619) 563-7478

Naval Base San Diego Learning Center
Building 151
San Diego, CA 92136-5000
(619) 563-7474

Fleet AntiSubmarine Warfare Training Center Learning Center
Building 7
San Diego, CA 92147-5090
(619) 563-7488

Naval Amphibious Base Coronado Learning Center
Building 650
San Diego, CA 92155-5000
(619) 563-7492

Marine Corps Recruit Depot Learning Center
Building 111
San Diego, CA 92140-5000
(619) 563-7482

Naval Submarine Base Admissions Office
Building 138, 140 Sylvester Road
San Diego, CA 92106-3521
(619) 563-7490

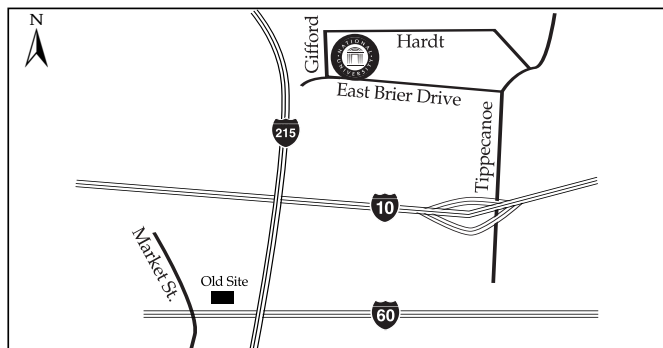
Naval Hospital Admissions Office
Building 26, Room 115
San Diego, CA 92134-5000
(619) 563-7470

Marine Corps Base Camp Pendleton Learning Center
Building 1331
Camp Pendleton, CA 92055-5020
(760) 268-1533

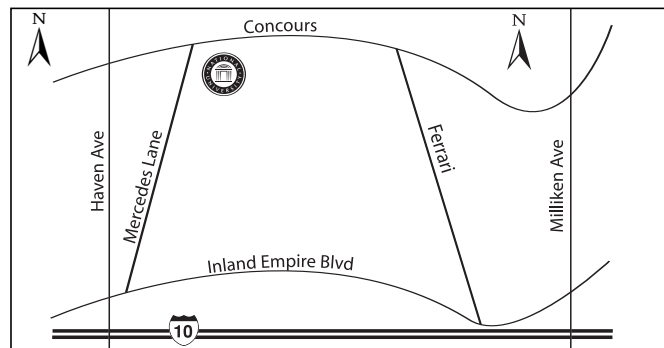
Twentynine Palms Center Marine Air Ground Task Force Learning Center
Building 1526, P.O. Box 6051
Twentynine Palms, CA 92278-1118
(760) 830-6887

Naval Base Bremerton Admissions Office
2255 Cole Avenue
Building 853, Room 106
Bremerton, WA 98314
(360) 476-8428

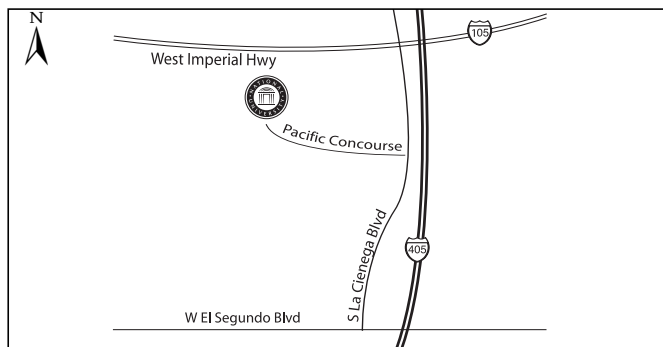
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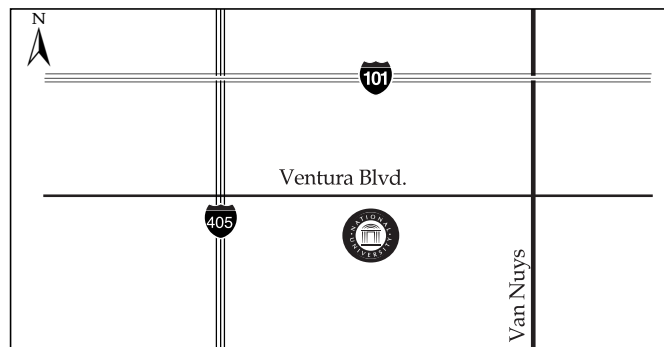
OS San Bernardino Campus
804 East Brier Drive
San Bernardino, CA 92408-2815
(909) 806-3300



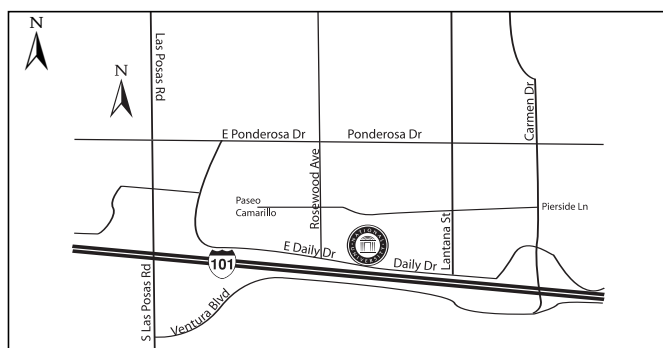
OT Ontario Campus
3800 Concours, Suite 150
Ontario, CA 91764-5904
(909) 919-7600



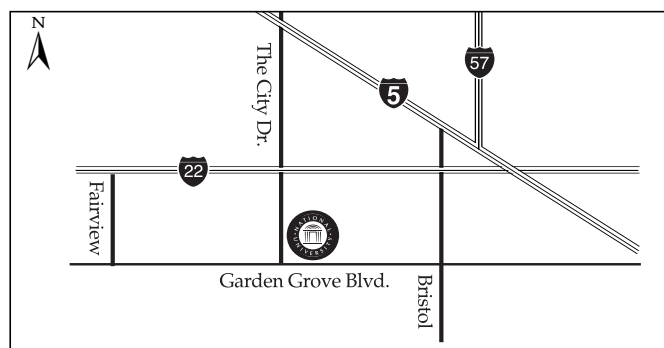
LA Los Angeles Campus
5245 Pacific Concourse Drive, Suite 100
Los Angeles, CA 90045-6905
(310) 662-2100



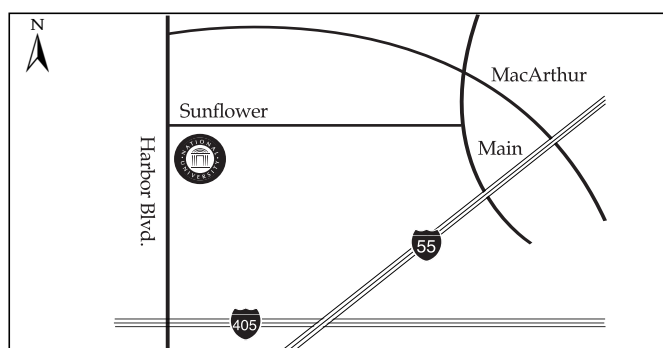
L5 San Fernando Campus
14724 Ventura Boulevard, Suite 801
Sherman Oaks, CA 91403-3501
(818) 817-2460



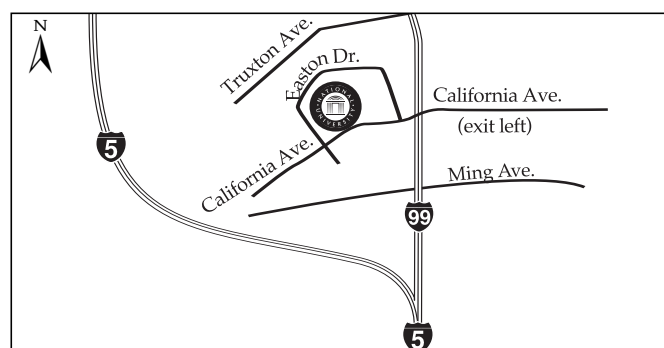
CV Camarillo Campus
761 East Daily Drive, Suite 120
Camarillo, CA 93010-0767
(805) 437-3000



OB Orange Campus
765 The City Drive South, Suite 207
Orange, CA 92868-4942
(714) 429-5300

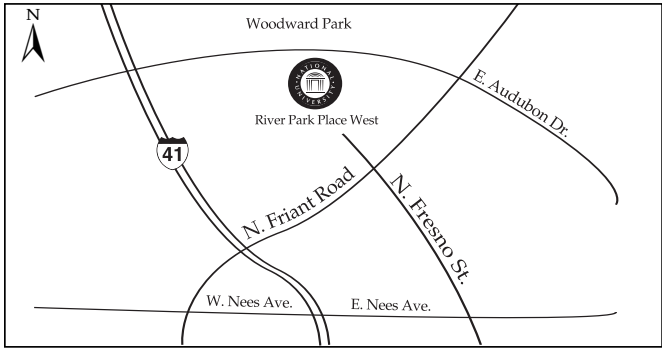


OP Costa Mesa Campus
3390 Harbor Boulevard
Costa Mesa, CA 92626-1502
(714) 429-5100

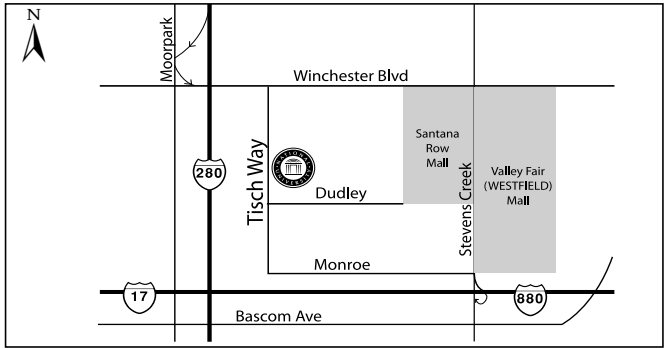


KERN COUNTY
FK Bakersfield Campus
4560 California Avenue, Suite 300
Bakersfield, CA 93309-1150
(661) 864-2360

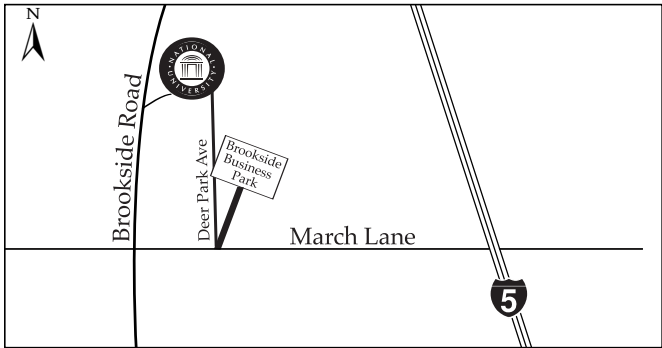
Location Maps



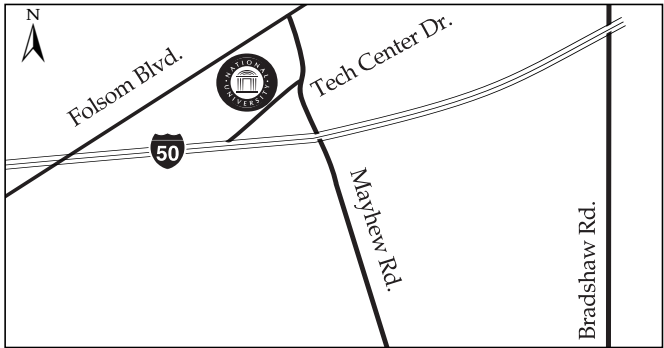
FS Fresno Campus
 20 River Park Place West
 Fresno, CA 93720-1551
 (559) 256-4900



JS San Jose Campus
 3031 Tisch Way, 100 Plaza East
 San Jose, CA 95128-2541
 (408) 236-1100



SQ Stockton Campus
 3520 Brookside Road
 Stockton, CA 95219-2319
 (209) 475-1400



ST Sacramento Campus
 9320 Tech Center Drive
 Sacramento, CA 95826-2558
 (916) 855-4100



SR Redding Campus
 2195 Larkspur Lane, Suite 200
 Redding, CA 96002-0629
 (530) 226-4000



GN National University Nevada
 2850 West Horizon Ridge Parkway, Suite 301
 Henderson, NV 89052-4395
 (702) 531-7800

Southern California Administration

David Waller
Associate Regional Dean
M.A. in Counseling Psychology
National University

Costa Mesa Campus
3390 Harbor Boulevard
Costa Mesa, CA 92626-1502
(714) 429-5100 • Fax: (714) 429-5396

Academic Department
(714) 429-5102
Fax: (714) 429-5397
Admissions
(714) 429-5100
Fax: (714) 429-5220
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(714) 429-5171
College of Letters and Sciences
(714) 429-5100
Fax: (714) 429-5176
Computer Lab
(714) 429-5122
Conference Facilities
(714) 429-5280
Credential Advisor
(714) 429-5403
Educational Services
(714) 429-5280
Financial Aid
(714) 429-5175
Library Information Center
(714) 429-5180
Fax: (714) 429-5399
School of Business and Management
(714) 429-5100
Fax: (714) 429-5397
School of Education
(714) 429-5100
Fax: (714) 429-5397
School of Engineering and Technology
(714) 429-5100
Fax: (714) 429-5397
School of Health and Human Services
(714) 429-5100
Fax: (714) 429-5397
School of Media and Communication
(714) 429-5100
Fax: (714) 429-5397

Orange Campus
765 The City Drive South
Orange, CA 92868-4942
(714) 429-5300 • Fax: (714) 429-5307

Admissions
(714) 429-5300
Fax: (714) 429-5307
Bookstore (National University TextDirect)
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E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(714) 429-5308
Financial Aid
(714) 429-5303

Mark Redfern
Associate Regional Dean
M.B.A., National University

Camarillo Campus
761 East Daily Drive, Suite 120
Camarillo, CA 93010-0767
(805) 437-3000 • Fax: (805) 437-3096

Bookstore (National University TextDirect)
1 (866) 243-0077
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Website: www.nutextdirect.com

Mahvash Yadegarpour
Associate Regional Dean
Ed.D., University of La Verne

Los Angeles Campus
Los Angeles Campus
5245 Pacific Concourse Drive
Los Angeles, CA 90045
(310) 662-2101 • Fax: (310) 662-2098

Academic Department
(310) 662-2102
Administration
(310) 662-2000
Admissions
(310) 662-2000
Fax: (310) 662-2095
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(310) 662-2030, 2031, 2032, 2033,
College of Letters and Sciences
(310) 662-2000
Fax: (310) 662-2110
Conference Facilities
(310) 662-2060
Credential Advisor
(310) 662-2052, 2053, 2054, 2050
Financial Aid
(310) 662-2021, 2022
Library Information Center
(310) 662-2180
Fax: (310) 662-2097
School of Business and Management
(310) 662-2000
Fax: (310) 662-2110
School of Education
(310) 662-2000
Fax: (310) 662-2110

San Fernando Valley Campus
14724 Ventura Boulevard, Suite 801
Sherman Oaks, CA 91403-3501
(818) 817-2460
Fax: (818) 817-2468

Admissions
(818) 817-2460
Fax: (818) 817-2468
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com

Melissa Bellinger
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M.B.A., National University

Bakersfield Campus
4560 California Avenue, Suite 300
Bakersfield, CA 93309-1150
(661) 864-2360 • Fax: (661) 864-2368

Administration
(661) 864-2363
Admissions
(661) 864-2360
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
661-864-2371
College of Letters and Sciences
(661) 864-2381
Conference Facilities
(661) 864-2360
Credential Advisor
(661) 864-2370
Financial Aid
(661) 864-2371
School of Education
(661) 864-2383

Olivia Horton
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M.A. in Human Behavior
National University

San Bernardino Campus
804 East Brier Drive
San Bernardino, CA 92408-2815
(909) 806-3300 • Fax: (909) 806-3341

Admissions
(909) 806-3300
Fax: (909) 806-3398
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(909) 806-3310
Credential Advisor
(909) 806-3332
Fax: (909) 806-3398
Financial Aid
(909) 806-3375
Library Information Center
(909) 806-3381
Fax: (909) 806-3380
College of Letters and Sciences
(909) 806-3334
School of Business and Management
(909) 806-3343
School of Education
(909) 806-3335

Ontario Campus
3800 Concourse Drive, Suite 150
Ontario, CA 91764-5904
(909) 919-7600 • Fax: (909) 919-7698

Admissions
(909) 919-7600
Fax: (909) 919-7698
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(909) 919-7622
Credential Advisor
(909) 806-3332
Fax: (909) 806-3398
Financial Aid
(909) 919-7622
Fax: (909) 806-3380
College of Letters and Sciences
(909) 919-7633
School of Business and Management
(909) 919-7631
School of Education
(909) 919-7632

Northern California, Nevada Administration

Mary Emery-Sherman
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National University

Sacramento Campus
9320 Tech Center Drive
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Academic Department
(916) 855-4309
Fax: (916) 855-4398
Admissions
(916) 855-4100
Fax: (916) 855-4295
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(916) 855-4161
Fax: (916) 855-4395
Cafeteria
(916) 855-4285
Conference Facilities
(916) 855-4131
Educational Services
(916) 855-4131
College of Letters and Sciences
(916) 855-4309
Copy/Postal Services
(916) 855-4195
Credential Advisor
(916) 855-4304 and 4307
Financial Aid
(916) 855-4175 and 4176
Library Information Center
(916) 855-4180
Fax: (916) 855-4396
School of Business and Management
(916) 855-4309
School of Education
(916) 855-4309
Student Teaching Placement
(916) 855-4305

Robert Bechill
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M.S. in Management
Naval Postgraduate School

Stockton Campus
3520 Brookside Road
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(209) 475-1400
Fax: (209) 475-1498
Bookstore (National University TextDirect)
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E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(209) 475-1410
Credential Advisor
(209) 475-1431

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National University

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20 River Park Place West
Fresno, CA 93720-1551
(559) 256-4900 • Fax: (559) 256-4992

Academic Department
(559) 256-4930
Fax: (559) 256-4996
Administrative Services
(559) 256-4910
Admissions
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Fax: (559) 256-4992
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(559) 256-4913
Fax: (559) 256-4993
College of Letters and Sciences
(559) 256-4934
Conference Facilities
(559) 256-4954
Credential Advisor
(559) 256-4932
Financial Aid
(559) 256-4929
Library Information Center
(559) 256-4951
School of Business and Management
(559) 256-4934
School of Education
(559) 256-4934

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3031 Tisch Way, 100 Plaza East
San Jose, CA 95128-2541
(408) 236-1100 • Fax: (408) 236-1196

Academic Department
(408) 236-1130
Fax: (408) 236-1195
Administration
(408) 236-1101
Fax: (408) 236-1196
Admissions
(408) 236-1100
Fax: (408) 236-1196
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(408) 236-1124
Fax: (408) 236-1197
College of Letters and Sciences
(408) 236-1137
Credential Advisor
(408) 236-1117, 1140
Financial Aid
(408) 236-1121
Library Information Center
(408) 236-1180
School of Business and Management
(408) 236-1138
School of Education
(408) 236-1131
Student Teaching/Placement Coordinator
(408) 236-1118

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M.S., Management
Minot State University

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2195 Larkspur Lane, Suite 200
Redding, CA 96002-0629
(530) 226-4000 • Fax: (530) 226-4040

Admissions
(530) 226-4000
Administration
(530) 226-4001
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Student Accounts
(530) 226-4011
College of Letters and Sciences
(530) 226-4003
Credential Advisor
(530) 226-4008
Financial Aid
(530) 226-4011
School of Education
(530) 226-4012
School of Business and Management
(530) 226-4005
Student Teaching Placement
(530) 226-4015

Tracy McMurry
Associate Regional Dean
M.A., Counseling Psychology
M.S. Educational Counseling
National University

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2850 West Horizon Ridge Parkway, Suite 301
Henderson, NV 89052-4395
(702) 531-7800 • Fax: (702) 531-7894

Admissions
(702) 531-7800
Fax: (702) 531-7894
Bookstore (National University TextDirect)
1 (866) 243-0077
E-mail: Nutextdirect@bkstr.com
Website: www.nutextdirect.com
Business Office/Financial Aid
(702) 531-7822
Fax: (702) 531-7894
School of Business and Management
(702) 531-7832
Fax: (702) 531-7895
School of Education
(702) 531-7834
Fax: (702) 531-7895
School of Health and Human Services
(702) 531-7831
Fax: (702) 531-7895

General Information

18	Degrees Offered
19	Mission Statement
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20	Military Community
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The University of Values



TM

Degree Programs Offered at National University

Undergraduate Degrees

Associate of Arts [↗]

with Concentrations in:
Medical Billing, Coding and Information Tech
Rehabilitative Counseling
Teaching

Associate of Science

with Majors in:
Health Science and Pre-Nursing
Nursing [↗]
Licensed Vocational Nurse to Associate of Science in Nursing
Licensed Vocational Nurse to Bachelor of Science in Nursing
Video Gaming [↗]

Bachelor of Arts

with Majors in:
Broadcast Media
with Concentrations in:
Broadcast Media Management
Broadcast Media Production
Early Childhood Education
with Concentrations in:
Early Childhood Administration
Teacher Education
English [↗]
English with Single-Subject Matter Preparation
with Concentrations in:
Communications and Media Letters
General Studies
Global Studies [↗]
History
Interdisciplinary Studies
Journalism
with Concentrations in:
Online/Print News Journalism
Broadcast Journalism
Management [↗]
Marketing [↗]
Multimedia Arts8
with Concentrations in:
3-D and Video Game Art
Digital Video and Audio
Print/Web Graphics
Web Development/Digital Interactivity
Multiple Subjects
Pre-Law Studies
Psychology [↗]
Sociology

Bachelor of Business Administration [↗]

with Concentrations in:
Accountancy [↗]
Alternative Dispute Resolution
Business Law
Economics
Entrepreneurship
Finance [↗]
Hospitality and Casino Management [↗]
Human Resources Management [↗]
Marketing [↗]
Sports Management [↗]

Bachelor of Public Administration

Bachelor of Science

with Majors in:
Accountancy [↗]
Allied Health [↗]
Computer Science [↗]
Construction Engineering [↗]
Construction Management [↗]
Criminal Justice Administration [↗]
Design Engineering
Domestic Security Management [↗]
Earth Sciences
Environmental Science and Policy
Financial Management [↗]
Information Systems [↗]
with Concentrations in:
Database Administration
Electronic Business
Telecommunication
Information Technology [↗]
Life Sciences
Mathematics
with Concentrations in:
Mathematics and Applications
Single-Subject Teaching
Nursing [↗]
Nursing Accelerated Post-Bachelor Degree [↗]
Nursing RN Completion [↗]
Organizational Behavior
Organizational Leadership
Paralegal Studies
with Certificates and Specializations in:
Legal Assistance Certificate
Paralegal Specialist Certificate
Litigation Specialization
Corporations Specialization
Real Estate Law Specialization
Probate and Estate Planning Specialization
Criminal Law Specialization
Family Law Specialization
Software Engineering [↗]

Graduate Degrees

Executive Master in Business Administration [↗]

Executive Master in Business Administration (Spanish Version) [↗]

Master of Arts

with Fields of Study in:
Counseling Psychology
English [↗]
Human Behavior
Human Resources Management [↗]
with Areas of Specialization in:
Organizational Development and Change Management [↗]
Organizational Leadership
Management [↗]
with an Area of Specialization in:
Organizational Leadership [↗]
Teaching [↗]
with Areas of Specialization in:
Best Practices
Reading
Teaching and Learning
Special Education
National Board Certified Teacher Leadership
Early Childhood Special Education

Master of Business Administration [↗]

with Areas of Specialization in:
Accountancy [↗]
Alternative Dispute Resolution
Electronic Business [↗]
Financial Management [↗]
Health Care Administration
Human Resources Management [↗]
International Business [↗]
Marketing [↗]
Organizational Leadership [↗]
Technology Management

Master of Education [↗]

with Fields of Study in:
Best Practices
Crosscultural Teaching
Elementary Education with Nevada Licensure
Secondary Education with Nevada Licensure
Teaching

Master of Fine Arts [↗]

with Fields of Study in:
Creative Writing [↗]
Digital Cinema [↗]

Master of Forensic Sciences [↗]

with Areas of Specialization in:
Criminalistics
Investigation [↗]

Master of Health Care Administration [↗]

Master of Public Administration [↗]

with Areas of Specialization in:
Alternative Dispute Resolution
Human Resources Management [↗]
Organizational Leadership [↗]
Public Finance [↗]

Master of Science

with Fields of Study in:
Computer Science
Corporate and International Finance
Database Administration
Educational Administration [↗]
Educational Counseling [↗]
Educational and Instructional Technology [↗]
with Specializations in:
K-12 and Higher-Education Classrooms
Corporate, Military, and Government Training
Electronic Business [↗]
Engineering Management [↗]
with Areas of Specialization in:
Enterprise Architecture
Industrial Engineering
Project Management
Safety and Security Engineering
Supply Chain Management and eLogistics
Environmental Engineering
Exceptional Student Education
Finance
Homeland Security and Safety Engineering [↗]
Industrial Organizational Psychology
Information Systems [↗]
Organizational Leadership [↗]
School Psychology
Software Engineering
Special Education [↗]
Special Education with an Emphasis in the Deaf and Hard-of-Hearing
Systems Engineering
with Areas of Specialization in:
Industrial Engineering
Engineering Management
Supply Chain Management and eLogistics
Environmental Engineering
Software Engineering
Enterprise Architecture
Taxation
Technology Management [↗]
Wireless Communications

Master of Science with Nevada Licensure

California Credentials

(Approved by the California Commission on Teacher Credentialing)

Advanced Studies 2042 MS/SS Teaching Credential
Intern Credential Program for Multiple or Single Subject Teaching [↗]
Internship - Preliminary Administrative Services Credential - Tier I [↗]
Out-of-State Candidate Requirements for Professional Clear Preliminary Multiple Subject Teaching Credential Program with BCLAD Option [↗]
Preliminary Single Subject Credential Program with BCLAD Option [↗]
Preliminary Level I Education Specialist Credential: Mild/Moderate Disabilities with CLAD Certificate [↗]
Preliminary Level I Education Specialist: Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option [↗]
Preliminary Level I Education Specialist Credential: Moderate/Severe Disabilities with CLAD Certificate [↗]
Preliminary Level I Education Specialist: Moderate/Severe Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option [↗]
Preliminary Tier I Administrative Services Certificate/Credential [↗]
Professional Level Multiple or Single Subject Teaching Credential Professional (Tier II) Administrative Services Credential [↗]
Professional Level II Education Specialist: Mild/Moderate Disabilities [↗]
Professional Level II Education Specialist: Moderate/Severe Disabilities [↗]
Pupil Personnel Services Credential School Counseling (PPSC) [↗]
Pupil Personnel Services Credential School Psychology (PPSP) Ryan Credential CLAD and AB 1059

Special Education Internships:

Preliminary Level I Education Specialist Credential: Mild/Moderate or Moderate/Severe Disabilities with CLAD Certificate [↗]
Preliminary Level I Education Specialist: Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option [↗]
Professional Level II Education Specialist Credential

Certificate Programs

Accountancy [↗]
Alternate Dispute Resolution
Behavioral Analysis
CA Reading [↗]
CLAD [↗]
Criminal Justice Administration [↗]
Early Childhood Special Education
Educational Technology [↗]
Electronic Business [↗]
Finance [↗]
Hospitality and Casino Management [↗]
Human Resources Management [↗]
Industrial Engineering [↗]
Information Technology [↗]
International Business [↗]
LVN "30 Unit" Option Certificate
Marketing [↗]
National Board Certified Teacher Leadership
Project Management [↗]
Security and Safety Engineering [↗]
Sports Management [↗]
Supply Chain Management and eLogistics [↗]
Teaching in Diverse Learning Settings

[↗] denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every learning facility. Various undergraduate minors are available in some degree programs.

Consult the appropriate school listing for more complete information.

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.

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

Bakersfield
Camarillo
Carlsbad
Costa Mesa
Fresno
Henderson, Nevada
La Mesa
Los Angeles
Ontario
Orange
Rancho Bernardo
Redding
Sacramento
San Bernardino
San Jose
Sherman Oaks
South Bay
Spectrum
Stockton

Military Locations

ASW (Fleet Anti-Submarine Warfare)
MCRD Camp Pendleton
MCAS Miramar
MCRD San Diego
NAB Coronado
NAS 32nd Street
NAS North Island
Twentynine Palms

Admissions Offices

Bremerton, Washington
Honolulu, Hawaii
San Diego, California

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 California Commission on Teacher Credentialing (CCTC)
- 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

- 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 who qualify may enroll in the Army or Air Force ROTC cross-enrollment programs.

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 four tiers of faculty at National University—full-time, associate, core adjunct, 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.

CORE 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 teach one course at a time, advise students on

General Information

course-related topics and participate in faculty development activities without a need for deeper commitment to other aspects of University life.

All levels of faculty hold advanced degrees in their areas of expertise and are respected professionals with many years of career experience. Learning is facilitated through lectures, outside reading, class discussions, case studies and research projects relating to problems within students' interests.

The extensive knowledge of adult learners and the diversity of their backgrounds add a level of richness to the group-learning experience. The average age of students attending the University is 33.

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.

Military Community

National University has seven convenient locations for the military community in San Diego County, and one in San Bernardino County. Centers are located at Naval Station 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, 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, and at Naval Base Bremerton, Washington.

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 Military Installation Voluntary Education Review (MIVER).

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.

Application Fee\$60
For students entering any degree program. This fee is charged to all but international students.

Non-Degree Application Fee\$60
For students entering any non-degree program.

Re-admission Fee\$60
For students who have been inactive for more than 12 months or who are entering another degree program.

Graduation Processing Fee\$100
Charged to all students before graduation.

Transcript Fee\$5
Per copy fee for each transcript including Continuing Education courses.

Returned Check Charge\$20

Reinstatement Fee\$100
Charged only to those students with unpaid delinquent financial obligations.

Late Payment Fee\$25
Charged when tuition payment has not been received by the first night of class.

Credit by Examination Fee\$100
Per examination, per course.

Challenge Examinations Fee\$50
Per course charge, course waiver, no credit.

Nursing Orientation Day Fee\$1,500

Nursing Theory Course (NSG) Fee\$250 per course

Nursing Clinical Laboratory (NSG) Fee\$400 per course

International Application Fee\$65

E-Portfolio Fee\$55

General Information

Tuition

Tuition rates in effect as of August 28, 2006.

Course Level	4.5 qtr unit	3 qtr unit	1.5 qtr unit
100, 200, 300, 400	\$1134	\$756	\$378
500 (Undergrad)*	\$1134	\$756	\$378
500 (Grad)*	\$1287	\$858	\$429
600 & 700	\$1287	\$858	\$429

* 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. Reduced tuition is available at designated military facilities for eligible students.

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 "O," 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, and follow the instructions.

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.

Conferences and Special Events

Providing exciting conferences and events on a variety of current and high-technology topics, the Division of Marketing and Educational Services goes beyond updating participants on all the latest technology, theories and practices. Connecting business, education and technology, these conferences and events provide the link that facilitates benchmarking and crossover application in a variety of professions. Pointing out applications for immediate use, these events are an invaluable resource for innovative and creative ideas that work in the real world.

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 meeting, or training sessions in an academic atmosphere that is comfortable, focused and conducive to interaction and learning.

Support Services

- 24 Academic Support Services
- 25 Student Support Services
- 26 International Student Support Services

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Support Services

Academic Support Services

Mathematics Tutoring

Mathematics tutoring is available to National University students free of charge. Assistance is offered for all of the mathematics courses offered by the University. Adjunct faculty within the Mathematics Department, and mathematics majors with senior standing are available to help any student for either onsite or online mathematics courses.

University Library System

NULS is comprised of the Central Library in San Diego and a wide range of online resources and services designed to meet the needs of online students and those at the National University campuses.

The Central Library
9393 Lightwave Ave
San Diego, CA 92123 USA
(858) 541-7900 or 1-866-NU ACCESS (682-2237) "Library"

Hours, Pacific Time (PT):

Monday – Thursday
10 a.m. – 10 p.m. PT

Friday
10 a.m. – 6 p.m. PT

Saturday
8:30 a.m. – 5 p.m. PT

Sunday
10 a.m. – 5 p.m. PT

URL: www.nu.edu/library

The Central Library is organized around student needs:

- Group and individual study spaces. Group study rooms should be reserved in advance.
- Information Commons—computers dedicated to student research and preparation of class work. Students may borrow laptops for in-library use. Wireless access is available. Printing is free from Library workstations.
- Curriculum Resource Center—a model K-12 classroom provides access to California state-approved textbooks, teaching resources, and interactive multimedia materials to assist education students in developing curriculum materials
- Information Skills Instruction Lab—Computer classroom for active learning of information technologies and library online resources. Library instruction is available for classes or as individual research consultations.
- Multimedia Lab—workstations support current web production and multimedia development technologies
- Print Collections
Journals: current titles and microfiche back-files
Books: Reference, circulating collection, juvenile and young adult books, curriculum materials, and special collections

Online Resources

The Central Library is also the administrative center for the Library's Web-based services and online information. All of the online resources are accessible 24 hours a day, 7 days a week through the Library's home page: www.nu.edu/library. From a non-National University computer, authentication is required:

Login: your National University 9-digit ID number
Password: your 6-digit birth date (mmddyy)

- eReference resources provide access to the online version of many standard reference encyclopedias and handbooks
- eBooks represent over one-third of the Library's book collection and are selected to support academic research. eBooks are listed in the Library's online catalog
- The eJournal collection provides full text of many articles indexed by the databases to which NULS subscribes. Journal title records in the Library catalog indicate which databases provide the full text.

Online Services

- Online tutorials and library guides
- Online reference help: Ask A Librarian
Phone: (858) 541-7900 or 1-866-NU ACCESS (682-2237) "Library"
E-mail: refdesk@nu.edu
- Books Direct—ships books to regional and online students. A request form is available online—FREE
- Journal Direct—provides electronic access to print articles in the Library's collection. A request form is available online—FREE
- Interlibrary Loan—provides access to articles and books owned by other libraries. A request form is available online—FREE

Writing Across the Curriculum

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

Strong writing skills are in demand in nearly every profession and the attainment of such skills gives 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:

- Writing intensive courses
- Workshops for faculty
- Writing centers
- Professional forums for self-expression, such as *The Gnu*, a student literary journal, and *WHACK*, a faculty newsletter

Upon registration, students are asked to purchase *The Little Brown Essential Handbook for Writers* (Longman, Publisher). This book serves as the official National University writing guide and reference text, and it is used by instructors from all disciplines as a reference for their students.

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, an intensive course designed to prepare students for the academic environment; and English Communication, a course designed to meet the personal or professional needs of individuals. TOEFL is waived for ELP students who complete National University's academic programs.

English Language Programs also offers customized programs for executives and professionals, business English communication courses, Vocational English as a Second Language (VESL), Accent Reduction, Business English, and language assessment services, including the test of English for international communication (TOEIC).

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.

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, veterans assistance, financial aid, and other services. Additionally, the library, alumni association, extended learning office, and student accounts office are available to help students.

Internet Student Access

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

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

Computer-Based Information Systems Research and Development Center

National University offers students online, real-time access to pertinent information. Through the portal available on the University's home page, students can access appropriate parts of their records, class schedules, Degree Progress Report, and textbook requirements, as well as add and drop courses from their schedules.

Students with Disabilities

National University complies with the Americans with Disabilities Act of 1990 and Section 504 of the Federal Rehabilitation Act of 1973. Accordingly, qualified persons with disabilities may not, on the basis of that disability, be denied admission or subjected to discrimination in admission decisions. Further, no qualified student with a disability, on the basis of that disability, may be excluded from any academic, research, counseling, financial aid, or other post-secondary education program or activity that the University provides to all students.

Students seeking special accommodations due to a disability must submit an application with supporting documentation to the Office of Scholarships and Special Services. The Committee for Students with Disabilities, which meets monthly, will consider all materials and will afford qualifying individuals with appropriate 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 or prospective students who want to read the complete National University Policy and Procedures, Services to Students with Disabilities, should request a copy from an advisor. Applications for accommodations for a disability may be sent to:

The Office of Scholarships and Special Services
National University
11255 North Torrey Pines Road
La Jolla, CA 92037-1011
Phone: 858-642-8185

The California Relay Operator can be reached at 711.

The Student Relations Coordinator (SRC)

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 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 structure that regularly produce conflicts, problems and complaints.

Support Services

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, 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 to the student to the SRC may not be used in grievance or other formal proceedings. For help in identifying alternative courses of action please contact the Student Relations Coordinator:

Student Relations Coordinator
National University
11355 North Torrey Pines Road
La Jolla, CA 92037-1011
858-642-8035
src@nu.edu

Career and Assessment Center

The Career and Assessment Center (CAC) 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, CAC provides online assistance in the following areas: resume review and critique; job search assistance; interviewing and negotiating techniques; and career development and assessment for those students seeking career direction. CAC also provides other services such as one-on-one career counseling/advising sessions and group workshops.

For more information about CAC and/or services, please contact CAC at 858-541-7950 or 1-866-NU-ACCESS, ext. 7950 or via e-mail: 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.

Advancement and Alumni Relations

National University Alumni Relations

Alumni Relations is dedicated to providing alumni with lifelong learning opportunities for personal and professional growth. It also offers alumni opportunities for continued participation in the University community. Finally, it seeks to celebrate and promote the successes of our graduates.

National University alumni are eligible to participate in a broad array of programs and services through the office of advancement and alumni relations. The University maintains open communication with its alumni community through its website, e-mail, mail, and an alumni e-newsletter titled the Newswire, which is circulated regularly to alumni with e-mail addresses on file. To subscribe, contact 1 (866) 682-2237, ext. 8111 or visit www.nu.edu/alumni.html.

The alumni relations website provides up-to-date information on

initiatives such as networking events and career development workshops. Alumni may also access the Online Community, a network created exclusively for National University alumni, from the alumni website or at www.alumni.nu.edu. The Community features an alumni directory, job postings, class notes, and more. Alumni are also encouraged to visit the online National University merchandise store, where they can purchase University apparel and show their pride as an alumnus or alumna.

Alumni membership to the online library allows access to the netLibrary and Ebsco databases. For a one-year membership, please visit the alumni website at www.nu.edu/alumni.html.

Development

As a nonprofit institution, the University relies to a large extent on contributions and partnerships to provide adult 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, contact the vice president of advancement and alumni relations at 858-642-8131 or e-mail development@nu.edu.

International Students Support Services

Admission

Applicants who require a Certificate of Eligibility for Nonimmigrant (F-1) Student Status, should contact an international admissions advisor for information on special admission requirements. 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.

Transcript Evaluation

Official transcripts 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. Further information is available from the Office of the Registrar in San Diego.

Language Proficiency

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

- 1) Providing proof of a Baccalaureate or a Master's degree from a U.S. Regional accredited colleges or university.

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2) Test of English as a Foreign Language.

- Students can establish English Language Proficiency by a Test of English as a Foreign Language (TOEFL) taken within 24 months before beginning coursework. Acceptable TOEFL scores are 525/197 for undergraduates and 550/213 for graduate students.
 - International English Language Testing System (IELTS) may be used in lieu of TOEFL. Undergraduates must score 5.5 and graduates must score 6.
 - A Certificate of Advanced English (C.A.E.) or Certificate of Proficiency in English (C.P.E.) grade of "C" or better will also be accepted.
 - International students may establish language proficiency by completing English as a Second Language (ESL) through National University's English Language Programs (ELP) or a language school approved by National University.
- ## 3) Completing National University's English Language Program in San Diego (TOEFL is not required for students who have completed National University English language program).
- International students who need English Proficiency are tested and placed in the appropriate class level
 - English Language classes follow the University calendar and provide 100 hours of instruction per month
 - At the end of each month, the students are evaluated for advancement

Interested students should apply directly to:

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

- ELP also offers programs for students who want to study English language but do not plan to attend National University.
- ## 4) Students can also meet the English Language Proficiency requirements by satisfactorily completing the highest level of study at the following five language training institutions:
- 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)
 - San Diego State University's "American Language Institute" – level 106 or pre-MBA program.
 - San Jose State University's "Studies in American Language" – advanced level
 - University of California at Davis's "International Training and Education Center" – advanced level
 - Fresno International English Institute

For additional information regarding the English Language requirements, students should contact an English Language Programs Coordinator at (858) 541-7968 or an international student advisor at (858) 541-7960 or 1-866-NU-ACCESS, ext. 7960 or e-mail: ipo@nu.edu.

Orientation for International Students

Orientation is done prior to class start as a group and on an individual basis. The student will meet with an advisor prior to the

students' first class. The orientation session will cover National University's intensive one-month format, academic policies and procedures, library and research facilities. Immigration regulations, auto and health insurance, banking and other topics of interest are also covered. The International student handbook is also available on National University's website <http://www.nu.edu/international>

Financial Aid

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Financial Aid

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 web page at www.nu.edu or visit the financial aid advisor on campus.

How to Apply for Financial Aid

Planning ahead and applying for financial aid programs 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, student awards will be determined using the previous year's income (taxed and untaxed) and current assets. Other factors considered include the student's marital status and family size.

Application Packets

Students may obtain a How to Apply Guide package from a financial aid or admissions advisor at all campuses. The package includes a Free Application for Federal Student Aid (FAFSA), which students must complete, sign, and mail to the federal processor for evaluation. To expedite the process, students are encouraged to apply online at www.fafsa.ed.gov. National University computer labs are available for our students' use.

Important Note: Students must mail in their signed certification page within fourteen (14) days when filing online in order for the FAFSA to be completely processed and eligibility determined by the U.S. Department of Education.

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 and have their records evaluated by the Office of the Registrar (excludes non-degree studies and continuing education programs)
- demonstrate financial need as determined by the federal methodology (excludes the federal unsubsidized Stafford Loan 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 on Overpayment and Default
- register with Selective Service if required to do so
- complete the verification process, if selected to do so, by submitting a copy of federal tax forms and any other required documents

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

Dependency Status

Students who apply for financial aid must determine whether they should apply 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).

Students who meet at least one of the following criteria are considered independent:

- Students who were at least twenty-four (24) years of age prior to January 1st of the current year
- Students who are married
- Students who are enrolled in a graduate program (this does not include students who are enrolled in a credential program)
- Students who have legal dependents other than a spouse
- Students who are orphans or wards of the court (or were wards of the court until they reached age eighteen [18])
- Students who are veterans of the U.S. Armed Forces (active duty military currently serving on active duty in the Armed Forces for other than training purposes).

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.

Student Loan Deferment

Students 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 Stafford borrowers. However, a deferment for an Unsubsidized Stafford borrower applies to principal only.

Deferments for PLUS applicants vary. See the Student Guide for details.

In-School Deferment

Once a month, the University submits student enrollment data to the National Student Loan Clearinghouse. For most students, this process reduces the number of deferment forms to fill out. However, students who receive a letter, statement, or a deferment form from a lender must complete and submit the deferment form as required. To be eligible, students must be in attendance at least half-time. The clearinghouse was created for Stafford/PLUS borrowers only and does not apply to Perkins or NU-HELP borrowers.

Students should contact their lender and/or the University for additional information.

Scholarship Program

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. 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 and Special Services
National University
11355 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 and Special Services at (858) 642-8185 or via e-mail at 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.

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 be not 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% 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 no charge, there will be no application of funds.
- Award funds must be used within twelve (12) months of the original award. Funds not used within twelve (12) months of the award are forfeited.

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 or on the Financial Aid web page on the University's website.

Financial Aid

V.A. Educational Benefits

Many active duty military personnel, veterans, dependents of deceased or disabled veterans, and reservists are eligible for Department of Veterans Affairs' educational benefits. The programs administered by the Veterans Affairs office at National University are:

Chapter 32, 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 G.I. Bill (Active Duty)

For veterans who entered active duty beginning July 1, 1985 and who participated in the 12-month pay reduction program while on active duty. Also includes Chapter 32 active duty persons with eligibility as of October 1, 1996 who elected to participate in the Montgomery G.I. Bill

Chapter 1606, Montgomery G.I. 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 (Selected Reserve Program)

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, Dependent's Benefits

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% permanently disabled by the Department of Veterans Affairs

Chapter 31, Vocational Rehabilitation

For veterans with a service-connected disability, or who are rated 10 percent or more disabled by the Department of Veterans Affairs

Chapter 34, G.I. Bill

For veterans who are currently on active duty if they entered the armed forces before January 1, 1977, or after January 1, 1977, under a delayed entry program.

Students should be aware that the Veterans Administration 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.

Military Tuition Assistance

The Tuition Assistance Department is located at 9388 Lightwave Ave, San Diego, CA 92123. The department provides counseling, guidance, and reimbursements to the University for students who are eligible for active duty tuition assistance if they are in the armed forces. Students may be eligible for tuition assistance up to 75% of the cost of their tuition. The amount of the benefit for active duty tuition assistance is determined by the military branch of service. The tuition assistance staff works with active students and ensures the contracts are monitored for accuracy and meet compliance issues. It is the student's responsibility to apply for tuition assistance through the Educational Services Officer on base.

Students who want 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 in the Mission Valley campus and 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 Veterans Affairs

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. Please check with your 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, 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. Below are listed websites for some available private loan programs. Below is a website that provides numerous private lenders: www.EdFund.org

Specialized Programs

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 or private 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.

For those applicants selected, the program will assume up to \$2,000 in educational loan debts for the first year of eligible teaching service and up to \$3,000 for each of the second and third years of eligible teaching service. Application period: March through June – see your financial aid advisor for current deadlines.

Additional Information Sources

California Student Aid Commission	www.csac.ca.gov
U.S. Department of Education	www.ed.gov/finaid.html
College is Possible	www.collegeispossible.org
Scholarship Search and Financial Aid Calculator	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 Direct Consolidation Loans
- Federal Family Education Loans: Subsidized and Unsubsidized Stafford Loans, FFEL PLUS Loans (for parents) and FFEL
- Consolidation Loans
- Guaranteed Student Loans, SLS Loans and Perkins Loans
- Ombudsman Customer Service Line 877-557-2575 or at www.sfahelp.ed.gov

Financial Aid Calendar		
A calendar of deadlines and critical dates for students applying for financial aid at the University.		
2006-2007	2007-2008	
January 1, 2006	January 1, 2007	<ul style="list-style-type: none"> • Apply for financial aid. Students must file a new Free Application for Federal Student Aid (FAFSA) annually.
March 2, 2006	March 2, 2007	<ul style="list-style-type: none"> • Deadline for new Cal Grant A and B applications. • National University Financial Aid priority filing date for FSEOG and Federal Perkins Loans. <i>Note: The Financial Aid Office will continue to make awards after this date as long as funds remain.</i>
April 2006	April 2007	<ul style="list-style-type: none"> • National University begins processing student awards. Financial Aid Packets containing the IAFFA and other verification documents will be mailed to aid applicants.
June 2006	June 2007	<ul style="list-style-type: none"> • Announcements of Cal Grant A and B Awards.
July 2006	July 2007	<ul style="list-style-type: none"> • The funding period begins for the Federal Pell Grant and Campus-Based programs (FSEOG, Federal Perkins).
October 2006	October 2007	<ul style="list-style-type: none"> • The funding period begins for the Cal Grant programs.
June 30, 2007	June 30, 2008	<ul style="list-style-type: none"> • Federal Pell Grant deadline. • Last day to file the FAFSA. <i>Note: The Federal Student Aid Center must receive the student's FAFSA by this date (June 30th). Applications postmarked June 30th and received by the processor after June 30th will not be accepted for processing.</i>
June 30, 2007	June 30, 2008	<ul style="list-style-type: none"> • National University Verification/Processing deadline. Students must submit all requested forms by this date in order to receive financial aid for the school year.
Completion of Student's Academic Year		<ul style="list-style-type: none"> • 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 and they must meet the University's minimum unit requirement: <p>Undergraduate /Credential: 12 units Graduate: 9 units</p>

Financial Aid

Financial Aid Programs

The following chart describes Federal, State and institutional financial aid programs that are available. Please pay attention to program requirements and applications deadlines.

Grant	Loan	Undergraduate	Graduate	CRED - 1	CERT - 2	Need-Based	Financial Aid Programs 2006-2007	Application Deadline	Date Funding Begins
•		•				•	<p>FEDERAL PELL GRANT is a grant program to help students with tuition cost. This program assists students who are working towards a first bachelor's degree. Award Range: \$400 to \$4,050 Applications: FAFSA, IAFFA</p>	June 30, 2007	July 2006
•		•				•	<p>FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG) 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. Award: \$725 maximum per year Applications: FAFSA, IAFFA</p>	Priority filing date: March 2, 2006	July 2006
•		•				•	<p>CAL GRANT A 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. Award: \$3,147 per quarter Applications: FAFSA, GPA verification</p>	March 2, 2006	Oct. 2006
•		•				•	<p>CAL GRANT 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. Tuition Award: \$3,147 per quarter Access: \$517 per quarter Applications: FAFSA, GPA verification</p>	March 2, 2006	Oct. 2006

1 Credential Program 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.

2 Certificate Program 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.

KEY

FAFSA: Free Application for Federal Student Aid

IAFFA: Institutional Application for Financial Aid

GPA: Grade Point Average

Note: Award ranges and aid types are tentative.

Grant	Loan	Undergraduate	Graduate	CIED - 1	CERT - 2	Need-based	Financial Aid Programs 2006-2007	Application Deadline	Date Funding Begins
	•	•	•	•	•	•	<p>SUBSIDIZED FEDERAL STAFFORD STUDENT LOAN is a loan program to assist students with educational expenses. The interest rate for a new borrower is a variable interest rate capped at 8.25% and is adjusted July 1 of each year. The 2006-2007 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"> • up to \$2,625 as a first year undergraduate • up to \$3,500 as a second year undergraduate • up to \$5,500 as a third, fourth, or fifth year undergraduate <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
	•	•	•	•	•		<p>UNSUBSIDIZED FEDERAL STAFFORD LOAN 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 2006-2007 rate is 5.8%. 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).</p> <p>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"> • up to \$6,625 as a first year undergraduate (at least \$4,000 of this amount must be in unsubsidized Stafford) • up to \$7,500 as a second year undergraduate (at least \$4,000 of this amount must be in unsubsidized Stafford) • up to \$10,500 as a third, fourth, or fifth year undergraduate (at least \$5,000 of this amount must be in unsubsidized Stafford) • up to \$18,500 as a graduate (at least \$10,000 of this amount must be in unsubsidized Stafford) <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>Aggregate Stafford Loan Limits</p> <p>Dependent Undergraduate: \$ 23,000 Independent Undergraduate: \$ 46,000 Graduate: \$138,500 (\$65,500 in subsidized Stafford and \$73,000 in unsubsidized Stafford)</p> <p><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"> • Loan Origination Fee: A loan origination fee of up to 3% of the loan principal is deducted proportionately from each loan disbursement. • Insurance Premium: An insurance premium of up to 1% of the loan principal is also deducted proportionately from each loan disbursement. 	Three months prior to the student's last course of the academic year	Based on each student's individual course schedule

Financial Aid

Grant	Loan	Undergraduate	Graduate	CRED - 1	CERT - 2	Need-based	Financial Aid Programs 2006-2007	Application Deadline	Date Funding Begins
	•	•		•	•		<p>FEDERAL PARENT LOANS FOR STUDENTS (PLUS) is a loan program to assist parents of undergraduate dependent students with educational costs. This loan has a variable interest rate capped at 9% and is adjusted July 1 of each year (the 2006-2007 rate is 8.5%). Like the unsubsidized Stafford Loan, the interest is not subsidized by the government. Repayment begins 60 days after the loan is made; however, for parents who qualify, payments (principal only) can be deferred during full-time attendance, but interest will accrue.</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: (same as the Stafford Loan Program)</p> <p>Applications: IAFFA, FAFSA, PLUS 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>FEDERAL PERKINS LOAN 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> <p>Award Range: \$175 to \$2,100 Cumulative Totals</p> <ul style="list-style-type: none"> • Up to \$20,000 for undergraduate study • Up to \$40,000 for graduate or professional study <p>Applications: IAFFA, FAFSA, Perkins Loan Application</p>	Priority filing date March 2, 2006	July 2006
•		•	•	•	•		<p>NATIONAL UNIVERSITY SCHOLARSHIP PROGRAM 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"> • Collegiate Honor up to \$2,000 • Presidential Tuition Scholarship up to \$2,500 • Military Tuition Scholarship up to \$2,500 <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>NATIONAL UNIVERSITY HIGHER EDUCATION LOAN PROGRAM (NU-HELP) 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 Cumulative total of tuition for fiscal year</p> <p>Origination Fee: \$30 will be charged to the student's account.</p> <p>Applications: FAFSA, IAFFA, NU-HELP Loan Application</p>	Open, but subject to available funds	July 2006

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Policies and Procedures

General Policies and Procedures

Attendance Procedures

All students must be officially registered for a class in order to attend it 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 may not permit unregistered students to attend a class and may not issue grades to unregistered students. The Office of the Registrar will not post grades for unregistered students.

Students are considered officially enrolled in a class at midnight of the ninth (9th) day of the session. Typically, the start-date of a session is the first Monday of the new course month. If the first Monday is a holiday, the start-date will be the first Tuesday. For example, if the first course offered in the September session meets on Mondays and Wednesdays, then the Monday of the first class period will be the start-date of the session. The start date if the session is the same for all students, regardless of when the student's first class meets.

Students are expected to attend all class periods of a course. An instructor may withdraw a student from class up to the twenty-first (21st) day of the session if the student has more than two (2) absences. An absence is assessed each time a student is not in attendance during a regularly scheduled class period, whether or not it is an excused absence. Students who have more than three (3) absences, and who are not withdrawn from the course by midnight of the twenty-first (21st) day of the session, will be issued a letter grade of "F." Tardiness to and early departure from classes accrues with the potential for a cumulative effect of absences.

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 last class session. With instructor approval, a grade of incomplete may be issued if the student has attended two-thirds of the course, and coursework is not completed by the last class session. Approval of the assignment of an incomplete grade is at the discretion of the instructor.

Any dispute about attendance must be addressed by the student in writing to the Registrar's Office within ninety (90) days of the posting of grades for the class. If extenuating circumstances prevent the submission of the dispute within ninety (90) days, the Registrar's Office will make a determination about whether the circumstances warrant consideration of the dispute. In no case will the office consider a dispute that is more than a year old.

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

Refund Policy

Students are accepted and registered for classes with the understanding that they will remain for the entire course. Faculty contracts and the commitment of space and other University resources are made on that assumption, creating obligations that are not relieved when students withdraw. National University's refund policy is designed so students who withdraw from class share in the costs incurred. Students may use the self-service function on the portal to withdraw themselves over the Internet prior to midnight of the ninth (9th) day, or, they may ask an admissions advisor to withdraw them.

If a student does not complete a course, a tuition refund is made according to the following schedule: Students who drop a course prior to midnight of the ninth (9th) day after the start-date of the session will receive a 100 percent refund. Students who withdraw from a course prior to midnight of the tenth (10th) day of the session will receive a 50 percent refund. Students who withdraw from a course after midnight of the tenth (10th) day will receive no refund.

Students must have a credit balance on their account to receive a refund. The University does not disburse refunds to students automatically. Students must submit a written request to the nearest Student Accounts Office. 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 mailed to the student's home address. Students must make sure that the address on file is correct. Refund request forms are available at all Student Accounts Offices.

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 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 75 consecutive days. Given National University's model of one course per month, this would generally equate to a three-month break in attendance.

Effective October 7, 2000, this new refund policy governs all Federal grant and loan programs: Federal Pell Grant, Federal SEOG, Federal Perkins Loan and all Federal Stafford/Direct Loans (subsidized and unsubsidized).

This Federal regulation now 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 must be performed according to a specific formula that identifies the total scheduled financial assistance the student earned and is therefore entitled to receive. If more financial aid is received (by either the student or by the University on the student's behalf) than is earned, the unearned funds must be returned to the Department of Education and/or the appropriate lender. If, on the other hand, 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% of the payment period, the student earns 30% of the financial aid he/she was originally scheduled to receive. This means that 70% 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% of the payment period has been completed, all (100%) 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% of a payment period, the student may have to repay unearned Federal monies that were already disbursed at the beginning of the payment period.*

Policies and Procedures

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 excess funds. The University's portion of the excess 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 provides that the amount that the student must repay is to be reduced by 50%. This means that a student who has received too much in grant funds will only be required to return half of the amount considered in excess.

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 Accounts Office to pay the amount refunded to the Department of Education or the lender 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.

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 substitutions or 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 advice and 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 a registered course as follows:

- Prior to the start date of the course. To assure 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 of the ninth (9th) day after the start-date of the session. No grade will be given and no tuition will be charged. After the tenth (10th) day, a grade may be entered and a tuition charge will be levied according to the refund policy.

Course Withdrawal

The term "Withdrawal" signifies that a student has withdrawn from a course after midnight of the ninth (9th) day of the session. Notifying the instructor of one's intent to withdraw is insufficient and will not constitute a withdrawal. Students may withdraw themselves through the student portal on the University's website prior to midnight of the ninth (9th) day, or, they may ask an admissions advisor to withdraw them. Students who withdraw after midnight of the twenty-first (21st) day of the session will receive a grade of "F" for the course. This is a permanent mark with no grade points assigned.

Grade Reporting

All grades are reported electronically. Students access their grades via the student 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 will be generated automatically and mailed the next day. Grades are not given over the telephone or by a personal visit to 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 to submit grades. Grades are reported only for students officially registered 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.

Request for Issuance of Transcripts

Students should direct requests for the issuance of National University transcripts to the National Student Clearinghouse at www.nslc.org or they may access this website through the student portal. Students must specify if they are requesting a standard academic transcript or a continuing education transcript. The transcript fee of \$5.

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 or NU-Help loan. Transcripts contain only coursework completed at National University. A summary of previous education is entered into the official transcript of record.

Full-Time Student Status

Undergraduate students or post-baccalaureate students pursuing a credential must meet one of the following requirements to obtain "Full-Time Student Status":

- 13.5 units in any three-consecutive-month period
- 18 units in any six-consecutive-month period, providing there is no three-consecutive-month break in attendance during the six (6) months

Graduate students must meet one of the following requirements to obtain "Full-Time Student Status":

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- 9 units in any three-consecutive-month period
- 13.5 units in any six-consecutive-month period, providing there is no three-consecutive-month break in attendance during the six (6) months

The units for any class with a “Withdrawn” status do not count toward determining full or part-time status. Students who do not attend for a quarter (three-consecutive-month period) are considered to be “Withdrawn” for that time period. Students with proper identification can verify enrollment at the public information area of the Office of the Registrar, 858-642-8260. Verification 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 above definition of “Full-Time Student Status” may not apply to international students who require an F-1 visa.

Memorandum of Agreement

Undergraduate and graduate students who must transfer from the area served by National University for work reasons and who are within one (1) full quarter of completing their studies, may satisfy remaining coursework with pre-approved transfer credit. Prior to withdrawal from the University, students must submit a written request for a Memorandum of Agreement to the Office of the Registrar for approval by the Committee on the Application of Standards. Upon Committee confirmation, the Office of the Registrar provides written verification of coursework approved for completion at a regionally accredited institution.

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.

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 fill out a “University Withdrawal Form,” which is available at each campus. They will be immediately withdrawn from the University and their future classes will be deleted from their schedules. Federal student aid recipients should refer to the “Financial Aid Refund Policy” in this handbook.

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, establish academic qualifications to enter the courses desired and remit the customary tuition and fees. Admission as a non-degree student neither implies nor assures acceptance as a degree candidate. Non-degree students are permitted to enroll in no more than six (6) courses (27 quarter units). Students requesting an exception must submit a statement to the Committee on the Application of Standards.

Applicants for an Undergraduate Non-Degree program must provide at least a high school transcript or G.E.D. scores and applicants for a Graduate Non-Degree program must provide proof of a Bachelor’s Degree from a regionally accredited institution.

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 for the course and participate in class activities, but are not required to take examinations. No course credit is awarded to the student.

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 twenty-five (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.

Library Borrowing Privileges and Fines

All current National University students, faculty and staff are eligible to borrow Library materials. The National University Library borrowing privilege is subject to verification of current university enrollment or employment, and is valid for one year. Borrowing privileges for National University staff members will be renewed when the staff member checks out books at the end of the year.

Books and CD-ROMs circulate for four weeks. A maximum of 10

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books and CDs may be checked out at one time. Periodicals, microforms, reference books, reserve books, and Special Collection items do not circulate, but may be photocopied.

The late fee for overdue books and CDs is \$0.20 per day, per item with a \$10.00 maximum late fee. Once the fine reaches \$5.00, students may not check out more books until the fine is paid and a hold will be placed on your grades. Materials not returned to the Library are considered lost. For lost items, the borrower is responsible for \$30.00 replacement cost plus the \$10.00 maximum late fee. If the material is returned, the \$30.00 replacement fee will be refunded, but the maximum late fee of \$10.00 will not be refunded. The late fee for overdue PED and EXC reserve test kits is \$0.20 per hour, per item. Test material not returned to the Library will be considered lost. The replacement cost for reserve materials, PED test kits, and EXC test kits will be the current replacement value of the lost item.

Library Video Booking

All media booking requests from faculty members must be placed three working days prior to the date needed. The video booking form is located on the Library web page under Faculty Resources, or in the Library's online catalog. Faculty members can not pick up videos at the Central Library and take them to another location. Students may view audio-visual materials in the Central Library with advance notice by calling the Library Help Desk.

Computer Lab Regulations

Computer labs are available at many University locations for use by students, faculty and staff. Lab assistants are 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 facilities. They may be asked to show University identification.
- 2) Students may not install privately owned or acquired 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) Students may use computing resources for University-related purposes only.
- 5) Students should minimize their use of lab printers. They should make multiple copies of large documents using a copy machine rather than the lab printer. The lab assistant has the right and responsibility to limit printing based on overall requirements.
- 6) The computers are equipped with headphones for student's use for multimedia content. Please adjust the volume on the headsets to a level that will not disturb other lab users.

The lab assistant has the right to ask students to leave for non-compliance with any of the University's regulations. Questions of a technical nature, reports of equipment failure, or disputes should be reported to the Help Desk line at 619-563-2647 for resolution.

Lab hours are posted at each facility and are subject to change as required 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.

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 Associate Vice President, Information Technology.

Unauthorized use or copying may subject employees, faculty, and students to disciplinary action.

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 forty-five (45) days of the day the University receives a request for access. Students should submit to the registrar, 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 are 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

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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.

- 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 have thirty (30) days from the date of enrollment to request that a "Privacy Act Lockfile" be placed on their records. For more information, students should contact the Office of the Registrar at 858-642-8260. Particular questions with respect to a student's rights under FERPA should be directed to the Office of the Registrar.

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 Registrar's Office 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 under the procedures in this handbook for "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 a written appeal to the School Dean within forty-five (45) days of the end date of the course. The student must provide clear 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 provide 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 dean forwards the student's written statement 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 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 final decision within thirty (30) days of receiving the grade appeal information from the dean. This decision is forwarded to the dean who informs the student, the instructor and the Registrar's Office of the decision in writing.

The decision of the grade appeals committee on these matters is final and cannot be appealed.

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, meaning they will be enrolled in more than 7.5 quarter units in the same month. The granting of an accelerated study is wholly at the dean's discretion. With the exception of certain approved programs, applications for acceleration must be approved a month in advance by the school dean. 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 and a 3.7 for graduates
- 3) Completed all prior coursework with no outstanding grades of "Incomplete"
- 4) Maintained 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 company-reimbursement plan on file in the Student Accounts Office*
- 5) Demonstrated a compelling, exceptional need

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

Approval to take more than 18 units in a quarter requires advance approval from the Committee on the Application of Standards. Under no circumstances are students approved to accelerate their studies every month.

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

- 1) Fill out an Accelerated Study Request, available as an e-Form on the Student Portal, or see an admissions advisor for assistance
- 2) 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 credential programs in the School of Education who have a GPA of 3.0 may take a regular evening course while doing student teaching, provided they meet the other criteria for accelerated study. Students approved to accelerate their studies will be limited to register for two (2) of the following courses concurrently while student teaching. For multiple subject: TED 621B, TED 622A, or TED 622B. For single subject: TED 625A, TED 625B, or TED 624.
- 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 circumstances. Approval for an independent study is at the discretion of the school dean. Students who believe 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 for an independent study, ALL of the following conditions must be met:

- 1) The course must be approved for independent study
- 2) The student must be evaluated by the Office of the Registrar
- 3) The student must have completed 13.5 quarter units in residence with a grade point average of 3.0
- 4) The student must have no grades of "Incomplete" at time of application
- 5) The student must have no more than one other independent study at the current degree level
- 6) The student must have a current account balance

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:

- 1) Fill out an Independent Study Request, available as an e-Form on the Student Portal, or see an admissions advisor for assistance
- 2) e-Form must include justification of the special circumstances that necessitate an independent study

The lead faculty member will select a qualified and experienced instructor to teach the course and forward the request form to the department chair or school dean. If the department chair or school dean approves the independent study, the office of academic services schedules the class and 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 in writing. If an instructor submits a grade of "Incomplete," the instructor must also notify the Office of the Registrar of the date of the extension. "Incompletes" not removed before the time limit become permanent grades of "F." Standard tuition charges apply to independent studies.

Guided Study

Guided study is an individualized course that deals with material not covered in any approved catalog course. Guided study course numbers are typically 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 must meet the eligibility requirements as indicated under the independent study section. Requests should be made well in advance of the start of the guided study.

Change of Academic Program

Students may apply for a change of academic program at any time, provided they are not disqualified from their current program. Application for such a change does not, however, mean automatic acceptance into the new program. Official acceptance into the new program occurs only when students are re-evaluated. 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 at the time of the change. Students must keep in mind that courses taken in the program they are exiting might not apply toward the program they are entering. The third (3rd) and any subsequent application for a change in program must be accompanied by a letter of intent that must be approved by the Committee on the Application of Standards. Such letter should explain the reason for the change along with the plan for completion.

Practica, Internships, & Residencies

Students may be required to take practical training courses in the form of internships, practica, or residencies depending on the academic discipline in which they are enrolled. This training may be accomplished at National University facilities or at off-campus locations, depending on the specialty being pursued. All such courses share certain common elements including:

- Students must register in advance
- University instructors are responsible for developing course

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- 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. A satisfactory grade is considered equivalent to a "B" grade or better for student teaching and graduate level courses, or a "C" grade or better for undergraduate courses. The satisfactory grade is not calculated into the student's GPA
- All practica, 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 practica, internships, or residencies in the time allotted are issued a grade of "Incomplete." If students do not clear the "Incomplete" within the time specified, they can file for an extension with their professor, who in turn files the extension with the registrar's office. Students who fail to complete the course at the end of the extension receive the grade of "F" or "U." No second extension can be given

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 had their academic records evaluated by the Office of the Registrar
- 2) Not exceed the maximum number of 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 a "Request for Concurrent Enrollment" accompanied by a course description to the Office of the Registrar
- 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) Concurrent enrollment requests must be received no later than two weeks prior to the enrollment date

Committee on the Application of Standards/Exceptions to Academic Regulations

Students can request an exception to a published University academic policy by submitting the request to the Committee on the

Application of Standards. Students should make such a request through their admissions advisor. Students must submit documentary evidence in support of each 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. All decisions rendered by the committee are valid for one (1) year from the date the decision was made. Any appeal 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. Any appeal to review a committee decision must include additional information and must be submitted to the committee coordinator in the Office of the Registrar in order to be reconsidered by the Committee.

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) Your request must include justification of the special circumstances that necessitate an exception to a published University policy

National University 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.

Faculty members, especially those who teach research or capstone project courses, must become knowledgeable about the IRB process. They discuss the IRB process with their students in the research and capstone project courses and provide students with the IRB forms or direct them to an electronic source where they are available. Faculty members assist students in filling out the forms and assuring that all required signatures and documentation (abstract, description of methodology, inclusion of survey instrument, preparation of consent form, etc.) are obtained before an IRB form is submitted. Even though a student may believe that their human subjects research should qualify as exempt from review, it is necessary to submit it to the IRB to receive confirmation that it qualifies.

If a student begins the data collection before receiving the approval from the IRB, their research project will not be accepted for review.

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, sex, 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

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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 investigate 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

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 thirty (30) 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 Student Relations Coordinator in the Office of Student Affairs will provide any member of the University community an opportunity to discuss specific concerns in a confidential setting. Assistance will be provided to:

- help the complainant understand the definition of discrimination or sexual harassment and determine if the alleged conduct would constitute discrimination or sexual harassment;
- explain the various informal and formal options available to the complainant, including strategies for the complainant to inform the offending party that the behavior is unlawful or unwelcome and should cease, action by an appropriate University official to stop the unlawful or unwelcome conduct and mediation; and
- identify various support services available to the complainant.

The student may seek a resolution of the matter through discussion with the alleged offender or person responsible for the program or for enforcing the rule or procedure. 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 or to the alleged offender's supervisor, if appropriate.

The campus officer who is consulted will keep a written log of discussions, which in all events will be forwarded to the Vice President for Student Services. If the dispute is resolved to the satisfaction of all parties, a memorandum stating resolution of the conflict is sent to the parties and the Vice President for Student Services will monitor the situation to prevent recurrence or retaliation.

Formal Procedures

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

- 1) The complainant must complete a complaint form. These forms are available in the Office of Student Affairs. To be processed, the complaint must be filed within 120 days of the alleged unlawful discrimination or harassment or within one-hundred twenty (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 thirty (30) 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 and will provide a copy to each party.

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B. A review panel is established as follows:

The complainant and respondent each nominate one student or employee who is unbiased, not involved in the complaint and willing and available to serve as a member of the panel.

The nominated panel members select, by mutual agreement, another member who will serve as chair of the panel, who will conduct the hearing and rule on procedural matters. If they are unable to agree on a chair, the Vice President for Student Services makes the selection.

C. Once the review panel is established:

The chair sets the time and place for the hearing at the earliest possible time consistent with the schedules of the parties and the panel. The date of the hearing may be postponed or extended by mutual agreement of the parties with the consent of the chair. The panel makes every reasonable effort to conduct its hearing within fourteen (14) days of the panel's formation.

The failure of any party to appear without justifiable cause will terminate that party's right of appeal.

The Vice President for Student Services reviews pertinent evidence and coordinates the hearing process by informing the panel of its role, defining the issues and ensuring that the panel is provided with the complaint, response and other appropriate information. The Vice President for Student Services serves as recorder of the proceedings and advisor to the panel, but does not vote.

The standard of review to be used in all proceedings is fundamental fairness. Strict rules of evidence and procedures are not required so long as the proceedings are conducted in a manner that allows both sides to fairly and fully explain the circumstances. Decisions regarding the admissibility of evidence and the weight to be given to pieces of evidence will be made by the chair. The burden of proof is upon the complainant to prove his or her case by a preponderance of the evidence, which means that the proof need only show that the facts are more likely to be so than not so.

The review panel proceedings will be conducted in a closed hearing. The parties will have a reasonable opportunity for oral presentation and to present written evidence. The hearing is not a legal forum and representation of parties by legal counsel is not permitted. The parties may, however, be accompanied by another member of the University community, who will act as a personal advisor with whom they may consult.

The panel will make every reasonable effort to forward its written findings to the Vice President for Student Services and to the parties within seven (7) days after the close of the hearing.

The findings will be recorded and signed by the parties and the Vice President for Student Services, except when either party disagrees with the findings of the committee and decides to appeal. Reasonable, timely, and effective action will be taken as needed to correct discriminatory effects, prevent recurrence, or remedy the complainant's loss, if any. These actions will be communicated to the complainant.

In the event disciplinary action is recommended, the respondent will be entitled to fair process provided by University rules and regulations. Only when a complaint reaches the formal process and only if it is sustained will it be recorded in the respondent's student or personnel file.

Appellate Procedures

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

Parties can forward commentary to the Provost and Vice President for Academic Affairs within fourteen (14) days of receipt of the appeal.

Within twenty-one (21) days following receipt of an appeal, the Provost and Vice President for Academic Affairs 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 and Vice President for Academic Affairs 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 United Nations Plaza, Room 239
San Francisco, California 94102

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 abide by the regulations of the University. 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

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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 of the 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 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 disciplinary hearing, convened by the Judicial Affairs Officer. 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 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 excepted) 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, however, 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.

Reasons for Probation, Suspension and Dismissal of Students

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

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- 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

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 Officer will notify the person making the report. If there is sufficient information, the Judicial 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 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. 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.

Hearing Procedures

Hearing committees consist of three (3) members. The Judicial 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 Officer will select the third (3rd) member. The Judicial 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. 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. If the committee decides to impose a penalty, it specifies the disciplinary action to be imposed.
- The Judicial 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 and Vice President for Academic Affairs. In order for the Provost and Vice President for Academic Affairs 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

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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 and Vice President for Academic Affairs, any disciplinary action previously imposed may be suspended pending disposition of the appeal.

The Provost and Vice President for Academic Affairs 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, mitigate 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 and Vice President for Academic Affairs. Within fourteen (14) days of receiving the recommendation, the Vice President 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
- To challenge or rebut evidence or testimony presented by the opposing party
- To submit evidence on behalf of their own position
- 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.

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Admission Procedures

Academic/Admissions Advising

Persons seeking admission to undergraduate studies at National University are unique in their specific circumstances and needs. Consequently, applicants are interviewed by an admissions advisor. The admissions advisor discusses applicants' specific requirements for admission at the initial interview. All prospective and registered students receive a 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 can be found under each degree program within this catalog. Faculty advisors 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.

Qualifications

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

- 1) High school graduates applying for enrollment at National University must have a high school GPA of 2.0.
- 2) Applicants who have completed fewer than 90 quarter (60 semester) units of transferable college credit must have graduated from high school, passed a high school-level G.E.D. test (standard score for each section must be at least 40 with an overall score of 225), or received a Certificate of Proficiency from a State Department of Education to be accepted on a provisional basis.
- 3) Applicants transferring from regionally accredited colleges and universities are admitted as degree students if their cumulative grade point average is 2.0 (C) or better. Applicants with a grade point average below 2.0 may be admitted on probation if the Committee on the Application of Standards determines that there is sufficient evidence of potential to complete college studies.
- 4) Applicants who are within six months of completing a high school degree may apply to National University for an undergraduate program. Baccalaureate courses may not be taken until proof of the student's high school degree is provided.
- 5) Applicants must present preliminary evidence of prior education at the required interview with an admission advisor. Unofficial transcripts are acceptable.
- 6) Applicants must also:
 - a. Complete an application for admission
 - b. Execute an enrollment agreement
 - c. Pay an application fee of \$60
 - d. Complete the mathematics and English Accuplacer evaluation

The Committee on the Application of Standards must approve any

exceptions to the above admissions requirements before the applicant's application may be processed.

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 copy is provided to students. Regardless of previous academic background, all students applying to any nursing program must complete both the mathematics and English ACCUPLACER exams.

First-time undergraduate students can take the Accuplacer evaluation tests once at no charge. Subsequent evaluations 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. Students without transferable mathematics credits will be evaluated for the pre-collegiate mathematics sequence, MTH 012A and MTH 012B, to be completed prior to college-level mathematics. Students may test out of one or both of these classes through successful placement by Accuplacer.

English Placement

Students may request transfer credit for lower division college-level English courses completed elsewhere with a grade of "C" or better. Students without transferable English credits will be evaluated for the pre-collegiate English course, ENG 013, to be taken prior to college-level English. Students may test out of ENG 013 through successful placement by ACCUPLACER.

MTH 012A, MTH 012B, and ENG 013 do not grant collegiate credit. Grading is S/U only.

Conditional Admission

High School students in their final semester before graduation who want to be admitted into National University for undergraduate studies may be conditionally accepted into to a baccalaureate program. The official acceptance of such students will occur when they produce in a sealed envelope an official transcript that shows conferral of the high school diploma. When the Office of the Registrar receives this official documentation, students will be considered for eligibility. Conditionally accepted students are not permitted to take baccalaureate courses at National University until they produce proof of high school graduation.

Provisional Acceptance

National University grants provisional admission to high school graduates if the official documents required to determine eligibility for admission, transfer credit, or advanced standing are not immediately available. To be provisionally admitted, applicants must provide preliminary documentation of prior education even if the records are not official. When the University receives the required official documentation, students are considered for official acceptance. Applicants are advised at their initial interview with an advisor that their degree plan may require changes following an evaluation of official transcripts and any other pertinent documents.

Undergraduate students may take courses during provisional admission while the Office of the Registrar awaits receipt of official

Academic Information for Undergraduate Degrees

transcripts from each college attended, CLEP scores, official military documents, high school transcripts, G.E.D. or high school proficiency certificates, and/or other documents required for evaluation. If the Office of the Registrar does not receive all required documentation within three months of the date of admission, the students must temporarily interrupt studies until the registrar receives all official documents. Course work completed satisfactorily during conditional admission counts toward graduation if it is consistent with specific degree program requirements.

Probationary Acceptance

Prospective students who are ineligible for admission must apply to the Committee on the Application of Standards. If the committee 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 perform satisfactorily. Upon satisfactory completion, the student will be officially admitted to the University. If the University determines upon receipt of official transcripts that a student does not meet stated admissions requirements, the student's studies will be interrupted until the student petitions the Committee on the Application of Standards for admission.

Transcript Requests of Other Institutions

Transfer credit earned at other institutions cannot be considered without official transcripts. In order to expedite the student's evaluation process, students are encouraged to provide official transcripts for all institutions attended. Upon request, the University will process on the student's behalf the initial request for all domestic transcripts, including payment of associated fees. If a transcript has not arrived within four weeks, the registrar's office will submit a second request and notify the student that a transcript is still outstanding. Thereafter, it becomes the student's responsibility to ensure that the University receives the document. 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 must acquire official transcripts/documents themselves.

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

Office of the Registrar
National University
11355 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 in a sealed envelope from the issuing institution.

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 records of students who have been accepted as candidates for a degree 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 course work toward meeting the requirements of a particular degree. Students will be notified by e-mail when they may view their Degree Progress Report online through the student portal. The report lists the course work and other requirements that remain for completion of the program. It guarantees that a student will not be required to take additional units unless studies are interrupted for a period of 12 or more months or if a student decides to change his/her academic program.

Applications for financial assistance cannot be certified 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 and have not satisfactorily completed a course in their program over a 12-month period may be readmitted to the University upon application. They are required to follow the policies of the catalog in effect at the time of readmission and 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 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. Transfer of credits from agencies which are not CHEA members are subject to additional scrutiny to validate that their academic programs adhere to the standards of institutions accredited by CHEA members. Transfer of credit from any collegiate institution will be accepted only if they apply to the student's degree or certificate program and are comparable in nature, content, and level of credit to similar course work 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.

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 at the issuing institution, or accept transfer credit on a provisional basis to be validated by satisfactory course work in residence. Under no circumstances will National University accept transfer credit for a course in which the student earned a "D" grade.

Collegiate

The maximum number of 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 credits acceptable for transfer is 40.5 quarter units (27 semester units). Exceptions to this policy are determined by the Committee on the Application of Standards. A total of 36 quarter units (24 semester units) may be

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accepted from the extension division of a regionally accredited university. Up to 9 quarter units (6 semester units) are allowed for correspondence courses from a regionally accredited institution. In either case, only credits that the previous institution accepts 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). For basic skills courses, only credits that the previous institution accepts toward degree requirements are allowed for transfer.

Non-collegiate

The maximum number of credits acceptable for non-collegiate learning is 58.5 quarter units (39 semester units) for an associate degree, with a cumulative total of 67.5 quarter units (45 semester units) for a baccalaureate degree. 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 CLEP examinations.
- No more than 22.5 quarter units (15 semester units) may be earned for:
 - 1) DANTES independent study/credit-by-examination courses
 - 2) ACT PEP: Regents College Examinations
 - 3) Credit recommended in the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE]) or the Directory of the National Program on Non-Collegiate Sponsored Instruction (PONSI).
 - 4) Local, state and federal law enforcement training recommended by ACE or PONSI and such credit as is listed on a transcript from a regionally accredited college.
- A maximum of 22.5 quarter units (15 semester units) may be allowed for departmental examinations at National University.
- A maximum of 45 quarter units (30 semester units) may be allowed for military experience and military schools that have been evaluated by ACE.
- 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.

CLEP General Examinations

The University awards credit for successful completion of CLEP general examinations to meet general education requirements. The mathematics general examination does not earn credit for any specific general education mathematics requirement. Therefore, it is recommended that students complete the mathematics evaluation prior to taking the mathematics CLEP exam.

Students who plan to use their CLEP scores for purposes other than earning a degree at National University, such as transferring to another institution or establishing eligibility for law school admission, should take a nationally administered CLEP examination. CLEP testing is available at select National University campuses.

CLEP Subject Examinations

Credit for successful completion of CLEP subject examinations can be applied to meet general education, preparation for the major, or general lower-division elective credit. With the exception of the French, German, Spanish and Introduction to Accounting examinations, 4.5 quarter units of credit are awarded for each subject examination passed according to ACE guidelines. The French,

German, or Spanish language examinations can award up to 18 quarter units and Introduction to Accounting can award up to 9 quarter units of credit.

Note: Effective July 1, 2002 the Educational Testing Service only makes available CLEP Subject Matter Examinations. However all General CLEP Examinations taken prior to this date are accepted in transfer up to a maximum of 27 quarter units or 18 semester hours. General CLEP examinations can only be applied to the General Education area.

DANTES Defense Activity for Non-Traditional Education Support

DANTES Subject Standardized Tests (DSSTs) demonstrate 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 DSSTs 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 tests are available to military personnel through the Education Services Officer.

Advanced Placement Exams

National University awards college credit for advanced placement exams passed with a score of 3 or better.

ACT PEP Regents College Examinations

The 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 ACT PEP/RCE 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).

ACT PEP/RCE registration bulletins are available at the Career and Assessment Center in San Diego. Students should contact the CAC for further details about testing sites.

National University Credit by Examination

Currently enrolled students can obtain credit for undergraduate courses by departmental examination when training or experience appear to provide a 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. Students can obtain applications for credit-by-examination from their advisors. Students must submit their petitions after they are matriculated at the University and before they complete their ninth course. Approval must be granted by the Office of the Registrar and the students must pay a \$100 fee to the business office. Students must take the examination within 30 days following the approval.

All credit-by-examination must support the objectives of the student's degree program and cannot exceed 13.5 quarter units in an associate degree program or 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, 13.5 may consist of departmental examinations to replace lower-division work and 9 quarter units to replace upper-division work, or vice versa. Students can earn no more than 9 quarter units in their

Academic Information for Undergraduate Degrees

major or minor by departmental examination. All grades are final. Students cannot repeat a credit-by-examination if a previous attempt was unsuccessful.

Credit from departmental examination is counted toward graduation, but no grade points are assigned or included in calculating grade point averages nor is the credit used to meet residence requirements.

Credit Granted for Military Education

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 "Application for the Evaluation of Educational Experiences during Military Service" (DD-295), or a Military Smart Transcript.

Credit may also be accepted from non-collegiate courses that are specifically listed in "A Guide to Educational Programs in Non-collegiate Organizations." Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

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

Course Waivers and Challenge Exams

Waiver Based on Prior Training or Experience

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 to allow the student to waive the particular course.

A course waived by the Committee on the Application of Standards exempts a student from that course. Units are not awarded for a waived course, so the student may need to take a different course in its place in order to meet the overall unit requirement for the degree.

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.

Servicemembers Opportunity College (SOC) Agreement

National University is a member of Servicemembers Opportunity Colleges (SOC) and participates in the SOCNAV, SOCMAR, SOCCOAST, and SOCGUARD associate and bachelor's degree programs for Navy, Marine Corps, Coast Guard, and National Guard personnel and their adult family members. The SOC network programs provide active duty personnel with a means to earn an

undergraduate degree from National University if transferred before completion of the required course work.

National University issues a SOC Student Agreement to every active-duty service member admitted, provided that the University has received all transcripts and other required documents such as the DD295 or Smart Transcript, and that the student has satisfactorily completed one 4.5-quarter unit course in residence. Service members who enrolled prior to January 1, 1999, who wish to obtain such an agreement, must submit a written request to the Office of the Registrar for an official evaluation, provided all required documents are on file. National University extends the Student Agreement process to service members of all military branches and their adult family members.

Participation in the SOC network system 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 successful completion of all academic requirements. A SOC Student Agreement is valid for a period of seven years. 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 Transfer Specialist in the Office of the Registrar for further information.

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.

National University notifies the Veterans Administration within 30 days upon a change of status of any veteran or eligible person who ceases to make satisfactory progress.

Grades and Grading System

Students who have more than three absences, excused or unexcused, cannot be given 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 given when a student who has completed at least two-thirds of the course class sessions and is unable to complete the requirements of the course because of 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, they provide the student with the conditions for removal of the Incomplete in writing and file a copy with the Office of the Registrar. The file copy remains in place until the "Incomplete" is removed or the time limit for removal has passed. An "Incomplete" is not assigned when the

Academic Information for Undergraduate Degrees

only way the student could make up the work is to attend a major portion of the class when it is offered again. Students must resolve "Incompletes" no later than the second complete quarter following the course completion date. Students can be required to remove an "Incomplete" in a shorter period at the discretion of the instructor.

An "I" that is not removed within the stipulated time becomes an "F." 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 tenth (10th) day after the start-date 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 but no grade points are assigned.

IP In Progress

A designation representing a sequential course in progress and that a grade will be assigned at the end of the sequence. No credit is awarded until the sequence is completed and a permanent grade is entered replacing the "IP" grade. This grade is also used for project courses that allow 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 "B" or better. No grade points are assigned.

S Satisfactory

Signifies average ("C") work. No grade points are assigned.

U Unsatisfactory

Signifies no credit ("F"). No grade points are assigned.

Plus/Minus Grading

National University uses a plus/minus grading system. The grades of A+, F+ and F- are 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. If they choose not to use this system, they must clearly state so in their course outline.

Grade Point Average Requirements

All course work completed at National University must average 2.0 or higher.

All course work completed at National University for the major or in fulfillment of upper-division requirements must average 2.0 or higher unless otherwise specified.

All course work completed at National University for the minor must average 2.0 or higher. If the required grade point average is not maintained, the minor is not included within the degree title.

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 averages. When a course is repeated, the higher grade is included in the calculation, but the lower grade remains part of the permanent record and is not calculated in the grade point average.

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

Students attending National University are expected to maintain satisfactory academic progress in their course of study. Academic progress is defined using both a qualitative and quantitative measure. The qualitative academic progress is assessed by the grade point average (GPA) achieved at National University; the quantitative academic progress is measured through the number of quarter units satisfactorily completed.

Undergraduate students must maintain a "C" (2.0) grade point average for course work taken at National University. Students are expected to satisfactorily complete 36 quarter units per year of full-time study or 18 quarter units per year of half-time study, provided the degree requirements are completed in no more than six years.

Academic Probation

Students whose cumulative GPA falls below 2.0 for course work taken at National University are placed on academic probation. They are allowed six courses to improve their cumulative GPA to 2.0. Students placed on academic probation are removed from this status when they have improved their cumulative GPAs to 2.0 or better.

Academic Disqualification and Reinstatement

Students on academic probation who fail to raise their cumulative GPA to 2.0 within the six classes will be academically disqualified from the University. To be considered for reinstatement, they must complete twelve 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.

If the faculty determines that a student ought to be academically dismissed for reasons other than grades, they 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.

Academic Information for Undergraduate Degrees

Discontinuance of Study Because of Incompletes

Students who have three concurrent "Incompletes" will be prohibited from taking any further courses until all three "Incompletes" have been removed. They will be allowed to continue their programs when final grades have been received for all "Incomplete" course work and all other requirements have been met.

Repetition of Courses and Grade Changes

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. The original grade entry 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 once. The Committee on the Application of Standards must authorize any exception.

All grades are final. Students will not be 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. (See "Grade Appeals.")

Second Degree from National University

A second degree from National University can be granted if all course and residence 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.

National University Memorial Degree

Since the University was founded in 1971, there have been several occasions when students have died before they were able to complete their degree studies. If it is requested by a student's family, the board of trustees will 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

As long as students do not interrupt their studies at National University for a period of twelve months or more, they remain subject to the requirements of the academic program in which they enrolled that were in place in the catalog at the time of admission.

Students who change their major or minor after having been admitted to the University must follow the major and minor requirements in effect at the time of such change.

Students can elect to change to the current catalog; however, they must meet all prerequisites and requirements for general education, majors, minors, and areas of specialization in the current catalog. They cannot combine requirements from their previous catalog with those in the current catalog.

Students who are disqualified and subsequently attend the University after an absence of 12 months are subject to the requirements of the catalog in effect at the time they are readmitted in the University.

Note: Disqualified students must petition C.A.S. for possible reinstatement.

Graduation Requirements for Undergraduate Degrees

Unit 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. Depending upon the selection of a minor and the need to complete developmental or skill courses prerequisite to general education or preparation for the major courses, some students may be required to complete more than 180 quarter units for their degree.

Upper-Division Units

The total number of upper-division units required for a baccalaureate degree is 76.5 quarter units (17 courses). Upper-division courses are numbered 300 through 599.

Residency Requirements

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

To qualify for an associate degree, students must complete a minimum of 31.5 quarter units at National University.

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)
- 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

Courses taken through the Division of Extended Learning and units earned through credit-by-examination do not apply to these requirements.

General Education Requirements

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 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 course work. All undergraduate students working toward any associate or baccalaureate degree must meet the University diversity requirement.

Academic Information for Undergraduate Degrees

National University has general education requirements in the following seven areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G: GENERAL EDUCATION ELECTIVE

(minimum 4.5 quarter units)

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.

Major and Minor 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 each bachelor of arts or bachelor of science degree. Most majors consist of an integrated area of specialized study at the upper-division level and consist of at least nine courses, which total 40.5 quarter units.

Courses taken in the major or in satisfaction of the major cannot be used to meet requirements in a minor or in general education.

The required upper-division courses for the major cannot be used to meet requirements in a minor or in general education. At least half of the required upper-division courses for the major must be completed in residence. Units earned through credit-by-examination do not satisfy residency requirements.

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 indicated. Courses in the minor do not count toward the major, but can be used to satisfy preparation for the major and general education requirements. At least two-thirds of the units in the minor must be completed in residence. Units earned through credit-by-examination do not satisfy residency requirements.

Application for Graduation

Graduation is not automatic upon the completion of degree requirements. Students must file an application in the Office of the Registrar within the designated application period for degree posting. A \$100 processing fee is required at the time of application. Requirements for graduation include:

- Satisfactory completion of one of the regular curricula of study leading to a degree with a minimum overall grade point average of 2.0 and a grade point average of 2.0 for all courses completed in satisfaction of major and minor requirements, unless otherwise specified.
- Settlement of all financial obligations with the University

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. Prerequisite courses that were required are included in the calculation of the grade point average. 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.

Degree Posting

Degrees are posted to transcripts after the close of each academic quarter, specifically on the third Sunday in January, April, July and October. Diplomas are mailed following degree posting.

Annual commencement exercises are held in San Diego for the San Diego and Southern regions and in Sacramento for the Northern region. 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 Application for Degree by the posted deadline to participate. Consult the University's Website for the dates of commencement.

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The University of Values



Academic Information for Graduate Degrees and Credentials

Admission

Academic/Admissions Advising

Persons seeking admission to graduate and credential studies at National University are unique in their specific circumstances and needs. Consequently, applicants are interviewed by an admissions advisor. The admissions advisor discusses applicants' specific requirements for admission at the initial interview. All prospective and registered students receive a 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 can be found under each degree program within this catalog. Faculty advisors 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.

Qualifications

In addition to the general admission requirements, applicants for admission to a master's degree program must:

- 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.

Students with a grade point average of 2.0 to 2.49 may be admitted to the University if they have a satisfactory score on one of the following tests:

- 550 on the Graduate Management Admission Test
- 480 (verbal) and 570 (quantitative) the Graduate Record Examination
- 48 on the Miller Analogies Test
- An approved, standardized program-specific exam

Note: National University's College Board Institutional Code=4557

Alternatively, students with an undergraduate grade point average of 2.0 to 2.49 may be admitted to National University if they have successfully completed 13.5 quarter units of graduate coursework with grades of "B" or better at a regionally accredited institution.

Finally, students with an undergraduate grade point average of 2.0 to 2.49 may be accepted to National University on probation (see "Probationary Acceptance" below).

- 2) Applicants must present preliminary evidence of prior education at the required interview with an admission advisor. Unofficial transcripts are acceptable.

- 3) Applicants who are within six months of completing a baccalaureate degree may apply to National University for a graduate or credential program. Graduate level courses may not be taken until proof of the student's baccalaureate degree is provided.
- 4) Complete an application for admission.
- 5) Execute an enrollment agreement.
- 6) Remit an application fee of \$60.
- 7) Complete program admission process. Any exceptions to the above admissions requirements must be considered by the Committee on the Application of Standards.

All post-baccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English, must demonstrate competence in English. Those 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 advisory 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 on the evaluation, the admissions advisor recommends appropriate English courses.

Conditional Acceptance

Undergraduate students in their final semester before graduation who want to be admitted into National University for graduate study may be conditionally accepted into a post-baccalaureate program. The official acceptance of such students will occur when they produce in a sealed envelope an official transcript from a regionally accredited institution that shows conferral of the bachelor's degree with a cumulative GPA of 2.5 or better. When the Office of the Registrar receives official documentation, it considers students for eligibility. Conditionally accepted students are not permitted to take post-baccalaureate courses at National University until they produce proof of a baccalaureate degree.

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. The sealed transcript is to be sent to the Office of the Registrar of National University in a prepaid envelope provided by admissions advisors. 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 three months of the date of admission, the students must temporarily interrupt studies until all official documents are received. Course work completed satisfactorily during conditional acceptance will count toward graduation if it is consistent with specific degree program requirements.

Probationary Admission

Students whose undergraduate GPA was 2.0 to 2.49 may be accepted

Academic Information for Graduate Degrees and Credentials

on probation. 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 probation are not permitted to schedule more than one course for 4.5 quarter units during probationary period unless the degree program the student has applied for requires that the first course taken is a satisfactory/unsatisfactory graded course. Students who receive a grade below “B” during the first 4.5 quarter units are disqualified. They are barred from further attendance and must apply to Committee on the Application of Standards to be considered for reinstatement.

Proof of Bachelor’s Degree

In order to expedite the admission process, post-baccalaureate students are asked at the time of admission to secure from the college or university where they completed their baccalaureate degree a copy of their transcript in a sealed envelope. Official transcripts should be sent to the Office of the Registrar. Admissions advisors can provide students with a prepaid envelope addressed to the Office of the Registrar. Students are advised not to open the sealed envelope of the issuing institution, doing so will render the transcript invalid and a new one will need to be procured.

Transcript Requests of Other Institutions

Transfer credit earned at other institutions cannot be considered without official transcripts. Students are required to provide official documentation for all courses to be considered for transfer. The Office of the Registrar will not accept hand-carried transcripts or transcripts “issued to student” as official documents unless in a sealed envelope from the issuing institution.

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

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

Office of the Registrar
National University
11355 North Torrey Pines Road
La Jolla, California, 92037-1011

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

When eligibility for admission to a post-baccalaureate program has been determined, students will be notified by e-mail that they may view their Degree Progress Report online. The report lists the course work and other requirements that remain for completion of the program. In the case of entering post-baccalaureate students, it will list their entire program. As students progress through the program, the report will show course work already completed and the courses remaining to be completed. The report helps students, advisors, and the University to determine progress toward completion of program requirements and also serves as a graduation check.

Readmission Procedures

Students who are in good standing and have not satisfactorily completed a course in their program over a 12-month period may be readmitted to the University upon application. They are required to follow the policies of the catalog in effect at the time of readmission and pay a readmission fee.

Credit

Unit Transfer Limit

Students can transfer a maximum of 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. All transfer units must be designated as graduate work in which a grade of “B” (3.0) or better was earned. Students who believe that they have taken coursework elsewhere that is applicable to their current program may submit an electronic course waiver form either through the student portal or with the assistance of an admissions advisor. The Office of the Registrar must have received official transcripts from the transferring institution before a transfer request may be submitted. If a course description is not considered to be sufficient for determining transferability, students may be required to submit a course syllabus.

Time Limit

Course work 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 year ago cannot be applied to post-baccalaureate credential or degree programs for re-enrolling students. Outdated courses must be repeated, or, with the approval of the school dean, a more recent, suitable course may be substituted. The Committee on the Application of Standards governs all exceptions.

Course Waivers

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. Course waivers may be submitted through the student portal utilizing the electronic course waiver form or with the assistance of an admissions advisor. If the course waiver is approved, the student is exempt from the course, however units are not awarded for waived courses. Students must still meet the unit requirement for the degree.

Challenge by Examination

Students in the School of Education have the option to test out of EDT 608 and EDT655. 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. Contact an advisor or a local representative for more information.

Credit-by-examination is not allowed at the graduate level.

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

Academic Information for Graduate Degrees and Credentials

F Failing

I Incomplete

A grade given when a student who has completed at least two-thirds of the course class sessions is unable to complete the course requirements due to uncontrollable and unforeseen circumstances. The student must convey (preferably in writing) these circumstances to the instructor prior to the final day of the course. If the instructor decides that an "Incomplete" is warranted, the instructor must convey the conditions for removal of the Incomplete to the student in writing. A copy must also be placed on file with the Office of the Registrar until the Incomplete is removed or the time limit for removal has passed. An "Incomplete" is not assigned if the only way a student can make up the work is to attend a major portion of the class when next offered. An "Incomplete" must be removed no later than the second complete quarter following the original course completion date, but may be for a shorter period at the discretion of the instructor. An "Incomplete" not removed within the stipulated time becomes an "F." 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. This grade is assigned for unsatisfactory work in practicum, residencies, and field-experience courses.

W Withdrawal

Signifies that a student has withdrawn from a course after midnight of the tenth (10th) day after the start-date 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 sequential course in progress. At the end of the sequence, a grade is received and replaces the "IP" grade. No credit is awarded until the sequence is completed and a permanent grade is entered replacing the "IP" grade. This grade is also used for project courses that allow 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 "B" or better. No grade points are assigned.

S Satisfactory

Signifies marginal ("C") work. No grade points are assigned.

U Unsatisfactory

Signifies no credit ("D" or "F"). No grade points are assigned.

Plus/Minus Grading

National University uses a plus/minus grading system. The grades of A+, F+ and F- are 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. If they choose not to use this system, they must clearly state so in their course outline.

Repetition of Courses and Grade Changes

Students are not obligated to repeat a failed course unless it is a course required for graduation. Students can repeat, at the prevailing cost per quarter unit, any course in which an "F," "D," "C," or "B-" grade was received. The original grade entry remains part of the student's permanent record, but is not considered as units attempted in computing the grade point average. To properly document the repeated course, students must notify the Office of the Registrar that the course has been repeated.

A course in which a "B" grade has been earned may not be repeated.

All grades are final. Students will not be 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. (See "Grade Appeals.")

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 higher grade is included in the calculation. The lower grade remains part of the permanent record, but is not calculated in the grade point average.

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 or credential has been completed, a cumulative GPA is assigned for the course work in that degree or credential, and the 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.

To meet the requirements for graduation, students must also maintain a 3.0 grade point average for their field of study and area of specialization. If the required grade point average is not maintained within an area of specialization, that emphasis is not included within the degree title. Students who receive a "D" or "F" grade in a required course must repeat the course in the following quarter and receive a passing grade. Students who receive a "D" or "F" in an elective course may submit a written petition to the Committee on the Application of Standards to substitute another course. However, the "D" or "F" grade is still calculated in the cumulative GPA.

Academic Information for Graduate Degrees and Credentials

Academic Probation

Students whose cumulative GPA falls below a 3.0 for work taken 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. The University recommends that any course work in which a letter grade of "C" or below was earned should be repeated while on probation.

Removal from Probation

Students placed on probation are removed from probation when they have improved their grade point average to a cumulative GPA of 3.0 or better.

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 better during their probationary period, will be disqualified from their academic program. Disqualified students cannot attend National University for the next three months. After a three-month leave from the University, students can apply for reinstatement.

Students who believe they have been unjustifiably disqualified can petition the Committee on the Application of Standards and request a reconsideration of the disqualification. In the petition, the students must identify any extenuating circumstances that led to disqualification (e.g., serious illness, death in immediate family) and must include supporting documentation.

Reinstatement

To be reinstated, disqualified students must petition the Committee on the Application of Standards. The petition must explain the reason for the disqualification and the steps the student has taken to remedy the issues that led to the disqualification. Students who are approved to be readmitted to the University will be placed on a "Conditional" status. Students will be placed on permanent probation after completion of the required conditions set forth by the C.A.S. Committee if their cumulative GPA has improved to the required 3.0.

Discontinuance of Study Because of Incompletes

Students who have three concurrent "Incompletes" will be prohibited from taking any further courses until all three "Incompletes" have been removed. They will be allowed to continue their programs when final grades have been received for all "Incomplete" course work and all other requirements have been met.

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. Students who believe they have been unjustifiably dismissed can appeal to the Committee on the Application of Standards and request a reconsideration of the dismissal.

If the faculty determines that a student ought to be academically dismissed for reasons other than grades, they 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. The number of courses required for a second degree varies, but at least 40.5 quarter units must be completed in residence in the new degree program. Units earned toward the first master's degree cannot be applied toward the second.

Note: An M.A. in Human Behavior cannot be earned after an M.A. in Counseling Psychology degree has been earned.

Catalog Rights

As long as students do not interrupt their studies at National University for a period of twelve months or more, they remain subject to the requirements of the academic program in which they enrolled that were in place in the catalog at the time of admission.

Students who change their academic program after admission must follow the requirements in effect at the time of such 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 subsequently attend the University after an absence of 12 months are subject to the requirements of the catalog in effect at the time they are readmitted to the University.

Note: Disqualified students must petition C.A.S. for possible reinstatement.

Additional Residency Requirements for Credential and Certificate Programs

Students in certificate programs must complete two-thirds of the coursework at National University.

Credential candidates must complete a minimum of 31 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:

- CLAD certificate
- 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

All transfer credit must relate to the content of the respective degree program.

Academic Information for Graduate Degrees and Credentials

Graduation Requirements for Graduate Degrees

Field of Study and Area of Specialization Requirements

Each master's degree has been structured to delineate the program prerequisites, field of study, areas of specialization, and electives that constitute the requirements for the degree. Each degree has a designated field of study that consists of at least six courses, which total at least 27 quarter units. Not all degrees have areas of specialization.

Unit and Residency Requirements

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 field of study and three-fourths of the area of specialization in residence.

Graduate courses are numbered 600–699.

Courses numbered 500–599 may grant graduate credit if specified by the requirements of the degree program.

Application for Graduation

Graduation is not automatic upon the completion of degree requirements. Students must file an application in the Office of the Registrar within the designated application period for degree posting. Students must pay a \$100 processing fee at the time of application. Requirements for graduation include:

- 1) Satisfactory completion of one of the regular curricula of study leading to a degree with a minimum grade point average of 3.0. Students must complete all course work in satisfaction of their field of study or area of specialization.
- 2) Settlement of all financial obligations with the University.

Graduate students whose grade point average is a 3.85 or better will graduate "With Distinction." Prerequisite courses at the undergraduate level that were required for the program are not included in the calculation of the grade point average for graduate honors.

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.

Degree Posting

Degrees are posted to transcripts after the close of each academic quarter, specifically on the third Sunday in January, April, July and October. Diplomas are mailed following degree conferral.

Commencement exercises are held in San Diego and Sacramento annually. 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 Application for Degree by the posted deadline to participate. Consult the University's Website for the dates of commencement.

General Education

66	General Education
66	General Education Program Requirements
66	Approved Courses

The University of Values



General Education

General Education

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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 program has six major educational goals:

- 1) To provide students with a rigorous academic liberal arts foundation to prepare them for their majors
- 2) To assist students in correlating their undergraduate education and their career goals
- 3) To promote the critical thinking, reading and writing skills necessary for success in a complex and rapidly changing world
- 4) To increase respect for and awareness of diverse peoples and cultures
- 5) To provide an interdisciplinary education through a variety of intellectual models that advance competing critical points of view and address professional and social problems
- 6) To promote access to information technology and public access databases within the context of course research

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:

- 1) Apply skills and concepts developed in general education courses to challenges and tasks presented in their upper division major courses
- 2) Apply skills and concepts developed in the general education courses to challenges and tasks presented in their future profession
- 3) Demonstrate critical thinking, reading and writing skills appropriate to upper-division college work
- 4) Demonstrate awareness of how diverse peoples and cultures have interacted in the past and interact in our contemporary world
- 5) Demonstrate critical awareness of the different approaches, methods and assumptions of different academic disciplines and how these are applied to professional and social problems
- 6) 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.

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. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

Approved Courses

AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

CATEGORY 1

Writing (10.5 quarter units required)

ENG 100 Effective College English I (3.0 quarter units)
(Prerequisite: Placement Exam)

ENG 101 Effective College English II (3.0 quarter units)
(Prerequisite: ENG 100)

ENG 240 Advanced Composition
(Prerequisite: ENG100/ 101)

or

General Education

ENG 334A Technical Writing
(Prerequisites: ENG 100/101)
(Only Business and Engineering majors may fulfill this requirement by taking ENG 334A)

CATEGORY 2

Speech and Communications (4.5 quarter units required)

COM 100 Introduction to Communications
COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(minimum 4.5 quarter units)

MTH 204 Mathematics for Business and Science
(Prerequisite: MTH012A & MTH012B)
MTH 209A Structure and Concepts of Mathematical Fundamentals I
(Prerequisite: Placement Evaluation)
MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)
MTH 215 College Algebra and Trigonometry
(Accelerated Course)
(Prerequisite: Placement Evaluation)
MTH 216A College Algebra and Trigonometry I (3 quarter units)
(Prerequisite: Placement Evaluation)
MTH 216B College Algebra and Trigonometry II (3 quarter units)
(Prerequisite: MTH 216A)
MTH 220 Calculus I
(Prerequisite: MTH 215)
MTH 301 Structure and Concepts of Mathematical Fundamentals II
(Prerequisite: MTH209A)
CST 206B Discrete Structures and Logic Design
(Prerequisite: MTH 215)
CST 208B Calculus for Computer Science
(Prerequisite: MTH 215)
MNS 205 Introduction to Quantitative Methods for Business
(Prerequisite: Placement Evaluation)
NSG 322 Introduction to Biomedical Statistics
(open only to students in the B.S.N Degree Plan)

AREA C: INFORMATION LITERACY

(4.5 quarter units required)

ILR 260 Information Literacy and Report Writing
(Prerequisite: ENG 100)

AREA D: ARTS AND HUMANITIES

(13.5 quarter units required)

ART 100 Introduction to Art History
(Prerequisites: ENG 100/101)
ART 200 Visual Arts
ART 200A Visual Arts Laboratory (1.5 quarter units)
(Prerequisite: ART200)
HIS 233 World Civilization I
(Prerequisites: ENG 100/101)
HIS 234 World Civilization II
(Prerequisites: ENG 100/101)
LIT 100 Introduction to Literature
(Prerequisites: ENG 100/101)
LIT 345 Mythology
(Prerequisites: ENG 100/101)
MUS 100 Fundamentals of Music
MUS 327 World Music
(Prerequisites: ENG 100/101)
THR 200 Theater Arts
PHL 100 Introduction to Philosophy
(Prerequisites: ENG 100/101)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

COM 380 Democracy in the Information Age [+]
(Prerequisites: ENG 100/101)
ECO 203 Principles of Macroeconomics
ECO 204 Principles of Microeconomics
(Prerequisite: ECO 203)
HIS 220A History of the United States I [+]
(Prerequisite: ENG 100/101)
HIS 220B History of the United States II [+]
(Prerequisite: ENG 100/101)
HIS 300 Foundations of Western Civilization
(Prerequisite: ENG 100/101)
HIS 350 Cultural Diversity [+]
(Prerequisites: ENG 100/101)
POL 201 American Government and Politics
(Prerequisites: ENG 100/101)
PSY 100 Introduction to Psychology
SOC 100 Principles of Sociology
(Prerequisite: ENG 100/101)
SOC 260 Cultural Anthropology
(Prerequisites: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

(Note: One science lab is required @ 1.5 quarter units)

SCI 100 Survey of Bioscience
SCI 100A Survey of Bioscience Laboratory (1.5 quarter units)
SCI 101 General Chemistry
SCI 101A General Chemistry Laboratory (1.5 quarter units)
(Prerequisites: MTH 204 and SCI 101)
SCI 104 General Physics
SCI 104A General Physics Laboratory (1.5 quarter units)
(Prerequisites: MTH 204 and SCI 104)
SCI 201 Human Anatomy and Physiology I
SCI 201A Human Anatomy and Physiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 201)
SCI 103 Fundamentals of Geology
SCI 103A Fundamentals of Geology Laboratory (1.5 quarter units)
(Prerequisite: SCI 103)
SCI 202 Human Anatomy and Physiology II
SCI 202A Human Anatomy and Physiology Laboratory II (1.5 quarter units)
(Prerequisite: SCI 202)
SCI 203 Introduction to Microbiology
SCI 203A Introduction to Microbiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 203)

AREA G: MODERN LANGUAGE

(9 quarter units required)

(In addition to the coursework listed below, students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

ASL 120 American Sign Language I
ASL 220 American Sign Language II
(Prerequisite: ASL 120)
ASL 320 American Sign Language III
(Prerequisite: ASL 220)
LAS 100 Spanish I
LAS 200 Spanish II
(Prerequisite: LAS 100)
LAS 300 Spanish III
(Prerequisite: LAS 200)

General Education

- LAS 101 Spanish for the Native Speaker
(Prerequisite: Native speaking ability and/or recommendation of instructor.)
- LAS 201 Spanish for the Native Speaker II
(Prerequisite: LAS 101)

AREA A-G GENERAL EDUCATION

(4.5 quarter units minimum)

If a student has not met the upper-division unit requirement in the completion of the above general education areas, one of the following courses must be taken. If a student has already met the upper-division unit requirement in the completion of the above general education areas, any course in Areas A through G may satisfy this Area.

- COM 380 Democracy in the Information Age [+]
(Prerequisites: ENG 100/101)
- HIS 300 Foundations of Western Civilization
(Prerequisites: ENG 100/101)
- HIS 350 Cultural Diversity [+]
(Prerequisites: ENG 100/101)
- LIT 342 World Literature
(Prerequisites: ENG 100/101)
- PHL 375 Environmental Ethics
(Prerequisites: ENG 100/101)
- SCI 300 Geography [+]
- SOC 260 Cultural Anthropology
(Prerequisites: ENG 100/101)

College of Letters and Sciences

Dean, **Michael McAnear**
Ph.D., Germanic Languages
University of California at Los Angeles

70	Degrees Offered
71	Faculty
73	Undergraduate Degree Programs
93	Minors
94	Graduate Degree Programs

The University of Values



Degree Programs Offered

Undergraduate Degrees

Associate of Arts [Ⓜ]

Associate of Arts in Rehabilitative Counseling

Associate of Science in Health Science and Pre-Nursing

Bachelor of Arts

with Majors in:

English [Ⓜ]

English with Single-Subject Matter Preparation

with Concentrations in:

Communications and Media

Letters

General Studies

Global Studies [Ⓜ]

History [Ⓜ]

Interdisciplinary Studies

Psychology [Ⓜ]

Sociology [Ⓜ]

Bachelor of Science

with Majors in:

Earth Sciences

Environmental Science and Policy

Life Sciences

Mathematics

with Concentrations in:

Mathematics and Applications

Single-Subject Teaching

Organizational Behavior

Bridge Program for Students with Foreign Credentials

College of Letters and Sciences Minors

Addictive Disorders

Counseling

English

Global Studies

History

Mathematics

Psychological Research

Sociology

Graduate Degrees

Master of Arts

with Fields of Study in:

Counseling Psychology

English [Ⓜ]

Human Behavior

Master of Fine Arts

with a Field of Study in:

Creative Writing [Ⓜ]

Master of Science

with a Field of Study in:

Industrial-Organizational Psychology

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, cultural, gender and ethnic issues in daily life. In order to give these concerns intellectual context, the Center events focus specific attention on questions of race, class, and gender, historical representation, cultural images and globalization.

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 activists. 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.

Events arranged by the Center are co-sponsored and supported by numerous organizations, including the California Council for the Humanities, San Diego Public Library, African and African-American Studies Research Project at UCSD, Naval Training Center Foundation, San Diego Historical Society, Sacramento Public Library, Sacramento Philharmonic, St. Paul's Cathedral in Sacramento, and many others.

In addition to sponsoring events and encouraging discussion of contemporary intellectual and cultural issues at National University campuses throughout California, the Center for Cultural and Ethnic Studies also houses the Community Oral History Project. The mission of the Community Oral History Project at National University is to create a pedagogical tool that makes history come alive for students and show them how community history is an integral part of U.S. and world history. Students and faculty collect and process oral history interviews with persons who had been eyewitnesses to or participants in events of historical significance for deposit in the oral history collection at National University and the San Diego Historical Society. The ultimate purpose of the project is to encourage oral history scholarship at National University and in the community.

International Cultural Studies

The Center for Cultural and Ethnic Studies also coordinates the International Cultural Studies program. This program offers courses in regional studies at various international locations, bringing the study of a specific region directly into the student's academic experience. For further information on this program, contact the College of Letters and Sciences.

Writing Across the Curriculum

Writing Across the Curriculum is a University-wide program that enriches all schools and areas of learning through the development of writing skills and critical thinking. The College of Letters and Sciences has developed this program to ensure that the writing needs of all disciplines are met and that the quality of writing and related skills distinguish the National University graduate. In conjunction with faculty of the other schools, the faculty of Arts and Sciences serve the entire University community by improving the skills so essential to student well being. They do this by creating writing-intensive courses, directing the Writing Centers, editing the WAC (*WHACK*) newsletter and the *Gnu Student Journal*.

[Ⓜ] denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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College of Letters and Sciences

Mission Statement

The College of Letters and Sciences 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 (COLS) 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.

Undergraduate Degrees

■ ASSOCIATE OF ARTS

(600)

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu
Christine Photinos • (858) 642-8349 • cphotino@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.

Degree Requirements

To receive the AA 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, 70.5 must fall into the areas of general education listed below. The other 19.5 quarter units can be comprised of elective courses and/or specific major program preparatory courses.

Students are urged to meet English and mathematics 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 application, placement evaluation and matriculation.

General Education Program Requirements

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu
Christine Photinos • (858) 642-8349 • cphotino@nu.edu

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward the Associate of Arts or bachelor's degree must meet the University diversity requirement.

The general education program has six major educational goals:

- To provide students with a rigorous academic liberal arts foundation to prepare them for their majors.
- To assist students in correlating their undergraduate education and their career goals.
- To promote the critical thinking, reading and writing skills necessary for success in a complex and rapidly changing world.
- To increase respect for and awareness of diverse peoples and cultures.
- To provide an interdisciplinary education through a variety of intellectual models that advance competing critical points of view and address professional and social problems.

- To promote access to information technology and public access databases within the context of course research.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language, including American Sign Language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

■ ASSOCIATE OF ARTS IN REHABILITATIVE COUNSELING

(600-302)

Faculty Advisor: Roland Fleck • (858) 642-8577 • rfleck@nu.edu

Program Description

The Associate of Arts degree in Rehabilitative Counseling is designed to meet state requirements for certification of alcohol and drug counselors. This program meets the requirements of The California Association of Alcoholism and Drug Abuse Counselors (CAADAC), a certification body recognized by the State of California. This is a degree shared by the Division of Extended Learning and the College of Letters and Sciences.

For complete information on the CAADAC certification, or to order a CAADAC Handbook visit www.caadac.org or call (916) 368-9412.

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. 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

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requirements for specific information regarding application, placement evaluation and matriculation.

Program Outcomes

Recognize the importance of individual differences by gaining knowledge about personality, cultures, lifestyles, gender, special needs, and any of the factors influencing client behavior in order to provide assessment that are sensitive to the uniqueness of the individual.

Apply pharmacological knowledge to the implementation of selected counseling strategies by incorporating substance specific information to improve the quality and continuity of care.

Using interview techniques gather and document relevant substance use history and related information from the client in order to obtain current status and history.

Maintain information about community resources and services by establishing contact with other services providers in order to evaluate the appropriateness of referring the client.

Make an accurate evaluation by documenting client's psychological, social, and physiological signs and symptoms of substance use disorders in order to formulate a treatment plan.

Using current literature and research findings, deliver culturally relevant formal and informal education programs for clients and significant/concerned others to raise awareness of the prevention, treatment, and recovery processes for substance use disorders.

Recognize signs and symptoms of co-existing medical, mental, emotional, and/or behavioral disorders and conditions by interpreting observable behavior, laboratory data, and results of interviews and testing in order to determine if the client may be experiencing problems in addition to substance use disorders.

Evaluate the effectiveness of treatment approaches used by engaging in a systematic and personal review of the process in order to improve the quality of services

Behave in an ethical manner by adhering to established professional codes of ethics and standards of practice in order to promote the best interest of the client.

Students will be introduced to the supervised experience in clinical skills required of alcohol and drug abuse counselors.

General Education Requirements

AREA A: ENGLISH COMMUNICATION

CATEGORY 1

Writing (10.5 quarter units required)

- ENG 100 Effective College English I (3.0 quarter units)
(Prerequisite: Placement Exam)
- ENG 101 Effective College English II (3.0 quarter units)
(Prerequisite: ENG 100)
- ENG 240 Advanced Composition
(Prerequisite: ENG100/101)
(No 300-level English course may fulfill this requirement)

CATEGORY 2

Speech and Communications
(4.5 quarter units required)

- COM 100 Introduction to Communications
or
- COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(minimum 4.5 quarter units)

- MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)
(Prerequisite: MTH 216A)

AREA C : Information Literacy and Technology

(4.5 quarter units)

- ILR 260 Information Literacy and Report Writing
(Prerequisites: ENG 100/101)

AREA D: ARTS AND HUMANITIES

(13.5 quarter units required)

- PHL 100 Introduction to Philosophy
(Prerequisite: Eng 100/101)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

- PSY 100 Introduction to Psychology
- SOC 100 Principles of Sociology
(Prerequisite: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

(Note: One science lab is required @ 1.5 quarter units)

- SCI 201 Human Anatomy and Physiology I
- SCI 201A Human Anatomy and Physiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 201)

AREA G: Modern Language

(9.0 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of sign language, computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G: GENERAL EDUCATION

(4.5 quarter units)

Requirements for the Major

(10 courses, 45 quarter units)

- ADC 200 Sociological Perspectives on Alcoholism and Drug Addiction
- ADC 210 Physiological and Pharmacological Aspects of Substance Abuse
- ADC 220 Counseling Techniques/Practical Applications
- ADC 230 Counseling Special Populations
- ADC 240 Treatment Approaches for Alcoholism and Substance Abuse Counselor

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ADC 250	Alcoholism and Substance Abuse prevention and Intervention Education
ADC 260	Chemical Dependency and Psychiatric Illness
ADC 270	Legal and Ethical Practices for Drug and Alcohol Counselors
ADC 280	Personal and Professional Growth
ADC 299	Practicum – Field Work 255 Hours

■ ASSOCIATE OF SCIENCE IN HEALTH SCIENCE AND PRE-NURSING (A.S. - HS)

(602-125)

Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu

The Associate of Science in Health Science and Pre-Nursing 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.

Program Expected Outcomes

The A.S. – HS degree program prepares the graduate to be able to:

- Communicate effectively with others using oral, visual and written methods.
- Analyze the social, physiological and psychological aspects of human behavior at a basic level.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.
- Discuss the complexities of the humans species on the continuum from the level of organism to level of organized social being.
- Explore career options in the field of health care utilizing survey-level knowledge in a variety of relevant content areas.

Degree Requirements

To receive the A.S. – HS 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. 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 career to avoid serious difficulties in other course work. Refer to the section on undergraduate admission requirements for specific information regarding application, placement evaluation and matriculation.

Core Program Requirements

(12 courses, 42 quarter units)

AREA A: ENGLISH COMMUNICATION Category 1 Writing

(6 quarter units)

ENG 100	Effective College English I
ENG 101	Effective College English II

Category 2 Speech and Communication

(4.5 quarter units)

COM 200	Effective Communication
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AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units)

ILR 260	Information Literacy and Report Writing (Prerequisites: ENG 100/101)
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AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

PSY 100	Introduction to Psychology
SOC 100	Principles of Sociology (Prerequisites: Eng 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

SCI 201	Human Anatomy and Physiology I
SCI 201A	Human Anatomy and Physiology Laboratory I
SCI 202	Human Anatomy and Physiology II
SCI 202A	Human Anatomy and Physiology Laboratory II
SCI 203	Introduction to Microbiology
SCI 203A	Introduction to Microbiology Laboratory

Electives

Of the 48 quarter units for electives, students must complete at least 4.5 quarter units at the upper division level and 4.5 quarter units in diversity enriched course work. A plus (+) indicates a diversity enriched offering. All undergraduate students working toward the Associate of Science in Health Science and Pre-Nursing must meet the University diversity requirement. Students are strongly encouraged to take Introductory Science, especially SCI 100, 100A, 101, and 101A. Students are also encouraged to take courses in mathematics, particularly a course involving statistical analysis such as MTH 210 or NSG 322.

■ BACHELOR OF ARTS

(610)

General Education Program Requirements

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu and Christine Photinos • (858) 642-8349 • cphotino@nu.edu

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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])

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AREA G: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

◆ Major in English

(610-111)

Faculty Advisor: John Miller • (714) 429-5146 • jmiller@nu.edu

The Bachelor of Arts with a major 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.

Note: Students interested in teaching English or Language Arts in middle or secondary schools should consider enrolling in the Single Subject Matter Preparation Program (610-114) described below.

Degree Requirements

To receive the Bachelor of Arts degree in English, students 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. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree.

Program Outcomes

- Students will demonstrate knowledge of major writers and their works and major periods of both British and American literature.
- Students will demonstrate the ability to analyze and interpret works of literature in a variety of genres both orally and in formal written work.
- Students will demonstrate understanding of major critical approaches to the interpretation of literature.
- Students will demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of both literary and non-literary texts.
- Students will demonstrate the ability to situate and analyze literary works within historical and cultural contexts.
- Students will demonstrate understanding of various literary genres, their development and persistence over time, and the role of genre in the understanding and analysis of literary and non-literary texts.
- Student writing will demonstrate mastery of conventions of Standard Written English.

Preparation for the Major

(1 course, 4.5 quarter units)

LIT 100 Introduction to Literature
(Prerequisite: ENG 101)

Requirements for the Major

(9 courses, 40.5 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 342	World Literature (Prerequisite: LIT 100)
LIT 360	Literary Theory (Prerequisite: LIT 100)

And select **two** of the following courses:

COM 360	Representation and Diversity in Media (Prerequisite: ENG 101)
ENG 350	Fundamentals of Linguistics (Prerequisite: ENG 101)
ENG 365	Creative Writing (Prerequisite: ENG 101)

◆ Major in English with Single-Subject Matter Preparation

(610-114)

Faculty Advisor: John Miller • (714) 429-5146 • 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 in order 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 and the selection of a concentration. 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 Outcomes

- Students will demonstrate knowledge of major writers and their works and major periods of both British and American literature.
- Students will demonstrate the ability to analyze and interpret works of literature in a variety of genres both orally and in formal written work.
- Students will demonstrate understanding of major critical approaches to the interpretation of literature.
- Students will demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of both literary and non-literary texts.
- Students will demonstrate the ability to situate and analyze literary works within historical and cultural contexts.
- Students will demonstrate understanding of various literary genres, their development and persistence over time, and the role of genre in the understanding and analysis of literary and non-literary texts.
- Student writing will demonstrate mastery of conventions of Standard Written English.
- Students will demonstrate knowledge of fundamental concepts of linguistics.

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- Students will demonstrate understanding of the major stages of language development in children.
- Students will demonstrate familiarity with and the ability to apply technologies relevant to the study and teaching of English.
- Students will demonstrate the ability to use and analyze a variety of communications media, including creative writing, journalism, electronic media, theater, and mass media.

Preparation for the Major

(3 courses, 13.5 quarter units; all courses may also be used to fulfill General Education requirements)

COM 200	Effective Communication
LIT 100	Introduction to Literature (Prerequisite: ENG 101)
THR 200	Theater Arts

Requirements for the Major

(11 courses, 49.5 quarter units)

COM 360	Representation and Diversity in Media (Prerequisite: ENG 101)
ENG 300	Preprofessional Practicum (This course should be taken as early in the student's program as possible; it requires a 31.5 hour observation in the public schools)
ENG 350	Fundamentals of Linguistics (Prerequisite: ENG 101)
ENG 365	Creative Writing (Prerequisite: 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 342	World Literature (Prerequisite: LIT 100)
LIT 360	Literary Theory (Prerequisite: LIT 100)

Upper-Division Concentrations

(4 courses, 18 quarter units)

All students enrolled in the Single Subject Matter Preparation program must also complete at least four courses in one of the following Concentrations. Students who wish to design their own Concentration (minimum of four courses) may do so with approval of the program Faculty Advisor.

▲ Concentration in Communications and Media

(169)

ART 315	Film as Art (Prerequisite: ENG 101)
COM 380	Democracy in the Information Age (Prerequisite: ENG 101)
GLS 310	Global Communications and Information Technology (Prerequisite: ENG 240)
GLS 320	Technologies of Culture (Prerequisite: ENG 240)
GLS 330	Film in an International Context (Prerequisite: ENG 240)

GLS 331	American Film in an International Context (Prerequisite: ENG 240)
MUL 330	Communication Tools (Prerequisite: ENG 101 and COM 100)
MUL 332	Electronic Design and Layout (Prerequisite: ENG 101 and COM 100)
MUL 335	Desktop Publishing (Prerequisite: MUL 332)
MUL 340	Principles of Web Design (Prerequisite: ENG 101 and COM 100)
SOC 325	Contemporary Popular Culture (Prerequisite: ENG 101)
SOC 332	Contemporary American Society (Prerequisite: ENG 101)
SOC 336	American Film and Society (Prerequisite: ENG 101)

▲ Concentration in Letters

(170)

ENG 352	Origins of English
ENG 375	Nature Writing (Prerequisite: ENG 101)
HIS 410	California Experience (Prerequisite: ENG 101)
LIT 345	Mythology (Prerequisite: LIT 100)
LIT 430	Children's Literature (Prerequisite: LIT 100)
LIT 443	World of the Short Story (Prerequisite: LIT 100)
LIT 446	Studies in Poetry (Prerequisite: LIT 100)
LIT 450	Studies in the Novel (Prerequisite: LIT 100)
LIT 456	Studies in Drama (Prerequisite: LIT 100)
LIT 460	Gender and Literature (Prerequisite: LIT 100)

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 course work 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

(610-443)

Faculty Advisor: Margaret J. Greer • (916) 855-4151 • mgreer@nu.edu

The Bachelor of Arts with a major in general studies (BAGS) is designed to meet the needs of an increasing body 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 course work 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, nursing, computer science, military science) and arts and sciences to an extent not currently available in other degree programs. This is

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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 adult learners to continue moving forward without retracing a considerable portion of their study.

Degree Requirements

To receive a Bachelor of Arts degree with a major in general studies, students must complete at least 180 quarter units as articulated below, 90 of which must be completed in the Arts and Sciences, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper division level.

In addition to the above University general education requirements, two concentrations are required. A concentration for the General Studies degree program is defined as 22.5 quarter units in a given discipline. A General Studies concentration differs from a major in the reduced number of credits that are required. The first concentration requirement is fulfilled by acquiring 22.5 quarter units in an Arts and Sciences discipline such as natural sciences, mathematics, literature, history, or social science, and nine of the quarter units must be completed at the upper division level. For example: If a student was pursuing a literature concentration, they would need five courses with a Literature prefix. The second concentration requirement is fulfilled by completing 22.5 quarter units in either a single Applied Studies or Arts and Science discipline, with at least nine of the quarter units completed at the upper division level. If a student selects the second concentration 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 concentration in Arts and Sciences rather than Applied Studies. If a second concentration in Arts and Sciences is selected, then students have the option of choosing five courses from various disciplines within the Arts and Sciences area.

Program Outcomes

Upon completion of the Bachelor of Arts general studies students will be able to:

- Demonstrate the competencies essential to the independent research on scholarly topics across a range of disciplines.
- Demonstrate competency with parenthetical citations within texts and with References or Works Cited pages.
- Demonstrate understanding of their cumulative growth with research and writing over the course of their postsecondary education.
- Demonstrate consistent proficiency with the mechanics of academic writing.
- Explain and interpret the role of education in their occupational choices.

Concentration Requirement

(10 courses, 45 quarter units)

Each student in the BAGS is required to complete two concentration requirements of 22.5 units each. Each of the concentration requirements must include at least nine-quarter units of upper division work. Students can choose from a variety of subject areas to satisfy the Arts and Sciences concentration 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 concentration requirement:

Arts and Sciences

(5 courses, 22.5 quarter units)

Literature
Environmental Studies
Fine and Performing Arts
History
Social Sciences
Communications

Applied Study

(5 courses, 22.5 quarter units)

Students can also use courses from the listed areas to satisfy the concentration requirement in Applied Study. These courses could be used on their own or in combination with related courses at other institutions.

Law
Management
Accounting
Information Technology Management
Criminal Justice Administration
Marketing
Human Resource Management

Portfolio Requirement: BGS 499

(1 course, 4.5 quarter units)

In addition to the above course work, students must complete a final portfolio project under the supervision of a faculty member. During this portfolio project, students map out the mosaic of their academic accomplishments and find the internal coherence of their intellectual explorations. To fulfill the portfolio requirement, students need to save and maintain a file of all papers written for their classes. These will be revised and included in the portfolio.

Upper-Division Electives

(5 courses, 22.5 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

(610-107)

Faculty Advisor: Daniel Thorburn • (209) 475-1443 • dthorbur@nu.edu

Offered only over the Internet, the global studies program takes advantage of emerging information technology to give students and professors the opportunity to use the vast resources of the World Wide Web. The program provides a flexible integration of skills and competencies that prepares students for a variety of international careers as well as graduate studies in business, technology, education, social science, government, media and law. In short, the program provides students with the ability to think and act "globally."

The global environment in which economics, culture and technology converge is diverse, changing, complex and interdependent. By combining a variety of disciplines, this program provides a framework in which to understand and effectively negotiate global realities, whether they are economic, political, cultural, or ecological. The program gives students practice in using Internet technology, applying cultural understanding and exploring and developing potential markets for their ideas and talent. Students in this program learn to use global communications and information technologies to conduct research in a variety of electronic databases. Global Studies majors become knowledgeable in the cultures and practices of the world's communities. Graduates understand the roles that ecology,

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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 to the solution of a real-world problem. This portfolio includes individual projects and a final, full-length project.

Global Studies Program Outcomes

At the end of the global studies program, students will be able to:

- Take the world as a major point of reference (“think globally”).
- Know how to frame an appropriate on-line research project.
- Evaluate on-line information for its reliability and veracity.
- Analyze and synthesize current research about selected global issues.
- Develop the knowledge and skills necessary to begin participating actively in solving important global issues and problems (“act globally”).
- Use global communications and information technologies and search engines effectively to conduct online research.
- Construct a sound argument in favor of a proposed solution to a real-world problem using theoretical constructs and empirical evidence.
- Clarify explicit linkages between culture, technology, and economics on global and regional scales.
- View a problem or situation from several disciplinary perspectives.
- Exercise cross-cultural awareness (awareness and comparison of the past and present diversity of ideas and practices to be found in human societies around the world).
- Explain the dynamics of global interactions and how they have changed over time.
- Analyze the roles that ecology, gender, race, class, religion, and ethnicity play in a variety of cultural environments and apply their understanding to everyday interactions among diverse cultures.

Degree Requirements

To obtain a Bachelor of Arts with a major in global studies, students must complete at least 180 quarter units as listed below, 45 of which must be completed through National University and 76.5 of which must be completed at the upper division level. 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 requirements for specific information regarding admission and matriculation.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Global Studies 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. If a student opts to take the elective course GLS 440, Study Abroad, additional fees, waivers, passports, visas, immunizations and other requirements may need to be fulfilled depending on the destination and it is the student’s responsibility to find out about these additional requirements and to meet them.

Preparation for the Major

(1 course, 4.5 quarter units)

HIS 234 World Civilizations II
(Prerequisite: ENG100/101)

Requirements for the Major

(13 courses, 58.5 quarter units)

COM 385	Tale, Text and Hypertext (Prerequisites: ENG 100/101)
GLS 310	Global Communications and Information Technology (Prerequisite: ENG 240)
GLS 330	Film in an International Context (Prerequisite: ENG 240)
GLS 410	Gender Identity in a Global Context
GLS 420	Ecological Revolutions: Economics, Technology and the Global Environment (Prerequisite: ENG 240)
GLS 430	The Global Economy (Prerequisite: ENG 240)
HIS 320	Culture, Capitalism and Technology in Modern World History (Prerequisites: ENG 100/101 and HIS 234)
HUM 501	Civic Culture and Global Awareness (Prerequisite: ENG 100/101)
LIT 342	World Literature (Prerequisites: ENG 100/101)
PHL 320	Comparative Religion (Prerequisite: ENG 240)
SCI 300	Geography: Mapping the World
SOC 328	Intercultural Thinking and Creativity (Prerequisites: ENG 100/101)
GLS 450	Global Studies Seminar and Final Project (To be taken as final course in the major)

Portfolio requirement for GLS 450: Students must complete a final portfolio project under the supervision of a faculty member. Students need to keep all graded work from all previous courses for possible inclusion in the portfolio.

Upper-Division Electives

(4 courses, 18 quarter units)

To fulfill upper division unit requirement, students may select from the courses listed below:

ART 329	World Art (Prerequisites: ENG 100/101)
GLS 320	Technologies of Culture (Prerequisite: ENG 240)
GLS 331	American Film in an International Context (Prerequisite: ENG 240)
GLS 440	Study Abroad
HIS 325	Peoples and Places: Migration in Modern World History (Prerequisites: ENG 100/101)
MUS 327	World Music (Prerequisites: ENG 100/101)
PHL 375	Environmental Ethics (Prerequisites: ENG 100/101)
POL 320	Politics of Social Movements (Prerequisites: ENG 100/101)

◆ Major in History

(610-117)

Faculty Advisor: Alex Zukas • (858) 642-8461 • azukas@nu.edu

The College of Letters and Sciences offers a broad-based program of study leading to the Bachelor of Arts degree in History. Some specific goals of the undergraduate program include: (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

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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 desirable and fulfilling careers. Graduates with a degree in history often become educators themselves and teach in elementary schools, secondary schools and in postsecondary education or work in or manage historic sites and museums. 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 or editing 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 non-profit foundations. Positions that attract history majors will likely require some of the following qualifications beyond the B.A. in History: experience, extensive knowledge of a particular time period or region, and specialized writing and research skills.

Program Outcomes

Upon completing the B.A. in History, graduates will be able to:

- Demonstrate the competencies essential to the independent and collaborative practice of historical thinking skills applied in the profession.
- Analyze the similarities and differences between distinct social formations around the world from ca. 10,000 B.C.E. to the present.
- Clarify how events in history are related to one another in time and space.
- Integrate knowledge of history with educational strategies in preparation for teaching history at the middle- and high-school levels.
- Analyze the roles that ecology, gender, race, class, religion, and ethnicity play in a variety of historical eras and places.
- Explain that the study of history involves interpretations of the past based on current concerns and theories and to see how understandings of the past change as new information and new interpretations of old information arise.
- Demonstrate proficiency in the utilization of research, including the evaluation of historical research as well as the development and implementation of research strategies in the field of historical studies.

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, and 76.5 of which must be completed at the upper division level. 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 requirements for specific information regarding admission and matriculation.

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
HIS 220A	History of the United States I (Prerequisites: ENG 100/101)
HIS 220B	History of the United States II (Prerequisites: ENG 100/101)
HIS 233	World Civilizations I (Prerequisites: ENG 100/101)
HIS 234	World Civilizations II (Prerequisites: ENG 100/101)

Requirements for the Major

(10 courses, 45 quarter units)

HIS 360	The American Colonial Experience, 1584-1783 (Prerequisite: ENG 100/101 and HIS 220A)
HIS 361	The Making and Sundering of the United States, 1783-1865 (Prerequisite: ENG 100/101 and HIS 220A)
HIS 362	The United States between Wars, 1865-1917 (Prerequisite: ENG 100/101 and HIS 220B)
HIS 363	The United States since World War I (Prerequisite: ENG 100/101 and HIS 220B)
HIS 400	History and Historians: Theories and Methods (Prerequisite: ENG 240)
HIS 431	The Ancient World (Prerequisite: ENG 100/101 and HIS 233)
HIS 432	The Classical World (Prerequisite: ENG 100/101 and HIS 233)
HIS 433	The Post-Classical World (Prerequisite: ENG 100/101 and HIS 233)
HIS 434	The Modern World, 1500 to the Present (Prerequisite: ENG 100/101 and HIS 234)
HIS 499	Capstone Research Project (Prerequisites: ENG 240, HIS 400, and completion of 31.5 quarter units of core courses in the major)

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 Arts in History. Students must select four courses from the (HIS) subject area. The following two courses can be satisfied with any upper division course in the College of Letters and Sciences.

Strongly Recommended

GLS 410	Gender Identity in a Global Context (Prerequisite: ENG 240)
GLS 420	Ecological Revolutions (Prerequisite: ENG 240)
GLS 430	The Global Economy (Prerequisite: ENG 240)
HIS 300	Foundations of Western Civilization (Prerequisite: ENG 100/101)
HIS 320	Culture, Capitalism, and Technology in Modern World History (Prerequisite: ENG 100/101 and HIS 234)
HIS 350	Cultural Diversity (Prerequisite: ENG 100/101 and HIS 220A/B)

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Recommended

HIS 325	Work and Migration in Modern World History (Prerequisite: ENG 100/101)
HIS 341	History through Theater (Prerequisite: ENG 100/101)
HIS 345	History and Cultures of Latin America (Prerequisite: ENG 100/101)
HIS 348	History and Cultures of Asia (Prerequisite: ENG 100/101)
HIS 349	History and Cultures of Africa (Prerequisite: ENG 100/101)
HIS 370	History and Cultures of the American Southwest (Prerequisite: ENG 100/101)
HIS 410	History of California (Prerequisite: ENG 100/101 and HIS 220A/B)
MTH 412	History of Mathematics (Prerequisite: MTH 216 or MTH 216A/B, or MTH 300)
SCI 400	History of Science (Prerequisite: One 4.5-quarter unit course from the natural sciences)
SOC 328	Intercultural Thinking and Creativity (Prerequisite: ENG 100/101)
SOC 332	Contemporary American Society (Prerequisite: ENG 100/101)
SOC 336	American Film and Society (Prerequisite: ENG 100/101)

◆ Major in Interdisciplinary Studies

(610-102)

Faculty Advisor: Jacqueline Caesar • (858) 642-8350 • jcaesar@nu.edu

The Bachelor of Arts with a major in interdisciplinary studies (BAIS) provides a broad, rigorous education that introduces students to essential knowledge, connections across the disciplines and application of knowledge to life beyond the University. This degree program gives students an enriched and provocative curriculum that prepares them for professional work in a changing cultural and economic environment.

Program Outcomes

Upon completion of the Bachelor of Arts in Interdisciplinary Studies, students will be able to:

- Custom design a course of study that enables them to pursue professional goals and objectives and personal interests.
- 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 for resource development, problem solving, and creative community building.

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 and 76.5 of which must be completed at the upper division level. 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 CBEST tests. 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

(3 courses, 13.5 quarter units)

The following courses, which satisfy general education requirements, are required to prepare for the BAIS major:

ENG 365	Creative Writing (Prerequisites: ENG 100/101)
or	
ENG 350	Fundamentals of Linguistics (Prerequisites: ENG 100/101)
HIS 220A	History of the United States I (Prerequisites: ENG 100/101)
or	
HIS 220B	History of the United States II (Prerequisites: ENG 100/101)
LIT 100	Introduction to Literature (Prerequisites: ENG 100/101)

Requirements for the Major

(13 courses, 58.5 quarter units)

COM 380	Democracy in the Information Age (Prerequisites: ENG 100/101)
SOC 336	American Film and Society
or	
HIS 350	Cultural Diversity (Prerequisites: ENG 100/101)
BIS 301	Introduction to Interdisciplinary Studies
BIS 401	Interdisciplinary Practice: Integrating Knowledge with Technology

4.5 quarter units in literature (LIT) are required. The following are recommended:

LIT 321	American Literature I (Prerequisite: LIT 100)
LIT 322	American Literature II (Prerequisite: LIT 100)
LIT 338	Shakespeare (Prerequisites: ENG 100/101)
LIT 342	World Literature (Prerequisites: ENG 100/101)
LIT 345	Mythology (Prerequisites: ENG 100/101)
LIT 446	Studies in Poetry (Prerequisites: ENG 100/101)
LIT 450	Studies in the Novel (Prerequisites: ENG 100/101)
LIT 460	Gender and Literature (Prerequisites: ENG 100/101)

4.5 quarter units in social sciences (HIS, POL, SOC) are required. The following are recommended:

HIS 320	Culture, Capitalism and Technology in Modern World History (Prerequisites: ENG 100/101 and SCI 300)
HIS 341	History Through Theater (Prerequisites: ENG 100/101)
HIS 410	The California Experience (Prerequisites: ENG 100/101)
SOC 332	Contemporary American Society (Prerequisites: ENG 100/101)
SOC 325	Contemporary Popular Culture (Prerequisites: ENG 100/101)
SOC 344	Marriage, Sex and the Family (Prerequisites: ENG 100/101)
SOC 430	Culture, Technology and Society (Prerequisites: ENG 100/101)

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- SOC 445 Contemporary Social Problems
(Prerequisites: ENG 100/101)
- SOC 540 Power and Social Change
(Prerequisites: ENG 100/101)

4.5 quarter units in behavioral sciences (HUB, PSY) are required. The following are recommended:

- HUB 420 Human Communication
(Prerequisites: ENG 100/101 and PSY 100)
- HUB 440 Organizational Development
(Prerequisites: ENG 100/101 and PSY 100)
- PSY 426 History of Psychology
(Prerequisites: ENG 100/101 and PSY 100)
- PSY 427 Biological Psychology
(Prerequisites: ENG 100/101 and PSY 100)
- PSY 428 Developmental Psychology
(Prerequisites: ENG 100/101 and PSY 100)
- PSY 429 Introduction to Personality Theory
(Prerequisites: ENG 100/101 and PSY 100)
- PSY 432 Social Psychology
(Prerequisites: ENG 100/101 and PSY 100)
- PSY 433 Cognitive Psychology
(Prerequisites: ENG 100/101 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 or MTH) must also be selected. Some of the mathematics courses may have more than one prerequisite. The following are recommended:

- SCI 300 Geography: Mapping the World
- SCI 330 Ecology
- SCI 411 Biodiversity
- SCI 450 Natural History of California
- MTH 301 Structure and Concepts of Mathematical Fundamentals II
(Prerequisite: MTH 209A)
- MTH 317 Mathematical Modeling
(Prerequisites: MTH 215 or MTH 216A/B and MTH 210)
- MTH 410 Computer Technology in the Mathematics Classroom
(Prerequisite: MTH 215 or MTH 216A/B or MTH 301 or placement evaluation)
- MTH 411 Number Theory
(Prerequisite: MTH 215 or MTH 216A/B or MTH 301 or placement evaluation)
- MTH 412 History of Mathematics
(Prerequisite: MTH 215 or MTH 216A/B)
- MTH 417 Foundations of Geometry
(Prerequisites: MTH 207, MTH 216B and MTH 325)
- MTH 418 Statistical Analysis
(Prerequisites: MTH 210 and MTH 220)

9 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
(Prerequisites: ENG 100/101)
- ART 323 Modern Art
(Prerequisites: ENG 100/101)
- ART 329 World Art
(Prerequisites: ENG 100/101)
- GLS 410 Gender Identity in a Global Context
(Prerequisites: ENG 100/101)
- HIS 345 Latin American Studies
(Prerequisites: ENG 100/101)
- HIS 348 Asian Studies
(Prerequisites: ENG 100/101)
- HIS 349 African Studies

- (Prerequisites: ENG 100/101)
- HIS 370 Cultures and History of the American Southwest
(Prerequisites: ENG 100/101)
- MUS 326 Survey of American Music History
- MUS 327 World Music
(Prerequisites: ENG 100/101)
- PHL 320 Comparative Religion
(Prerequisites: ENG 100/101)
- PHL 339 Study of a Major Philosopher
(Prerequisites: ENG 100/101)
- PHL 375 Environmental Ethics
(Prerequisites: ENG 100/101)
- PHL 437 Ethics
(Prerequisites: ENG 100/101)
- SOC 328 Intercultural Thinking and Creativity
(Prerequisites: ENG 100/101)
- SOC 500 Cultural Pluralism in American Society
(Prerequisites: ENG 100/101)
- Capstone course
(1 course, 4.5 quarter units)
- BIS 490 Interdisciplinary Studies Seminar

Upper-Division Electives

(3 courses, 13.5 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.

◆ Major in Multiple Subjects

(610-116)

Faculty Advisor: Lee Lovallo • (916) 855-4115 • llovallo@nu.edu

The Bachelor of Arts in Multiple Subjects (BAMS) provides a broad, rigorous education that engages students with core knowledge, connections across the disciplines and application of knowledge to life beyond the university, particularly in the field of elementary school teaching. The program emphasizes the study of concepts that form the content areas of language study, literature, mathematics, science, social science, history, humanities, the arts and human development. This degree program gives students an enriched and provocative curriculum that prepares them for professional work as multiple subject teachers in a changing cultural and economic environment.

Degree Requirements

To receive a Bachelor of Arts in Multiple Subjects, students 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. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and matriculation.

All students seeking a multiple-subject credential must demonstrate subject-matter competency through a state approved examination. The major in Multiple Subjects is designed to prepare students for the competency examination.

Program Learning Outcomes

The program specific outcomes for the Bachelor of Arts in Multiple Subjects are based on the Standards of Quality and Effectiveness for the Subject Matter Requirement for the Multiple Subject Teaching Credential (September 2001) as published by the California Commission for Teacher Credentialing and related degree programs. Upon completion of this program graduates will be able to:

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- Communicate effectively in writing and in speech.
- Demonstrate core knowledge in a broad array of disciplines including English, mathematics, history, social sciences, the arts, science, physical education and health.
- Understand and utilize cross-disciplinary connections.
- Demonstrate a knowledge of pedagogical theory and technique appropriate to classroom teaching in grades K-8.
- Show competence in the use of computers and related technology.
- Communicate in a foreign language or computer language.
- Approach with confidence the California Subject Examination for Teachers in Multiple Subjects (CSET).

The General Education courses indicated next are required to prepare students for the subject matter equivalency examination.

Required General Education Courses

AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

CATEGORY 1 Writing

(10.5 quarter units required)

- ENG 100 Effective College English, Part I
(3 quarter units)
- ENG 101 Effective College English, Part II
(3 quarter units)
- ENG 240 Advanced Composition
(Prerequisites: ENG 100/101)

CATEGORY 2 Speech and Communication

(4.5 quarter units required)

- COM 100 Introduction to Communications
or
COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(9 quarter units required)

- MTH 209A Structures and Concepts of Mathematical Fundamentals I
- MTH 301 Structures and Concepts of Mathematical Fundamentals II
(Prerequisites: MTH 209A)

AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units required)

- ILR 260 Information Literacy and Report Writing
(Prerequisite: ENG 100/101)

AREA D: ARTS AND HUMANITIES

(22.5 quarter units required)

- HIS 233 World Civilizations I
(Prerequisites: ENG100/101)
- HIS 234 World Civilizations II
(Prerequisites: ENG100/101)
- LIT 100 Introduction to Literature
(Prerequisites: ENG 100/101)
- or
- LIT 345 Mythology
- ART 100 Introduction to Art History
- or
- ART 200 Visual Arts
- MUS 100 Fundamentals of Music
- or

- MUS 327 World Music
- PHL 100 Introduction to Philosophy

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units required)

- HIS 220A History of the United States I (includes study of the Constitution)
(Prerequisites: ENG 100/101)
- HIS 220B History of the United States II
(Prerequisites: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(10.5 quarter units required)

- SCI 100 Survey of Bioscience
- SCI 100A Survey of Bioscience Laboratory
(1.5 quarter units)
- SCI 101 General Chemistry
- SCI 101A General Chemistry Laboratory
- SCI 102 Survey of Physical Science
- SCI 103 Fundamentals of Geology
- SCI 103A Fundamentals of Geology Laboratory
- SCI 104 General Physics
- SCI 104A General Physics Laboratory

AREA G: MODERN LANGUAGE

(9 quarter units required)

- ASL 120 American Sign Language I
- ASL 220 American Sign Language II
(Prerequisite: ASL 120)
- ASL 320 American Sign Language III
(Prerequisite: ASL 220)
- LAS 100 Spanish I
- LAS 200 Spanish II
- LAS 300 Spanish III
- LAS 101 Spanish for Native Speakers I
- LAS 201 Spanish for Native Speakers II

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G GENERAL EDUCATION

(4.5 quarter units minimum)

- COM 380 Democracy in the Information Age [+]
(Prerequisites: ENG100/101)
- HIS 300 Foundations of Western Civilization
(Prerequisites: ENG100/101)
- HIS 350 Cultural Diversity [+]
(Prerequisites: ENG100/101)
- LIT 342 World Literature
(Prerequisites: ENG100/101)
- PHL 375 Environmental Ethics
(Prerequisites: ENG100/101)
- SCI 300 Geography [+]
- SOC 100 Principals of Sociology
- or
- SOC 260 Cultural Anthropology
(Prerequisites: ENG100/101)

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Requirements for the Major

(11 courses, 49.5 quarter units)

Reading, Language, Literature

(3 courses, 13.5 quarter units)

ENG 350	Fundamentals of Linguistics (Prerequisites: ENG 101)
LIT 321	American Literature I (Prerequisite: LIT 100)
or	
LIT 322	American Literature II (Prerequisite: LIT 100)
LIT 338	Shakespeare (Prerequisite: LIT 100)
LIT 342	World Literature (Prerequisite: LIT 100)
LIT 345	Mythology (Prerequisite: LIT 100)
LIT 430	Children's Literature and Literacy (Prerequisite: LIT 100)
LIT 450	Studies in the Novel (Prerequisite: LIT 100)
LIT 456	Studies in Drama (Prerequisite: ENG 101)
LIT 460	Gender and Literature (Prerequisite: ENG 101)

History and Social Science

(3 courses, 13.5 quarter units)

SCI 300	Geography: Mapping the World (Prerequisites: ENG 100/101)
PHL 320	Comparative Religion (Prerequisites: ENG 100/101)
HIS 410	California History (Prerequisites: ENG 100/101)

Mathematics and Science

(1 course, 4.5 quarter units)

SCI 301	Earth and Planetary Science
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Visual and Performing Arts

(1 course, 4.5 quarter units)

ART 400	Expressive and Integrated Arts (Prerequisites: ART 200, MUS 100)
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Physical Education, Health, Human Development

(2 courses, 9 quarter units)

MSM 301	Teaching Elementary Physical Education
PSY 301	Child and Adolescent Development (Prerequisites: ENG 100/101)

Capstone course
(1 course, 4.5 quarter units)

MSM 499	Multiple Subject Matter Capstone (Prerequisite: all program requirements)
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Upper-Division Electives

(5 courses, 22.5 quarter units)

Students can select any 300, 400, or 500 level degree related electives to complete the total of 76.5 upper division units for the degree.

◆ Major in Psychology

(610-104)

Faculty Advisor: Brenda Shook • (916) 855-4108 • bshook@nu.edu

The Bachelor of Arts with a major in psychology 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. The primary program outcomes and competencies are:

- Competency in classification and research of psychopathology.
- Knowledge and understanding of developmental psychology throughout the life span.
- Mastery of theory and research of personality and psychological characteristics of the individual.
- Knowledge of social influences on behavior.
- Ability to write a comprehensive paper that covers empirical and theoretical study of a specific topic related to the major.
- Understanding of the history of substance abuse, and individual social, cultural, and institutional values that underlie substance abuse and dependency.
- Knowledge of the social service structure for prevention and treatment of substance abuse and dependency.
- Knowledge of neurological, physiological, and biological bases of behavior.
- Knowledge of theory and principles of cognitive psychology and the cognitive approach to understanding the mind and behavior
- Understanding of basic data analysis techniques in psychology and the ability to perform simple statistical calculations.
- Mastery of the fundamental ideas in the history of psychology and how they relate to contemporary theories and systems.
- Sensitivity to diversity issues and awareness of multiculturalism.

Degree Requirements

To receive a Bachelor of Arts degree with a major in psychology, students must complete at least 180 quarter units as articulated 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. 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)

MTH 210 Introduction to Probability and Statistics*
(Prerequisite: Placement Evaluation)

PSY 100 Introduction to Psychology*

These courses can be used to satisfy general education requirements

Requirements for the Major

(10 courses, 45 quarter units)

PSY426	History of Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY 427	Biological Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY 428	Developmental Psychology (Prerequisites: ENG 100/101 and PSY 100) (PSY301 may not be substituted for this course)
PSY 429	Introduction to Personality Theory (Prerequisites: ENG 100/101 and PSY 100)
PSY 430	Introduction to Psychopathology (Prerequisites: ENG 100/101 and PSY 100)

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PSY432	Social Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY433	Cognitive Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY 435	Analyses of Data in Psychological Research (Prerequisite: ENG 100/101 and PSY 100)
CHD 440	Drugs, Values and Society
PSY 480	Senior Project (Two-month, 4.5-unit course) (Prerequisites: All other core courses)
or	
PSY491	Guided Studies for Honors Students (Two-Months, 4.5 unit course) (Prerequisite: Completion of core courses with a GPA of 3.75 or higher, and approval of the Department)

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.

◆ Major in Sociology

(610-445)

Faculty Advisor: Lorna L. Zukas • (714) 429-5408 • lzukas@nu.edu

Description of the Program

The Bachelor of Arts in Sociology will engage 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 such sectors as business, the health professions, the criminal justice system, 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.

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 and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. All courses required in the major and required upper division electives for the B.A. in Sociology must be completed with a C- or better grade. Students are required to complete a portfolio of their work 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 requirements for specific information regarding admission and matriculation. The following courses are specific degree requirements.

Program Outcomes

Many occupations today require a college educated individual who can write and speak well, solve problems, learn new information quickly and work well with others on a team. This means that college graduates use their education in a wide variety of fields, and your future career may relate more to your personal career interests, work values and transferable skills than any specific academic major. The program in Sociology seeks to provide students with a comprehensive background for graduate level study, for students preparing for careers in social service, probation/parole, mental health, and related areas. Sociology provides important background knowledge as well as:

- Professional competencies essential to the independent and collaborative practice of social research and analysis.
- Exposure to the methods used by sociologists to undertake social research and answer questions about society.
- Exploring the connection between the individual and society and analyzing the social construction of reality.
- Interpreting key sociological perspectives and theories and applying them to real-world situations.
- Recognizing the role of race, ethnicity, gender, and class in society and analyze peoples' roles in making, maintaining, or changing society.
- Demystifying social institutions through demonstrated knowledge of social structure, status, roles, groups and organizations.
- Demonstration of undergraduate-level written communication skills.
- Demonstration of undergraduate-level oral communication and presentation skills.
- Application of analytical and critical thinking skills.

Required Program Prerequisites

(2 courses, 9 units)

SOC 100 Principles of Sociology*
MTH 210 Introduction to Probability and Statistics*
* may be used in general education

Required Core for the Major

(9 courses 40.5 quarter-units)

SOC 344 Marriage, Sex and Family
SOC 365 Classical Social Theory
SOC 375 Contemporary Social Theory
SOC 385 Methods of Social Inquiry
SOC 443 Sociology of Deviance

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SOC 455	Organizational Sociology
SOC 500	Understanding Cultural Pluralism in American Society
SOC 540	Power and Social Change
SOC 499	Capstone Seminar

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 to fulfill the unit requirements to earn the Bachelor of Arts in Sociology.

SOC 449	Sociology of Law
SOC 460	The Individual and Society
SOC 331	Sociology of Health and Illness
SOC 325	Contemporary Popular Culture
SOC 328	Intercultural Thinking/Creativity
SOC 332	Contemporary American Society
SOC 336	American Film and Society
SOC 430	Culture, Technology and Society
SOC 445	Contemporary Social Problems
SOC 490	Guided Study
CJA 448	Violence and Society
GLS 410	Gender Identity in a Global Context
GLS 430	The Global Economy
GLS 440	Study Abroad
HIS 350	Cultural Diversity
HUM 501	Civic Culture and Global Awareness
MTH 412	History of Mathematics
MUL 325	Psychology of Games
PHL 320	Comparative Religion
PHL 375	Environmental Ethics
POL 320	Social Movements
SCI 300	Geography: Mapping the World

*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, Addictive Disorders, Counseling, Global Studies, History and Video Gaming.

■ BACHELOR OF SCIENCE

(620)

Faculty Advisors: Paz Jensen • (858) 642-8471 • pjensen@nu.edu and Christine Photinos • (858) 642-8349 • cphotino@nu.edu

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

General Education Program Requirements

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

◆ Major in Earth Sciences

(620-113)

Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu

The Bachelor of Science with a major in Earth Sciences provides a strong foundation in mathematics and earth sciences. This major is designed to serve the needs of students who plan to teach at elementary or secondary level(s) and is also useful for those preparing for careers in science education, or in science-related business, engineering, or technology.

Other students who wish a broad, interdisciplinary approach should look closely at the benefits provided by the major. In addition to meeting requirements for a Bachelor of Science degree, it provides for moderate intensification in one field of science without sacrificing an interdisciplinary approach and background in other areas of mathematics and earth sciences. Earth Science majors are not eligible for a double major in mathematics or any of the component sciences in the program.

The College of Letters and 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. Please note that all mathematics and science courses contain a critical thinking component by their very nature.

Program Outcomes for the B.S. Earth Sciences

- Develop an integrated overview of the diverse fields of human knowledge in the physical Sciences.
- Demonstrate an ability to make interdisciplinary conceptual linkage across the scientific disciplines e.g. Evolution (planetary); plate tectonics/biogeography; global ecosystems.
- Demonstrate the critical thinking skills essential to scientific inquiry and research protocols.
- Demonstrate an increased respect for the awareness of the geological and geographical processes of the planet, and the responsible role(s) humankind must play.
- Demonstrate fundamental knowledge of major conceptual models in the fields of physical sciences, global geography, and mathematics.
- Demonstrate competence in communication (oral and written) and quantitative skills, including the critical analysis of data and argument.
- Mastery of laboratory-based and field-based scientific inquiry.
- Demonstrate basic computer/technology literacy including the

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ability to access databases within the context of course research and project development.

- Demonstrate knowledge of contemporary research in the sciences, particularly geo- sciences, adequate for teaching basic sciences in middle and high school
- Demonstrate the ability to critically review current research topics/problems and determine those that are best approached on an interdisciplinary basis.
- Develop a heightened awareness of the historical perspective each of the scientific disciplines within the natural sciences.

Curriculum Requirements

To receive a Bachelor of Science degree with a major in earth sciences, students 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. 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 matriculation.

Program Requirements

To prepare for a major in Earth Sciences, students must demonstrate proficiency in the fundamental concepts of earth and life sciences and introductory mathematics through successful completion of the following courses. Some of these courses may also be used to satisfy general education requirements.

Preparation for the Major

(10 courses, 33 quarter units)

MTH 215	College Algebra and Trigonometry
SCI 102	Survey of Physical Science
SCI 100	Survey of Bioscience
SCI 100A	Survey of Bioscience Laboratory (1.5 quarter units) (Prerequisite: SCI 100)
SCI 101	General Chemistry
SCI 101A	General Chemistry Laboratory (1.5 quarter units) (Prerequisites: MTH 204 and SCI 101)
SCI 103	Fundamentals of Geology
SCI 103A	Fundamentals of Geology Laboratory (1.5 quarter units) (Prerequisite: SCI 103)
SCI 104	General Physics (Prerequisite: Satisfactory completion of high school algebra or equivalent and MTH 204)
SCI 104A	General Physics Laboratory (1.5 quarter units) (Prerequisites: MTH 204 and SCI 104)

Requirements for the Major

(8 courses, 36 quarter units)

MTH 317	Mathematical Modeling
SCI 330	Ecology
SCI 335	Environmental Science
SCI 400	History of Science
SCI 411	Biodiversity
SCI 301	Earth and Planetary Sciences
SCI 322	Oceanography
SCI 490	Guided Study (4.5 quarter Field Study units)

Upper-Division Electives

(8 courses, 36 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 upper division units for the degree.

◆ Major in Environmental Science and Policy

620-123

Faculty Advisor: Dzung T. Nguyen • (858) 642-8467 • dnguyen@nu.edu

Description of Program and Potential Career Paths

The Bachelor of Science degree with a major in Environmental Science and Policy explores the complex relationships between natural atmospheric, hydrologic, geological, and ecological systems and human activities in a systematic way. This is accomplished by examining these interactions from a variety of perspectives, including the social sciences, the humanities, and the natural sciences.

The BS in Environmental Science and Policy degree provides excellent training for careers with agencies responsible for environmental protection and natural resources use, consulting firms, and those seeking opportunities for graduate studies.

Program Learning Outcomes

Upon completing the B.S. in Environmental Science and Policy, the students will be able to examine environmental issues from an interdisciplinary perspective. They should be able to:

- Describe the scientific principles that underlie the dynamics and energy flow within natural ecosystems.
- Recognize the role of biogeochemical, climatological, and geological cycles such as the current late Pleistocene conditions which impact climate, resources, land use and management, economic conditions, extinctions, global warming and cooling, etc.
- Identify the social, historical, economic, and political factors that have shaped our present-day environmental problems.
- Know the constraints for dealing with the above problems.
- Recognize the roles of philosophy, religion, and ethics in shaping human's interaction with the natural surroundings.
- Identify the factors that influence the emergence of the environmental movement and the codification of environmental laws.
- Evaluate the impact of environmental policy on the quality of life.

Students who have completed the major will also be able to appreciate and examine a problem at a variety of scales, from "local" to "global". Finally, through their work in the capstone seminar course, they will have had the practical experience of working on a few focus issues in a collaborative way, simulating the real-world give-and-take-among parties with different interests and perspectives on environmental questions.

The College of Letters and Sciences is committed to the complete academic development of its students. Consequently, where practical, all mathematics and science course are writing-intensive and incorporate a diversity component. Please note that all mathematics and science courses contain a critical thinking component by their very nature.

Degree Requirements

To receive a Bachelor of Science degree with a major in environmental sciences and policy, students must complete at least 180 quarter units as articulated below, 45 of which must be

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completed in residence at National University and 76.5 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 matriculation.

Program Requirements

To prepare for a major in Environmental Science and Policy, students must demonstrate proficiency in the fundamental concepts of life sciences, earth sciences and mathematics through successful completion of the following courses. Some of these courses may also be used to satisfy general education requirements.

Preparation Courses

(12 courses, 45 quarter units)

SCI 100	Survey of Bioscience
SCI 100A	Survey of Bioscience Laboratory (1.5) (Prerequisite: SCI 100)
SCI 101	General Chemistry
SCI 101A	General Chemistry Laboratory (1.5) (The SCI 100 and SCI 101 series fulfill GE Area F) (Prerequisites: SCI 101 and MTH 204)
SCI 103	Fundamentals of Geology
SCI 103A	Fundamentals of Geology Laboratory (1.5)
COM 200	Effective Communications (This course fulfills 4.5/15 GE Area A)
MTH 210	Introduction to Probability and Statistics (This course fulfills GE Area B)
MTH 214	Modeling of the Environment * (This course fulfills GE Area B)
SCI 300	Geography: Mapping the World (This course fulfills GE Area A-G upper division)
CIS 301	Management Info Systems
COM 422	Technical writing and Presentation * (This course fulfills 4.5/10 GE Area A)

Upper-Division Required Courses

(12 courses, 53.0 quarter units)

SCI 303	Introduction to Geographic Information Systems (GIS) and Remote Sensing in Natural Resources.
SCI 330	Ecology
SCI 322	Oceanography
SCI 335	Environmental Science
SCI 336	Natural Resource Conservation, Economics and Policy
SCI 337	Environmental Law, Policy and Sustainability
PHL 375	Environmental Ethics
SCI 411	Biodiversity
GLS 420	Ecological Revolutions: Economics, Technology and the Global Environment (on-line class)
SCI 491A	Senior Seminars and Capstone Project in Environmental Studies

(Select a seminar series from the following list)

Wildlife Management
Desert /Xeric Watershed Management
Riparian Ecology and Management
Waste Water Management
Environmental Impact Report (EIR) process and preparation
Urban Open Space Management (canyons, vernal pools, housing corridors, etc.)
Land use, zoning, development and mitigation process
h. GIS/ Remote Sensing/ Electronic Tracking Data bases
SCI 491B Senior Seminars and Capstone Project in Environmental Studies
(Select a seminar series from the following list. It must be a different

topic from the one in SCI491A).
Wildlife Management
Desert /Xeric Watershed Management
Riparian Ecology and Management
Waste Water Management
Environmental Impact Report (EIR) process and preparation
Urban Open Space Management (canyons, vernal pools, housing corridors, etc.)
Land use, zoning, development and mitigation process
h. GIS/ Remote Sensing/ Electronic Tracking Data bases

SCI 492 Agency Internship/Project in Environmental Science and Policy

Upper-Division Electives

(13.5 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 upper-division units for the degree. Some of the suggested upper-division courses are:

ENG 375	Nature Writing
SCI 405 & 405A	Cell and Molecular Biology & Lab
SCI 450	Natural History of California: A Field Course
PHI 336	Philosophy of Science

◆ Major in Life Sciences

(620-112)

Faculty Advisor: Michael Maxwell • (858) 642-8413 • mmaxwell@nu.edu

The Bachelor of Science with a major in Life Sciences provides a strong foundation in mathematics and life sciences. This major is designed to serve the needs of students who plan to teach at elementary or secondary level(s) and is also useful for those preparing for careers in the health sciences, in science education, or in science-related business, engineering, technology or social service fields.

Other students who wish a broad, interdisciplinary approach should look closely at the benefits provided by the major. In addition to meeting requirements for a Bachelor of Science degree, it provides for moderate intensification in one field of science without sacrificing an interdisciplinary approach and background in other areas of mathematics and life sciences. Life Sciences majors are not eligible for a double major in mathematics or any of the component sciences in the program.

The College of Letters and Sciences is committed to the complete academic development of its students. Consequently, where practical, all mathematics and science course are writing-intensive and incorporate a diversity component. Please note that all mathematics and science courses contain a critical thinking component by their very nature.

Program Learning Outcomes

- Develop an integrated overview of the diverse fields of human knowledge in the life sciences.
- Demonstrate an ability to make interdisciplinary conceptual linkage across the scientific disciplines e.g. evolution biography; heredity/genetics; global ecosystems.
- Demonstrate the critical thinking skills essential to scientific inquiry and research protocols.
- Demonstrate an increased respect for the awareness of the biodiversity of the planet, and the responsible role(s) humankind must play.
- Demonstrate fundamental knowledge of major conceptual models in the fields of life sciences, global geography, and mathematics.
- Demonstrate competence in communication (oral and written)

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and quantitative skills, including the critical analysis of data and argument.

- Mastery of laboratory-based and field-based scientific inquiry.
- Demonstrate basic computer/technology literacy including the ability to access databases within the context of course research and project development.
- Demonstrate knowledge of contemporary research in the sciences, particularly life sciences, adequate for teaching basic sciences in middle and high school.
- Demonstrate the ability to critically review current research topics/problems and determine those that are best approached on an interdisciplinary basis.
- Develop a heightened awareness of the historical perspective each of the scientific disciplines within the natural sciences.

Curriculum Requirements

To receive a Bachelor of Science degree with a major in life sciences, Students 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. 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 matriculation.

Program Requirements

To prepare for a major in Life Sciences, students must demonstrate proficiency in the fundamental concepts of life sciences and introductory mathematics through successful completion of the following courses. Some of these courses may also be used to satisfy general education requirements.

Preparation for the Major

(8-9 courses, 27-28.5 quarter units)

MTH 210	Introduction to Probability and Statistics (Prerequisite: Placement Evaluation)
MTH 215	College Algebra and Trigonometry (Prerequisite: Placement Evaluation)
or	
MTH 216A	College Algebra and Trigonometry I (Prerequisite: Placement Evaluation)
and	
MTH 216B	College Algebra and Trigonometry II (Prerequisite: Placement Evaluation)
SCI 100	Survey of Bioscience
SCI 100A	Survey of Bioscience Laboratory (1.5 quarter units) (Prerequisite: SCI 100)
SCI 101	General Chemistry
SCI 101A	General Chemistry Laboratory (1.5 quarter units) (Prerequisites: MTH 204 and SCI 101)
SCI 104	General Physics (Prerequisite: Successful completion of high school algebra or equivalent and MTH 204)
SCI 104A	General Physics Laboratory (1.5 quarter units) (Prerequisites: MTH 204 and SCI 104)

Requirements for the Major

(11 courses, 43.5 quarter units)

MTH 317	Mathematical Modeling (Prerequisites: MTH 210 and MTH 215 or MTH 210 and MTH 216A/B)
SCI 330	Ecology
SCI 335	Environmental Science

SCI 400	History of Science
SCI 411	Biodiversity
SCI 405	Introduction to Cell and Molecular Biology
SCI 405A	Introduction to Cell and Molecular Biology Laboratory (1.5 quarter units) (Prerequisite: SCI 405)
SCI 412	General Zoology
SCI 412A	General Zoology Laboratory (1.5 quarter units) (Prerequisite: SCI 412)
SCI 420	Animal Behavior
SCI 408	Introduction to Genetics and Heredity

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 upper division units for the degree.

◆ Major in Mathematics

(620-105)

Faculty Advisor: Igor Subbotin • (310) 662-2150 • isubboti@nu.edu

The Bachelor of Science with a major 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 in industry and research (concentration in mathematics and applications). 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, Sciences and Humanities 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. The program includes two concentrations.

The concentration in mathematics and applications provides students with the fundamental mathematical knowledge to formulate and solve problems in industry and research. Computer Science courses are encouraged, since the use of computers has been instrumental in the expansion of these opportunities.

The single-subject teaching concentration was created to train mathematics teachers who want to provide quality mathematical instruction to students in secondary schools.

Single-Subject Mathematics Preparation Program

The Single-Subject Mathematics Preparation Program is approved by the California Commission on Teacher Credentialing. The program emphasizes a strong foundation in mathematical content together

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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.)
- After accomplishing the core part of the program, students must complete all required courses from the single-subject teaching concentration (MTH 304, MTH 410, MTH 460, MTH 461, MTH 450A).

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 adult learners whose goal is to work professionally in mathematics or teach Mathematics in California public schools.

Program Learning Outcomes

- Students will experience, master, and apply skills and knowledge in problem solving. Using appropriate mathematical models students will be able to examine given situations, extract quantitative information, formulate and solve mathematical problems described these situations.
- Students will use language and mathematical symbols to communicate mathematical ideas. They will be able to communicate mathematical concepts clearly and effectively using graphs, formulas, tables, computer technology, and graphing calculators, using appropriate mathematical symbols and notions.
- Students will demonstrate a variety of reasoning skills. They will develop their ability to reason inductively and deductively, test conjectures, construct counter-examples, make valid arguments, and judge the validity of mathematical arguments, apply a variety of reasoning processes such as spatial, probabilistic, and proportional process, evaluate the reasonableness of solutions to problems.
- Students will be able to investigate the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines.
- Students will be able to use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs, that is appropriate for the research and study in mathematics.
- Students will be able to have an understanding of the classic and modern algebra as a fundamental language through which mathematics is communicated. They will have deep knowledge in abstract, linear, and matrix algebra.
- Students will have a fundamental knowledge of geometry. They will translate between synthetic and coordinate representations, understand axiomatic systems, master in Euclidian and non-Euclidean geometries, apply geometry to the real world problems.
- Students will be able to model real world problems with a variety of algebraic and transcendental functions, to translate between the tabular, symbolic, and graphical representation of functions, master in the main concepts of calculus, including the derivative, integral, differential equations, their interconnections, and their use in analyzing and solving real-world problems.
- Students will understand the beauty of pure number theory,

including such advanced topics as diophantine equations, number-theoretic functions, quadratic reciprocity, primitive roots, and continued fractions. They will be able to discuss errors in numerical computation, use function approximation, polynomial interpolation, cubic spline interpolations, quadratures, numerical differentiation, and so on.

- Students will be able to use advance statistics and probability concepts and methods to analyze and study different real-world problems.

Degree Requirements

To receive a Bachelor of Science degree with a major in mathematics, students 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. 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 requirements for specific information regarding admission and matriculation.

Preparation for the Major

(7 courses, 31.5 quarter units)

MTH 210	Introduction to Probability and Statistics (Prerequisites: placement evaluation)
CST 242	Introduction to Programming Concepts and Methods
SCI 102	Survey of Physical Sciences
MTH 220	Calculus I or CST 208 B (Prerequisites: MTH 215 or MTH 216 A and B, or placement evaluation)
MTH 221	Calculus II (Prerequisite: MTH 220)
MTH 222	Calculus III (Prerequisite: MTH 221)
MTH 223	Calculus IV (Prerequisite: MTH 222)

Upper-Division Requirements for the Major (core courses)

(12 courses, 54 quarter units)

MTH 311	Topics from Geometry (Prerequisites: MTH 215 or MTH 216 A and B, or placement evaluation)
MTH 317	Mathematical Modeling (Prerequisites: MTH 215 or MTH 216 A and B, and MTH 210)
MTH 325	Discrete Mathematics or CST 206B (Prerequisites: MTH 215 or MTH 216 A and B, or placement evaluation)
MTH 435	Linear Algebra (Prerequisites: MTH 325 and MTH 220)
MTH 433	Differential Equations (Prerequisites: MTH 223 and MTH 435)
MTH 411	Number Theory (Prerequisites: MTH 215 or MTH 216 A and B or MTH 301 or placement evaluation)
MTH 416	Algebraic Structures (Prerequisites: MTH 325 and MTH 435)
MTH 417	Foundation of Geometry (Prerequisites: MTH 215 or MTH 216 A and B, and MTH 311)
MTH 418	Statistical Analysis (Prerequisites: MTH 210 and MTH 220)
MTH 432	Advanced Calculus (Prerequisites: MTH 223)
MTH 412	History of Mathematics (Prerequisites: MTH 301 or MTH 215 or MTH 216 A and B)
MTH 438	Applied Mathematical Modeling (core capstone course) (Prerequisites: MTH 433, MTH 416, and 432)

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Additional Requirement for Single Subject Teaching Concentration

(1 course, 4.5 quarter units)

MTH 304 Mathematics Practicum and Portfolio Project
(Prerequisites: MTH 215 or MTH 216 A and B or placement evaluation. Should be taken as early in the student's program as possible)

Upper-Division Concentration Requirements

(4 courses, 18 quarter units)

▲ Concentration in Mathematics and Applications

(172)

Students must successfully complete the following courses for a concentration in mathematics and applications. It is recommended that students take these classes at or near the end of their program after completing the upper division major requirements.

MTH 440 Numerical Analysis
(Prerequisite: MTH 220)
MTH 441 Abstract Algebra with Applications
(Prerequisite: MTH 416)
MTH 442 Functions of Complex Variables and its Applications
(Prerequisite: MTH 223)
MTH 450 A Mathematics Project Course I
(Prerequisites: All core requirements for mathematics major)

▲ Concentration in Single-Subject Teaching

(173)

Students must successfully complete the following courses for a concentration in single-subject teaching. It is recommended that students take these classes at or near the end of their program after completing the upper division major requirements.

MTH 410 Computer Technology in the Mathematics Classroom
(Prerequisite: MTH 215 or MTH 216A/B or MTH 211 or MTH 301)
MTH 460 Problem Solving Strategy
(Prerequisites: MTH 416 and MTH 417)
MTH 461 Methods of Teaching of Mathematics
(Prerequisites: MTH 307, MTH 325, MTH 412, MTH 460)
MTH 450A Mathematics Project Course I
(Prerequisites: All core requirements for mathematics major)

Students must complete the core for a BS in Mathematics and complete an interview with the department chair before taking a project course. Students can select additional electives from any other upper division courses.

◆ Major in Organizational Behavior

(110)

Faculty Advisor: Lou Ellen Sherrill • (310) 258-6622 • lsherrill@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 with a major in organizational behavior provides a solid foundation for applying knowledge to the workplace and increasing the effectiveness of both individuals and work teams. The primary program outcomes and competencies are:

- The ability to write a comprehensive paper 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.
- Competency in knowledge of the history and precursors of organizational theory and management practice from a psychological perspective.
- Mastery of skills and techniques in diagnosing, planning, implementing, and managing organizational change and technological innovation.
- Mastery of human communication and conflict resolution skills.
- Sensitivity to diversity issues and an awareness of multicultural perspectives.
- Mastery of research methods for the collection and statistical interpretation of behavioral and organizational data.

Degree Requirements

To receive a Bachelor of Science degree with a major 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 and 45 of which must be completed in residence at National University.

Requirements for the Major

(9 courses, 40.5 quarter units)

HUB 440 Organizational Development
(Prerequisites: ENG 100/101 and PSY 100)
HUB 410 Psychology for Managers
HUB 500 Cross-Cultural Dynamics of Human Behavior
(Prerequisites: ENG 100/101 and PSY 100)
MGT 422 Team Building, Interpersonal Dynamics and Empowerment
or
HUB 400 Group Structure and Dynamics
(Prerequisites: ENG 100/101 and PSY 100)
HRM 409B Survey in Human Resources Management and Organizational Behavior
or
PSY 432 Social Psychology
(Prerequisites: ENG 100/101 and PSY 100)
MGT 400 Ethics in Law, Business and Management
HUB 401 Conflict Resolution
(Prerequisites: ENG 100/101 and PSY 100)
or
HUB 420 Human Communication
(Prerequisites: ENG 100/101 and PSY 100)
PSY 435 Analysis of Data in Psychological Research
(Prerequisites: ENG 100/101 and PSY 100)
PSY 480 Senior Project
(Prerequisite: HUB 441)

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.

College of Letters and Sciences

Bridge Program for Students with Foreign Credentials

Program Description

The Foreign Credential Bridge Program is designed as a pre-qualifying 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 are admitted to a master's program, must complete this fourth year of undergraduate courses until they have finished this prerequisite program.

Degree Requirements

This bridge program requires a minimum of 48 quarter units of study, all of which must be taken in residence at National University. Students must fulfill the requirements in the areas listed below. These requirements may be met by course work taken in the bachelor's degree. 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 (3.0 quarter units)
(Prerequisite: Placement Exam)
- ENG 101 Effective College English II (3.0 quarter units)
(Prerequisite: ENG 100)
- ENG 240 Advanced Composition
(Prerequisite: ENG100/ 101)
(No 300-level English course may fulfill this requirement)
- or
- ENG 334A Technical Writing
(Prerequisites: ENG 100/101)

CATEGORY 2: Speech and Communications

(4.5 quarter units required)

- COM 100 Introduction to Communications
- COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(minimum 4.5 quarter units)

- MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)
- MTH 215 College Algebra and Trigonometry
(Accelerated Course)
(Prerequisite: Placement Evaluation)
- MTH 216A College Algebra and Trigonometry I (3 quarter units)
(Prerequisite: Placement Evaluation)
- MTH 216B College Algebra and Trigonometry II (3 quarter units)
(Prerequisite: MTH 216A)

AREA D: ARTS AND HUMANITIES

(13.5 quarter units required)

- ART 100 Introduction to Art History
(Prerequisites: ENG 100/101)
- ART 200 Visual Arts
- ART 200A Visual Arts Laboratory (1.5 quarter units)
(Prerequisite: ART 200)
- HIS 233 World Civilization I
(Prerequisites: ENG 100/101)

- HIS 234 World Civilization II
(Prerequisites: ENG 100/101)
- LIT 100 Introduction to Literature
(Prerequisites: ENG 100/101)
- LIT 345 Mythology
(Prerequisites: ENG 100/101)
- MUS 100 Fundamentals of Music
- MUS 327 World Music
(Prerequisites: ENG 100/101)
- PHL 100 Introduction to Philosophy
(Prerequisites: ENG 100/101)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

- COM 380 Democracy in the Information Age [+]
(Prerequisites: ENG 100/101)
- ECO 203 Principles of Macroeconomics
- ECO 204 Principles of Microeconomics
(Prerequisite: ECO 203)
- HIS 220A History of the United States I [+]
(Prerequisite: ENG 100/101)
- HIS 220B History of the United States II [+]
(Prerequisite: ENG 100/101)
- HIS 300 Foundations of Western Civilization
(Prerequisite: ENG 100/101)
- HIS 350 Cultural Diversity [+]
(Prerequisites: ENG 100/101)
- POL 201 American Government and Politics
(Prerequisites: ENG 100/101)
- PSY 100 Introduction to Psychology
- SOC 100 Principles of Sociology
(Prerequisite: ENG 100/101)
- SOC 260 Cultural Anthropology
(Prerequisites: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

(Note: One science lab is required @ 1.5 quarter units)

- SCI 100 Survey of Bioscience
- SCI 100A Survey of Bioscience Laboratory (1.5 quarter units)
- SCI 101 General Chemistry
- SCI 101A General Chemistry Laboratory (1.5 quarter units)
(Prerequisites: MTH 204 and SCI 101)
- SCI 104 General Physics
- SCI 104A General Physics Laboratory (1.5 quarter units)
(Prerequisites: MTH 204 and SCI 104)
- SCI 201 Human Anatomy and Physiology I
- SCI 201A Human Anatomy and Physiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 201)
- SCI 103 Fundamentals of Geology
- SCI 103A Fundamentals of Geology Laboratory (1.5 quarter units)
(Prerequisite: SCI 103)
- SCI 202 Human Anatomy and Physiology II
- SCI 202A Human Anatomy and Physiology Laboratory II (1.5 quarter Units)
(Prerequisite: SCI 202)
- SCI 203 Introduction to Microbiology
- SCI 203A Introduction to Microbiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 203)

College of Letters and Sciences

College of Letters and Sciences Minors

● Minor in Addictive Disorders

(156)

This program is designed for students who plan to work in agencies that treat single or multiple addictions. It is also an excellent undergraduate program for students planning to pursue a Master of Arts in Counseling Psychology. Students with a minor in addictive disorders are waived from CHD 440 in the behavioral science major.

Program Requirements

(6 courses, 27 quarter units)

- PSY 460 Introduction to Addictive Disorders
PSY 461 Group Counseling with Addictive Disorders
PSY 462 Etiology and Treatment of Chemical Dependency*
(Prerequisite: PSY 460)
PSY 463 Etiology and Treatment of Eating Disorders
(Prerequisite: PSY 460)
PSY 464 Etiology and Treatment of Sexual Addiction
(Prerequisite: PSY 460)
PSY 465 Counseling the Addictive Family System
(Prerequisite: PSY 460)

* A student entering the program with a CAADAC certificate can take an elective rather than this class.

● Minor in Counseling

(182)

Program Requirements

(6 courses, 27 quarter units)

This minor is designed for students who are interested in gaining additional experiences in working in various mental health and business settings, teaching, and or pursuing advanced degrees in clinical/counseling fields.

- PSY 340A Effective Counseling Techniques I
PSY 340B Effective Counseling Techniques II
(Prerequisite: PSY 340A)
PSY 437 Theories of Psychotherapy
(Prerequisites: ENG 100/101 and PSY 100)
PSY 438 Introduction to Group Counseling
(Prerequisites: PSY 340A and PSY 340B)
PSY 439 Counseling Diverse Populations
(Prerequisites: PSY 340A, PSY 340B and PSY 438)
SOC 344 Marriage, Sex and Family
(Prerequisites: ENG 100/101)
or
HUB 420 Human Communication
(Prerequisites: ENG 100/101 and PSY 100)

● Minor in English

(486)

Program Requirements

(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 the following list:

- ENG 350 Fundamentals of Linguistics
(Prerequisite: ENG 101)
ENG 365 Creative Writing
(Prerequisite: ENG 101)
ENG 375 Nature Writing
(Prerequisite: ENG 101)
LIT 342 World Literature
(Prerequisite: LIT 100)
LIT 360 Literary Theory
(Prerequisite: LIT 100)
LIT 345 Mythology
(Prerequisite: LIT 100)
LIT 430 Children's Literature
(Prerequisite: LIT 100)
LIT 443 World of the Short Story
(Prerequisite: LIT 100)
LIT 446 Studies in Poetry
(Prerequisite: LIT 100)
LIT 450 Studies in the Novel
(Prerequisite: LIT 100)
LIT 456 Studies in Drama
(Prerequisite: LIT 100)
LIT 460 Gender and Literature
(Prerequisite: LIT 100)

● Minor in Global Studies

(180)

Program Requirements

(6 courses, 27 quarter units)

Please choose any six of the following:

- COM 385 Tale, Text, and Hypertext
(Prerequisites: ENG 100/101)
GLS 410 Gender Identity in a Global Context
(Prerequisite: ILR 260)
GLS 420 Ecological Revolutions: Economics, Technology and the Global Environment
(Prerequisite: ILR 260)
GLS 430 The Global Economy
(Prerequisite: ILR 260)
HIS 320 Culture, Capitalism, and Technology in Modern World History
(Prerequisites: ENG 100/101 and HIS 234)
PHL 320 Comparative Religion
(Prerequisite: ENG 240)
LIT 342 World Literature
(Prerequisites: ENG 100/101)
SCI 300 Geography: Mapping the World

● Minor in History

(181)

Program Requirements

(6 courses, 27 quarter units)

Please choose any six of the following:

- HIS 360 The American Colonial Experience, 1584-1783
(Prerequisites: ENG 100/101 and HIS 220A)
HIS 361 The Making and Sundering of the United States, 1783-1865
(Prerequisites: ENG 100/101 and HIS 220A)
HIS 362 The United States Between Wars, 1865-1917
(Prerequisites: ENG 100/101 and HIS 20B)

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HIS 363	The United States since World War I (Prerequisites: ENG 100/101 and HIS 220B)
HIS 431	The Ancient World (Prerequisites: ENG 100/101 and HIS 233)
HIS 432	The Classical World (Prerequisites: ENG 100/101 and HIS 233)
HIS 433	The Post-Classical World (Prerequisites: ENG 100/101 and HIS 233)
HIS 434	The Modern World, 1500 to the Present (Prerequisites: ENG 100/101 and HIS 234)

● Minor in Mathematics

(153)

Program Requirements

(6 courses, 27 quarter units)

To achieve a minor in Mathematics, students should select six courses in mathematics beyond MTH 221. They can complete this minor to fulfill requirements for a Bachelor of Arts with a major in interdisciplinary studies.

● Minor in Psychological Research

(352)

This minor offers a comprehensive introduction to the area of research in psychology. (May not be offered at all campuses.)

Prerequisites for the Minor

(2 courses, 9 quarter units)

PSY 100	Introduction to Psychology
ILR 260	Information Literacy and Report Writing

Program Requirements

(6 courses, 27 quarter units)

PSY 426	History of Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY 432	Social Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY 433	Cognitive Psychology (Prerequisites: ENG 100/101 and PSY 100)
PSY 435	Analysis of Data in Psychological Research (Prerequisite: MTH 210)
PSY 434	Psychological Research (Prerequisite: PSY 435)
PSY 436	Computer Applications in Psychology (Prerequisites: ILR 260 and PSY 435)

● Minor in Sociology

(485)

Curriculum Requirements

(6 courses, 27 quarter units)

Students wishing to minor in Sociology must take the following three (3) courses:

SOC 365	Classical Social Theory (Prerequisites: SOC 100 and ILR 260)
SOC 375	Contemporary Social Theory (Prerequisites: SOC 100 and ILR 260)
SOC 385	Methods of Social Inquiry (Prerequisites: SOC 100, MTH 210, and ILR 260)

Students must also choose three (3) of the following courses to complete the unit requirements for the minor:

SOC 335	Contemporary Popular Culture (Prerequisites: SOC 100 and ILR 260)
SOC 328	Intercultural Thinking and Creativity (Prerequisites: SOC 100 and ILR 260)

SOC 331	Social Issues in Health and Illness (Prerequisites: SOC 100 and ILR 260)
SOC 332	Contemporary American Society (Prerequisites: SOC 100 and ILR 260)
SOC 344	Marriage, Sex and Family (Prerequisites: SOC 100 and ILR 260)
SOC 346	American Film and Society (Prerequisites: SOC 100 and ILR 260)
SOC 430	Culture, Technology and Society (Prerequisites: SOC 100 and ILR 260)
SOC 443	Sociology of Deviance (Prerequisites: SOC 100 and ILR 260)
SOC 445	Contemporary Social Problems (Prerequisites: SOC 100 and ILR 260)
SOC 449	Sociology of Law (Prerequisites: SOC 100 and ILR 260)
SOC 455	Organizational Sociology (Prerequisites: SOC 100 and ILR 260)
SOC 460	The Individual and Society (Prerequisites: SOC 100 and ILR 260)
SOC 500	Understanding Cultural Pluralism in American Society (Prerequisites: SOC 100 and ILR 260)
SOC 540	Power and Social Change (Prerequisites: SOC 100 and ILR 260)

Graduate Degrees

■ MASTER OF ARTS IN COUNSELING PSYCHOLOGY

(710-500)

Faculty Advisor: Charles M. Powell • (310) 662-2153 • cpowell@nu.edu

The Master of Arts in Counseling Psychology 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 degree meets the academic requirements necessary to sit for the Marriage and Family Therapist (MFT) License mandated by the Board of Behavioral Science in the state of California. 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 California. It also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology. The primary program outcomes and competencies are:

- Entry level expertise in the diagnosis of mental disorders.
- Entry level expertise in development of a treatment plan.
- Entry level expertise in the implementation of treatment plans.
- Professional integrity and legal and ethical standards with clients and staff.
- Entry level competence in case presentations, oral reports, and written reports.
- Theoretical and clinical knowledge.
- Graduate level competency in theoretical research and written reports.
- Competency in psychopharmacology.
- Competency in multi-cultural awareness and diversity as it pertains to clinical situations of assessment and treatment.
- Competency in knowledge of human development (child, adolescent, and adult).
- Entry level competency in a broad range of clinical orientations and therapies.

Application Requirements

Students interested in enrolling in this program should contact the appropriate campus for further information regarding the application process.

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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 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 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.

Degree Requirements

(18 courses, 78 quarter units)

To receive the Master of Arts in Counseling Psychology, students must complete at least 78 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 should refer to the section on graduate admission requirements for specific information regarding application and matriculation. In addition:

- Students must complete all course work with a grade of "B" or better. 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 must complete a minimum of 20 hours of individual, marital, family, or group psychotherapy before taking PSY 631A and another 20 hours before graduation for a total of 40 hours.
- Students must obtain a total of 200 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 631B. One-hundred-fifty of the 200 hours must involve face-to-face psychotherapy with clients.
- Independent studies are not allowed in this program.
- Students may not take more than one course per month.
- Students seeking licensure must register with the Board of Behavioral Science Examiners (BBS) after graduation and fulfill all BBS licensing requirements.

Students are also urged to join the California Association of Marriage and Family Therapy and the American Association of Marriage and Family Therapists. Students must obtain malpractice insurance through C.A.M.F.T. or another professional organization.

Students must complete all course work within seven years. Any courses taken more than seven years ago must be repeated.

Program Prerequisite Recommended Preparation

(1 course, 4.5 quarter units)

PSY 429 Introduction to Personality Theory

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.

Program Core Requirements

(18 courses, 78 quarter units)

These courses are scheduled on a limited basis. Students are encouraged to consult the regional faculty for the course sequence requirement, which may differ in each region. Enrollment in these courses is limited to MA Counseling Psychology students unless the course is specifically listed in another degree.

PSY 635 Development Contexts in Psychotherapy: Childhood and Adolescence
PSY 629A Development Contexts in Psychotherapy: Adulthood

and Aging
PSY 619 Research: Paradigms and Critiques (3 quarter units)
PSY 623A Perspectives on Psychopathology Individual Psychotherapy and Clinical Assessment I
PSY 623B Principles of Psychotherapy I: Assessment and Interventions Individual Psychotherapy and Clinical Assessment II
PSY 636 Principles of Psychotherapy II: Child and Adolescent
PSY 632A Couples/Family Therapy A
PSY 632B Couples/Family Therapy B
PSY 628 Principles of Psychotherapy III: Group Approaches
PSY 627 Legal and Ethical Issues in Marriage and Family Therapy
PSY 631A Practicum I: Marital and Family Therapy
(Prerequisite: Department approval)
PSY 631B Practicum II: Marital and Family Therapy*
(Prerequisites: PSY 631A and Department approval)
PSY 637 Principles of Psychotherapy V: Cultural Competencies
PSY 624 Assessment Techniques for Marriage and Family Therapists
PSY 642 Relational Violence
CHD 640 Addictions: Contexts and Treatments
PSY 626 Human Sexuality in Psychotherapy
PSY 652 Psychopharmacology (3 quarter units)
*This seminar meets once a week for two hours during six consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon.

■ MASTER OF ARTS IN ENGLISH

(710-504)

Faculty Advisor: Janet Baker • (858) 642-8472 • jbaker@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.

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 matriculation.

By the end of this program, students shall have 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.

Specifically, by the end 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

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- theoretical issues pertaining to the study of literature.
- Synthesize current theory and practice in the study of American multicultural literature.
- Evaluate the complexities of canon formation.
- 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.

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 Vicki Martineau, Director of Writing Across the Curriculum, at vmartine@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.

Core Courses

(6 courses, 27 quarter units)

Select from the following list of courses:

- ENG 600 Seminar in Literary Theory
ENG 610 Seminar in Multicultural Literature of North America
ENG 620A Seminar in a Literary Period or Movement I
or
ENG 620B Seminar in a Literary Period or Movement II
ENG 640 Seminar in Poetry
ENG 690A Seminar in a Major Author I
or
ENG 690B Seminar in a Major Author II
ENG 699 English Capstone course

(Prerequisite: All other program requirements must be completed before enrolling in this course. Exceptions may be made if student is within two courses of program completion, only with the approval of the Program Director.)

Electives

(4 courses, 18 quarter units)

Select from the following list of courses:

- ENG 620A or ENG 620B Seminar in a Literary Period or Movement I or II (if not used to fulfill another program requirement)
MCW 630 Seminar in Fiction
MCW 650 Seminar in Creative Non-Fiction
ENG 660 Seminar in Literary Hypermedia
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 Seminar in Comparative Literary Studies
ENG 690A or ENG 690B Seminar in a Major Author I or II (if not used to fulfill another program requirement)
ENG 680A Seminar in a Theme I
ENG 680B Seminar in a Theme II
(other courses may be used for elective credit with permission from the program director.)
ENG 685 Great Directors: American
ENG 686 Great Directors: International

■ MASTER OF ARTS IN HUMAN BEHAVIOR

(710-501)

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.

The primary program outcomes and competencies are:

- 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 matriculation.

Core Requirements

(10 courses, 45 quarter units)

- HUB 648 Personal Growth and Communication
HUB 646 Personal and Professional Ethics
HUB 641 Stages of Adult Development
HUB 639 Contemporary Issues in Sexuality
HUB 601A Organizational Behavior
HUB 642 Theories of Behavior Change
HUB 601D Creative Leadership
HUB 650 Foundations of Behavioral Research
HUB 660 Assessment in Organizations
(Prerequisite: HUB 650)
HUB 680 Integrative Project in Human Behavior
(Capstone course)
(Prerequisite: HUB 650)

Electives

(2 courses, 9 quarter units)

Students can select graduate elective courses from the following course prefixes: CHD, HRM, HUB, MKT, MGT and SOC (CHD 601 and SOC

College of Letters and Sciences

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 FINE ARTS IN CREATIVE WRITING

(715-505)

Faculty Advisor: Karen Offitzer • (818) 817-2481 • koffitze@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 (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.

Program Outcomes

Upon completion of the Master of Fine Arts in Creative Writing, graduates will demonstrate the following proficiencies:

- expertise in the various aesthetic theories pertaining to specialty (fiction, literary nonfiction, poetry, or screenwriting)
- expertise in the practical and theoretical models of teaching and learning the writing of fiction, literary nonfiction, poetry and screenwriting
- expertise in recognizing and commenting critically on specific works of literature and screenwriting
- expertise in the development of publishable-quality writing in area of specialty (fiction, literary nonfiction, poetry, or screenwriting)
- ability to communicate effectively and knowledgeably on such matters as plot, characterization, style, point of view, narrative technique, language, and other issues of fiction
- ability to communicate effectively and knowledgeably on such matters as voice, plot, characterization, style, point of view, narrative technique, language, and other issues of literary nonfiction
- ability to communicate effectively and knowledgeably on such matters as language, style, themes, technique, rhythm, form, and other issues of poetry
- ability to communicate effectively and knowledgeably on such matters as plot, characterization, style, point of view, narrative technique, language, form, dialogue, and other issues of screenwriting

Application Requirements

To be considered for admission, applicants must meet the University

graduate admission requirements listed in the general information for graduate degrees. In addition, applicants in creative writing should submit portfolios of their writing directly to the following address: koffitzer@nu.edu.

The portfolio should include 20-40 pages of fiction or literary nonfiction (usually 2-3 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:

ENG 365	Creative Writing
LIT 443	World of the Short Story
LIT 446	Studies in Poetry
LIT 450	Studies in the Novel
LIT 456	Studies in Drama

Degree Requirements

(10 courses, 45 quarter units)

To receive the MFA in Creative Writing, students must complete at least 45-quarter units; a total of 4.5 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 matriculation.

Advancement to Candidacy

A student is advanced to candidacy for the Master of Fine Arts degree after successful completion of MCW 600 and two core courses. Grades below "B" must be repeated. At that time, the student selects or is assigned a thesis mentor.

Career Development Opportunities

A number of career development opportunities are available for degree candidates who plan to teach, work in film, or pursue careers in writing or publishing.

Candidates who want to gain hands-on experience in peer tutoring can apply for an internship at NU's onsite and online writing centers. Contact Shareen Grogan, Director of the Writing Centers, for more information.

Candidates who want hands-on experience in editing and publishing can apply for an internship at NU's student literary journal, THE GNU. Contact Professor Karen Offitzer, Program Lead, MFA in Creative Writing, for more information.

Candidates who want hands-on experience in filmmaking can apply to work as a crew member on graduate student films, working with students in our MA and MFA in Digital Cinema programs. Contact Professor Karen Offitzer, Program Lead, MFA in Creative Writing, for more 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.

College of Letters and Sciences

Core Requirements

(4 courses, 18 quarter units)

Students are required to take MCW 600 and are required to take one seminar (consisting of two courses) in their chosen specialty, plus must choose three additional courses in different areas.

MCW 600 Pedagogy of Creative Writing

and choose three of the following courses:

MCW 620 Writing Internship
MCW 630 Seminar in Fiction Writing
MCW 645 Seminar in Poetry Writing
MCW 650 Seminar in Creative Nonfiction
MDC 680 Seminar in Screenwriting

MCW 600 is four weeks; all other writing workshops and seminars are eight weeks in duration.

Specialized Study

(2 courses, 9 quarter units)

(Prerequisite for advanced workshops: approval of Application Portfolio)

Students are expected to take a minimum of two (2) 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 I
(Prerequisite: MCW 630)

and

MCW 630B Advanced Workshop in Fiction II
(Prerequisite: MCW 630)

or

MCW 640A Advanced Workshop in Poetry I
(Prerequisite: MCW 645)

and

MCW 640B Advanced Workshop in Poetry II
(Prerequisite: MCW 645)

or

MCW 650A Advanced Workshop in Literary Nonfiction I
(Prerequisite: MCW 650)

and

MCW 650B Advanced Workshop in Literary Nonfiction II
(Prerequisite: MCW 650)

or

MCW 680A Advanced Workshop in Screenwriting I
(Prerequisite: MCW 680)

and

MCW 680B Advanced Workshop in Screenwriting II
(Prerequisite: MCW 680)

Elective Requirements

(2 courses, 9 quarter units)

Students choose two electives in form and technique specific to specialty; courses must constitute a coherent program of study. It is possible to pursue a course in another discipline when such study is demonstrably essential to the student's creative work. Students are encouraged to choose electives to strengthen areas of weakness; pursue technical or theoretical knowledge essential to the student's creative work, or to otherwise enrich the degree program. The candidate must work out a specific program in conjunction with the lead program faculty.

Approved courses (other courses may be approved by lead program faculty)

ENG 610 Seminar in Multicultural Literature of North America

ENG 620A Seminar in a Literary Period or Movement I
ENG 620B Seminar in a Literary Period or Movement II
ENG 660 Seminar in Literary Hypermedia
ENG 670 Seminar in Comparative Literary Studies
ENG 680A Seminar in a Theme I
ENG 680B Seminar in a Theme II
ENG 690A Seminar in a Major Author I
ENG 690B Seminar in a Major Author II
ENG 665 Film Theory
ENG 666 Film History: The Silents
ENG 667 Film History: American Film
ENG 685 Great Directors: American
ENG 686 Great Directors: International

Thesis Courses

(2 courses, 9 quarter units)

MCW 660 Thesis I (Practicum)

(Prerequisite: all core, specialized study and elective courses)

MCW 670 Thesis II (Revision)

(Prerequisite: MCW 660)

Thesis: 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 (minimum 120 pages). The thesis will include a preface (minimum 1000 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.

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 SCIENCE IN INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY

(720-610)

Faculty Advisor: Delbert M. Nebeker • (858) 642-8398 • dnebeker@nu.edu

The Master of Science in Industrial-Organizational Psychology program (MSIOP) provides accredited graduate level training and education in industrial-organizational psychology. It prepares professionals to manage programs dealing with work analysis and design, fairness and utility of employee selection and placement, employee productivity, employee satisfaction and retention, and organizational design and development. The program design follows the Guidelines for Education and Training of the Division 14 of the American Psychological Association: the Society of Industrial-Organizational Psychology. It is practice-oriented, research-based, and advocates the highest levels of personal and professional integrity. The MSIOP is particularly appropriate for those working in Human Resources Management, Employee Development and General Management who would benefit from graduate level education in the people/organizational side of management. This program is appropriate also for those nearing completion of their military career.

Program Outcomes

After the completion of the Master of Science in I-O Psychology students will be able to:

- Demonstrate master's level competencies in the areas specified in the Society for Industrial and Organizational Psychology (SIOP)

College of Letters and Sciences

guidelines for Master's level education and training in Industrial and Organizational Psychology.

- Demonstrate the ability to critically analyze and evaluate literature in general psychology and I-O psychology.
- Demonstrate the ability to apply the competencies learned in the program to the benefit of organizations and their employees.
- Demonstrate preparedness for further study of I-O Psychology at the doctoral level.

Application Requirements

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information for graduate degrees. Recent graduates of undergraduate programs as well as bachelor degree holders who have substantial employment experience in organizations are welcome to apply. Qualified applicants will be interviewed by faculty to determine suitability of background, motivation, and career objectives. Students interested in this program should contact the appropriate campus or one of the faculty advisors for further information regarding the application process.

Degree Requirements

(12 courses, 54 quarter units)

To receive the Master of Science in I-O Psychology, students must complete at least 54-quarter units; a total of 13.5 units may be granted for equivalent work completed at another institution. In addition the student must pass two examinations for completion of the MS in I-O Psychology. The first is the Prelim Exam and deals with the history of psychology and the scientific fields of psychology. This examination must be passed before the student takes the seventh course in the program. The second examination is the Competency Exam and demonstrates mastery of the program in I-O Psychology. This exam may be taken any time after the eighth course in the program and must be passed before enrolling in the IOP 695: Field Placement in I-O Psychology. These examinations may be repeated until passed. A fee of \$100 is charged for each administration of these exams. Preparation for the first exam will be done external to the graduate program- within the student's undergraduate program and/or by a program of reading sources suggested by the faculty. Preparation for the second exam will occur within the graduate program and by mastering the required series of courses and a program of reading sources suggested by the faculty.

Core Requirements

(11 courses, 49.5 quarter units)

IOP 615	Industrial - Organizational Psychology
IOP 630	Research and Statistics I
IOP 631	Research and Statistics II (Prerequisite: IOP 630)
IOP 640	Work Motivation (Prerequisite: IOP 615)
IOP 635	Psychological Measurement (Prerequisite: IOP 631)
IOP 650	Organizational Development (Prerequisite: IOP 615)
IOP 645	Training in Organizations (Prerequisite: IOP 615)
IOP 655	Attitude Theory and Measurement (Prerequisite: IOP 635)
IOP 665	Performance Appraisal and Feedback (Prerequisites: IOP 635 and IOP 615)
IOP 660	Applied Measurement in I-O Psychology (Prerequisite: IOP 635 or HUB 650)
IOP 695	Field Placement in I/O Psychology (Prerequisites: Completion of Prelim and Competency Exams)

Elective Requirement

(1 course, 4.5 quarter units)

IOP 690	Advanced Seminar in I/O Psychology
HUB 601B	Communication for Managers
HUB 601D	Creative Leadership
HUB 641	Stages of Adult Development
HUB 642	Theories of Behavior Change
HRM 667	Compensation and Benefits
HRM 633A	Seminar in Employee Relations, Labor Relations and Union Management
ODV 610	Advanced Studies in Organizational Behavior in a Diverse Society
ODV 601	Integrating Performance Management, Technology, and Organizational Communication
PAD 620	Foundations of Public Administration
PAD 626	Public Personnel Policy

Field Placement Requirement

The field placement experience is an integral part of the graduate program in I-O Psychology. It will occur toward the end of the program after the student has mastered the basic principles, and has acquired the knowledge, skills, and abilities related to the practice of I-O Psychology. The field placement experience may occur in the same organization where the student is employed if the duties involved are different from the duties performed in the past and are representative of the content of I-O Psychology. If such an arrangement is not possible, students may select a placement from those developed by the faculty. The field placement requirement is at least 160 hours of approved, supervised, and evaluated experience and a written report on the placement as a capstone experience in the program.

Alternative Scheduling

This program will be taught with the first 4 courses in the traditional one month format and the remaining courses taught in a two-month per course format. Under the two-month format the classes will meet once a week for 8 weeks in the current time configuration (5:30 to 10:00 pm). The courses in the two month format will be staggered and beginning with the second two-month class they will overlap. This means that during the second month of each two-month class the student will also be in the first month of the next course. In this way the student will be enrolled in two courses at the same time. The two month format is necessary for some courses because they will require projects involving research or experience in operating organizations which will be difficult if not impossible to accomplish in the single month format.

School of Business and Management

Interim Dean, **Don Schwartz**
J.D.
New York University

102	Degrees Offered
103	Faculty
105	Undergraduate Degree Programs
119	Minor Programs
121	Graduate Degree Programs
132	Certificate Programs

The University of Values



Degree Programs Offered

Undergraduate Degrees

Bachelor of Arts

with Majors in:
Management[Ⓞ]
Marketing[Ⓞ]
Pre-Law Studies

Bachelor of Business Administration[Ⓞ]

with Concentrations in:
Accountancy[Ⓞ]
Alternative Dispute Resolution
Business Law
Economics[Ⓞ]
Entrepreneurship
Finance[Ⓞ]
Hospitality and Casino Management[Ⓞ]
Human Resource Management[Ⓞ]
Marketing[Ⓞ]
Sports Management[Ⓞ]

Bachelor of Public Administration

Bachelor of Science

with Majors in:
Accountancy[Ⓞ]
Criminal Justice Administration[Ⓞ]
Domestic Security Management[Ⓞ]
Financial Management[Ⓞ]
Organizational Leadership
Paralegal Studies
with Certificates and Specializations in:
Legal Assistance Certificate
Paralegal Specialist Certificate
Litigation Specialization
Corporations Specialization
Real Estate Law Specialization
Probate and Estate Planning Specialization
Criminal Law Specialization
Family Law Specialization

Minors

Accountancy[Ⓞ]
Alternative Dispute Resolution
Business Administration
Business Law
Business Studies
Criminal Justice Administration[Ⓞ]
Economics[Ⓞ]
Pre-Law Studies

Transition Programs

BA MGT/MA MGT Transition Program
BBA/MBA Transition Program
BBA/MS EB Transition Program
BBA/MS TM Transition Program
BPA/MPA Transition Program
BS Accountancy/MBA Transition Program
BS CJA/MFS Transition Program
BS CJA/MPA Transition Program
BS DSM/MFS Transition Program
BS DSM/MPA Transition Program
BS IS/MS EB Transition Program
BS ITM/MS EB Transition Program

Graduate Degrees

Executive Master of Business Administration[Ⓞ]

Executive Master of Business Administration (Spanish Version)[Ⓞ]

Master of Arts

with Fields of Study in:
Human Resource Management[Ⓞ]
with Areas of Specialization in:
Organizational Development and Change Management[Ⓞ]
Organizational Leadership[Ⓞ]
Management[Ⓞ]
with an Area of Specialization in:
Organizational Leadership[Ⓞ]

Master of Business Administration[Ⓞ]

with Areas of Specialization in:
Accountancy[Ⓞ]
Alternative Dispute Resolution
Electronic Business[Ⓞ]
Financial Management[Ⓞ]
Health Care Administration
Human Resource Management[Ⓞ]
International Business[Ⓞ]
Marketing[Ⓞ]
Organizational Leadership[Ⓞ]
Technology Management[Ⓞ]

Master of Forensic Sciences[Ⓞ]

with Areas of Specialization in:
Criminalistics
Investigation[Ⓞ]

Master of Public Administration

with Areas of Specialization in:
Alternative Dispute Resolution
Human Resource Management[Ⓞ]
Organizational Leadership[Ⓞ]
Public Finance[Ⓞ]

Master of Science

with Fields of Study in:
Corporate and International Finance
Electronic Business[Ⓞ]
Organizational Leadership[Ⓞ]
Taxation

Certificate Programs

Accountancy[Ⓞ]
Alternative Dispute Resolution (*Undergraduate and Graduate*)
Criminal Justice Administration[Ⓞ]
Electronic Business[Ⓞ]
Finance[Ⓞ]
Hospitality and Casino Management
Human Resource Management[Ⓞ]
International Business[Ⓞ]
Marketing[Ⓞ]
Sports Management[Ⓞ]

[Ⓞ] denotes program also offered or partially offered online.
Note: Not all online programs or courses are offered in entirety via Internet.
Note: Not all courses or programs listed in this catalog are available at every campus.
Various undergraduate minors are available in some degree programs.

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School of Business and Management

Vision Statement

The vision of the School of Business and Management is to build a learning community of educators, scholars, and students who are people of integrity, with competitive knowledge, capacity for innovation, and cultural sophistication who are recognized for their capable, purposeful, and ethical leadership in a changing world.

Mission Statement

The mission of the School of Business and Management of National University is to provide working adults as well as traditional students with flexible access to relevant business and professional education, in order to enhance their opportunities as ethical, effective and knowledgeable leaders in a global economy. Programs provide rigor, currency and continuous improvement and are delivered by a faculty that synthesizes its scholarly activity and practitioner experience into an optimal blend of theory and practice.

Undergraduate Degrees

■ BACHELOR OF ARTS

(610)

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

◆ Major in Management

(610-413)

Faculty Advisor: Iraj Mahdavi • (858) 642-8374 • imahdavi@nu.edu

The Bachelor of Arts with a major 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.

Bachelor of Arts in Management / Master of Arts in Management (BA MGT / MA MGT) Transition Program

Students who are currently enrolled in the Bachelor of Arts in management program, have at least a GPA of 3.0 and are within six courses of graduation, may register for the Bachelor of Arts in management/Master of Arts in management (BA MGT/MA MGT) transition program by taking two MA management classes as electives during the BA management program. Students choose any two of the following: MGT 601, LED 601, ELB 620, or HRM 640. To be eligible, students must apply for and begin the MA management program within six months of completing their BA management program. The number of courses required to earn an MA/MGT degree for transition program students is reduced from 12 to 10 courses.

Students must complete graduate-level course work taken as part of the BA MGT degree with a grade of B or better. This 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. Grades earned in graduate-level courses will be calculated as part of the student's undergraduate Grade Point Average.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Describe the basic functions of management and their practical implications.
2. Analyze and evaluate management, leadership, and motivation theories.
3. Identify organizational behavior, communications and change theories and their practical implications.
4. Explain the effect of international business environmental factors (legal, economic and cultural) on the conduct of global business.
5. 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 with a major in management, 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 absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.) Refer to the section of undergraduate admission requirements for specific information regarding admission and matriculation.

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Preparation for the Major

(3 courses, 13.5 quarter units)

ECO 203	Principles of Microeconomics*
ECO 204	Principles of Macroeconomics*
LAW304	Legal Aspects of Business

*May be used to satisfy general education requirements.

Requirements for the Major

(11 courses, 49.5 quarter units)

ODV 420	Introduction to Organizational Behavior
ODV 410	Organizational Development, Career Systems, and Training and Development
BKM 400	Business Knowledge Management Strategies
MGT 409C	Principles of Management and Organization
MGT 400	Ethics in Law, Business and Management
HRM 409B	Survey in Human Resource Management and Organization Development
MGT 422	Team Building, Interpersonal Dynamics
MKT 402A	Marketing Fundamentals
MGT 430	Survey of Global Business (Prerequisites: ECO 203 and ECO 204)
LED 400	Introduction to Leadership
BUS 480	Integrated Business Policy (capstone course) (Prerequisites: At least nine (9) preparation or core courses)

Upper-Division Electives

(4 courses, 18 quarter units)

Students are encouraged to take any minors or electives in the following prefix areas: ACC, BKM, ECO, FIN, HRM, LAW, MGT, MKT, MNS, LED and ODV.

◆ Major in Marketing

(610-415)

Faculty Advisor: Susan Silverstone • (858) 642-8430 • ssilver@nu.edu

The Bachelor of Arts (B.A.) in marketing provides learners with a solid foundation in strategic marketing concepts focused on the application of marketing theory and practice in the global marketplace. Emphasis is placed on the development of technical marketing skills and knowledge, strategic planning and decision-making, relevant use of technology, and communication throughout the global community.

Program Requirements

To receive a B.A. in marketing degree, 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 of undergraduate admission requirements for specific information regarding admission and matriculation

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Write effective marketing documents such as: reports, press releases, and research findings.
- Orally present marketing information in a group setting.
- Examine the ethical implications of marketing activities.
- Explain required changes within key marketing components necessary to improve the attractiveness of a given offering.
- Explain the challenges and rewards of the global marketplace.

Preparation for the Major

(5 courses 22.5 quarter units)

ACC 201	Financial Accounting Fundamentals
ACC 202	Managerial Accounting Fundamentals
ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
MNS205	Introduction to Quantitative Methods for Business

Requirements for the Major

(11 courses 49.5 quarter units)

MKT 402A	Marketing Fundamentals
MKT 420	Consumer Behavior (Prerequisite: MKT 402A)
MKT 430	Introduction to Global Marketing (Prerequisite: MKT 402A)
MKT 434	Introduction to Market Research (Prerequisite: MKT 402A)
MKT440A	Sales Techniques and Methodology (Prerequisite: MKT 402A)
MKT441	Channel and Value Networks (Prerequisite: MKT 402A)
MKT442A	Introduction to Public Relations (Prerequisite: MKT 402A) MKT443
MKT445	E-Marketing (Prerequisite: MKT 402A)
MKT446	Marketing of Services (Prerequisite: MKT 402A)
MKT448	Not for Profit Marketing (Prerequisite: MKT 402A)
MKT480	Marketing Capstone (Prerequisite: MKT402A and completion of 31.5 quarter units of upper division core requirements)

MKT 402A is eligible for credit-by-exam waiver.

If students plan to do an Internship, it is strongly recommended that they take BUS 491 as an elective.

Upper-Division Electives

(5 courses, 22.5 quarter units)

Please select any upper division course from the School of Business and Management.

◆ Major in Pre-Law Studies

(610-421)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Description

The major in pre-law studies 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. The core program courses may be taken in any sequence providing the required pre-requisites have been met. Students may also select elective courses, other than those recommended, from the following disciplines: psychology, sociology, behavioral science, information technology, human resources management, finance, management and marketing.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

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1. Apply critical legal thinking in analyzing judicial decisions
2. Describe, analyze, and anticipate legal issues in a business environment
3. Review and analyze contemporary legal issues in the state, federal and administrative law forums.
4. Analyze issues by application of relevant rules of law, ethical standards, and social mores
5. Develop a clear and concise legal argument supporting a position on a given legal topic
6. Demonstrate written, oral communication and presentation skills.
7. Describe and analyze need for effective planning in preparation for the negotiation process

Requirements

(16 courses, 72 quarter units)

To receive a Bachelor of Arts with a major in pre-law studies, students must complete at least 180 quarter units as described below. 76.5 quarter units must be completed at the upper-division level and 45 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.)

Preparation for the Major

(4 courses, 18 quarter units)

PHL 238 Critical Thinking in Everyday Life*

ECO 203 Principles of Microeconomics*

ECO 204 Principals of Macroeconomics*

ACC 201 Financial Accounting Fundamentals

* May be used to satisfy general education requirements.

Requirements for the Major

(10 courses, 45 quarter units)

ENG 365 Creative Writing

or

ENG 375 Nature Writing

HIS 350 Cultural Diversity

or

HIS 320 Culture, Capitalism & Technology in Modern World History

POL 320 Politics of Social Movements

or

POL 540 The American Political System

MGT 400 Ethics in Law, Business and Management

or

HUB 500 Cross-Cultural Dynamics of Human Behavior

LAW 400 Current Legal Issues

LAW 304 Legal Aspects of Business I

LAW 305 Legal Aspects of Business II

(Prerequisite: LAW 304)

LAW 405 Analytical Reasoning

LAW 408 Legal Writing, Research and Oral Argument

ADR 405 Negotiation Fundamentals

Upper-Division Electives

(6 courses, 27 quarter units)

ADR 400 Alternative Dispute Processes

ADR 415 Mediation Fundamentals

ADR 420 Communication and Conflict

CJA 451 Court Systems & the Judicial Process

CJA 464 Constitutional Law

SOC 445 Contemporary Social Problems

PHL 437 Ethics

ENG 432 Report and Research Paper Writing

GLS 430 The Global Economy

PHL 375 Environmental Ethics

HUB 410 Psychology for Managers

■ BACHELOR OF BUSINESS

ADMINISTRATION

(630)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • 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 Bachelor of Business Administration degree gives students an opportunity to specialize in designated fields by pursuing concentrations and minors, or to choose an individualized set of general BBA electives.

BBA/MBA Transition Program

Students who are currently enrolled in the Bachelor of Business Administration program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BBA/MBA transition program by taking MBA classes as electives during the BBA Program. To be eligible, students must apply for and begin the MBA Program within six months of completing their BBA Program. Students may choose up to three of the following courses: MKT 602, LED 601, ELB 620, and BKM 600. The number of courses required to earn an MBA degree for transition program students is reduced from 14 down to as few as 11 courses.

Students must complete graduate-level course work taken as part of the BBA degree with a grade of B or better. This 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. Grades earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

1. Comprehend and apply the principles of business ethics
2. Obtain the quantitative skills and knowledge needed to make sound business decisions
3. Acquire knowledge in the fields of business, including management, international business, marketing, business law, accountancy, finance, economics, and knowledge management, and apply these skills to different business environments
4. Integrate the knowledge acquired in the program to analyze a business to identify its strengths and weaknesses and determine what changes can be made for improvement
5. Conduct independent research relevant to business-related issues
6. Demonstrate written and oral presentation skills expected of a business school graduate

Degree Requirements

To receive a Bachelor of Business 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 of undergraduate admission requirements for specific information regarding admission and matriculation.

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

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units at the upper-division level and 4.5 units in diversity enriched course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

Preparation for the Major

(6 courses, 27 quarter units)

MNS 205	Introduction to Quantitative Methods for Business*
ECO 203	Principles of Microeconomics*
ECO 204	Principles of Macroeconomics*
ACC 201	Financial Accounting Fundamentals
ACC 202	Managerial Accounting Fundamentals (Prerequisite: ACC 201)
LAW 304	Legal Aspects of Business I

* May be used to satisfy general education requirements

Requirements for the Major

(8 courses, 36 quarter units)

BKM 400	Business Knowledge Management Strategies
MGT 409C	Principles of Management and Organization
FIN 310	Business Finance (Prerequisite: ACC 201)
MNS 407	Management Science (Prerequisite: MNS 205)

MKT 402A	Marketing Fundamentals
MGT 430	Survey of Global Business (Prerequisites: ECO 203 and ECO 204)
MGT 451	Production and Operations Management
BUS 480	Integrated Business Policy (Capstone Course) (Prerequisites: At least nine BBA preparation and core courses)

Upper-Division Electives

(8 courses, 36 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
FIN 446	International Financial Management (Prerequisites: FIN 310 and FIN 440)
FIN 440	Financial Institutions (Prerequisite: FIN 310)
HRM 409B	Survey in Human Resource Management and Organization Development
HRM 432	Recruiting, Selection, Promotion, and Retention
HRM 439	Legal, Regulatory, and Labor Relations Concerns in HRM
LAW 305	Legal Aspects of Business II (Prerequisite: LAW 304)
MGT 400	Ethics in Law, Business and Management
MGT 442	Strategic Business Management
MKT 430	Introduction to Global Marketing (Prerequisite: MKT 402A)
MKT 434	Introduction to Market Research (Prerequisite: MKT 402A)
MKT 443	Introduction to Advertising

BBA Concentrations

▲ Concentration in Accountancy

(472)

Faculty Advisor: Connie 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, non-profit 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 and selecting the CPA track electives.

Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations as to academic preparation that will best meet their career objectives.

Students must successfully complete the following courses for a concentration in accountancy and must have successfully completed ACC 201 before enrolling in any of these courses:

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Requirements for the Concentration

(6 courses, 27 quarter units)

- ACC 410A Intermediate Accounting I
(Prerequisite: ACC 201)
- ACC 410B Intermediate Accounting II
(Prerequisite: ACC 201)

Plus any four of the following courses:

- ACC 410C Intermediate Accounting III
(Prerequisite: ACC 201)
- ACC 431 Advanced Accounting
(Prerequisite: ACC 201)
- ACC 432A Taxation - Individual
(Prerequisite: ACC 201)
- ACC 432B Taxation II
(Prerequisite: ACC 201)
- ACC 433A Managerial Accounting I
(Prerequisite: ACC 201)
- ACC 433B Managerial Accounting II
(Prerequisite: ACC 433A)
- ACC 434 Government and Nonprofit Accounting
(Prerequisite: ACC 201)
- ACC 435A Auditing I
(Prerequisite: ACC 201)
- ACC 435B Auditing II
(Prerequisite: ACC 435A)

▲ Concentration in Alternative Dispute Resolution

(185)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This concentration is designed for those students majoring in business administration who may seek entry into the Alternative Dispute Resolution 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 any four of the following:

- ADR 400 Alternative Dispute Resolution Processes
- ADR 405 Negotiation Fundamentals
- ADR 410 Facilitation Fundamentals
- ADR 415 Mediation Fundamentals
- ADR 420 Communication and Conflict
- ADR 425 Cultural Issues in Conflict Management
- ADR 430 Ethics and Neutrality

▲ Concentration in Business Law

(484)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Requirements

(6 courses, 27 quarter units)

This concentration is designed for students undertaking the Bachelor of Business Administration (BBA) 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.

- LAW 400 Current Legal Issues
- LAW 304 Legal Aspects of Business I
- LAW 305 Legal Aspects of Business II
(Prerequisite: LAW 304)
- MGT 400 Ethics in Law, Business, and Management
- ADR 400 Alternative Dispute Processes
- ADR 405 Negotiation Fundamentals

▲ Concentration in Economics

(480)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • bsimpson@nu.edu

This concentration is designed for those students who seek to gain specialized knowledge in the field of economics. This concentration emphasizes market process (or free market) economics. Economics prepares students for careers in business, government, and non-profit organizations. Economics also provides very good preparation for graduate level work, including in business, law, public policy, and public administration.

Knowledge of economics can increase one's earning potential relative to other academic fields (including business and management). According to a U.S. Department of Commerce report, those with undergraduate economic degrees are among the highest paid workers. They place third out of fifteen academic fields (behind only engineering and agriculture/forestry). By concentrating in economics, students can take advantage of some of the increased earnings potential that economics makes possible.

For guidance and recommendations concerning the concentration in economics, please contact the above-named Faculty Advisor.

Requirements for the Concentration

(5 courses, 22.5 quarter units)

Students must successfully complete five of the following courses for a concentration in economics. Students must complete at least three of the courses in residence at National University. Three of the five courses completed for the concentration must be ECO 401, 402, and ECO 430. It is recommended that students take the courses needed for the concentration in economics at or near the end of their program.

- ECO 401 Market Process Economics I
- ECO 402 Market Process Economics II
- ECO 430 Economics and Philosophy

Plus any two of the following

- ECO 447 Money and Banking
(Prerequisite: ECO 203 and 204)
- ECO 415 Labor Economics
(Prerequisite: ECO 203 and 204)
- ECO 420 International Economics
(Prerequisite: ECO 203 and 204)

▲ Concentration in Entrepreneurship

(487)

Faculty Advisor: Wali I. Mondal • 858-642-8415 • wmondal@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 market place for employment or to start new business ventures.

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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 potential of a student.

Students are strongly advised to contact the above-named 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:

1. Identify the origin and development of entrepreneurship
2. Analyze risk taking and innovation
3. Describe marketing of goods and services
4. Comprehend financial plan and control of small business
5. Apply the basics of e-commerce through technology
6. Analyze E-Commerce servers and clients
7. Distinguish family business from other forms of business
8. Examine the impact of family business both nationally and globally

Requirements for the Concentration

(4 courses, 18 quarter units)

Students must successfully complete the following four courses:

- MGT 481 Foundations of Entrepreneurship
MGT 482 Small Business Management
(Prerequisite: MGT 481)
MGT 483 E-Business
(Prerequisite: MGT 481)
MGT 484 Family Business Management
(Prerequisite: MGT 481)

▲ Concentration in Finance

(467)

Faculty Advisor: Farhang Mossavar-Rahmani • (858) 642-8409 • fmossava@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 at or near 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
(Prerequisite: FIN 310)
FIN 442 Investments
(Prerequisites: FIN 310 and FIN 440)
FIN 443 Working Capital Management
(Prerequisite: FIN 310)
FIN 444 Risk Management and Insurance
(Prerequisite: FIN 310)
FIN 446 International Financial Management
(Prerequisite: FIN 310)
FIN 447 Financial Planning
(Prerequisite: FIN 442)

▲ Concentration in Hospitality and Casino Management

(479)

Faculty Advisor: Michael Pickett • (858) 642-8374 • mpickett@nu.edu

This concentration is designed for those majoring in business administration 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 visitor's bureaus.

Requirements for the Concentration

(7 courses, 31.5 quarter units)

- SMG 432 Principles of Leisure Services Management
HCM 400 Hospitality and Casino Accounting
HCM 430 Hospitality and Casino Staffing
HCM 450 Native American Tribal Community Development
HCM 440 Cultural Diversity and Hospitality Management
HCM 420 Hospitality and Casino Marketing
HCM 410 Hospitality and Gaming Law

▲ Concentration in Human Resource Management

(468)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • 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 BBA core courses.

- HRM 409B Survey in Human Resource Management and Organization Development
HRM 432 Recruiting, Selection, Promotion, and Retention
HRM 433 Pay and Benefit Administration, and HR Technology
HRM 439 Legal, Regulatory, and Labor Relation Concerns in HRM
ODV 410 Organizational Development, Career Systems, and Training and Development
ODV 420 Introduction to Organizational Behavior

▲ Concentration in Marketing

(469)

Faculty Advisor: Susan Silverstone • (858) 642-8430 • ssilvers@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. Students must complete at least four of

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the courses in residence at National University. It is recommended that students take these courses at or near 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 (Prerequisite: MKT 402A)
MKT 430	Introduction to Global Marketing (Prerequisite: MKT 402A)
MKT 434	Introduction to Marketing Research (Prerequisite: MKT 402A)
MKT 443	Introduction to Advertising

Plus any two of the following courses:

MKT 440A	Personal Selling (Prerequisite: MKT 402A)
MKT 441	Channel Value Networks (Prerequisite: MKT 402A)
MKT 442A	Public Relations and Ethics (Prerequisite: MKT 402A)
MKT 445	Direct Marketing Basics (Prerequisite: MKT 402A)
MKT 446	Introduction to Services Marketing (Prerequisite: MKT 402A)
MKT 447	Marketing for Entrepreneurs (Prerequisite: MKT 402A)

▲ Concentration in Sports Management

(259)

Faculty Advisor: George Drops • (858) 642-8438 • gdrops@nu.edu

This concentration is designed for those students majoring in business administration who may seek entry into management and marketing in the specialized fields of the sports and fitness industries. There is a wide range of opportunities in sports management including professional sports, university and college athletic programs, high school athletics, fitness centers, golf and tennis clubs, sports instruction centers, leisure and recreational facilities and allied businesses.

Requirements for the Concentration

(6 courses, 27 quarter units)

SMG 430	Introduction to Sports Management
SMG 432	Principles of Leisure Services Management
SMG 433	Sports Financial Management
SMG 434	Principles and Problems of Coaching
SMG 435	Legal Aspects of Sports Administration
SMG 436	Sports Marketing and Promotions

■ BACHELOR OF PUBLIC ADMINISTRATION

(640)

Faculty Advisor: Kenneth Goldberg • (858) 642-8478 • kgoldber@nu.edu

The Bachelor of Public Administration 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, 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 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.

Upon successful completion of this program, learners will be able to:

1. Describe and synthesize the theories of public administration.
2. Describe and analyze the operations and procedures of public management and nonprofits.
3. Develop skills in managing a public sector or nonprofit organization.
4. Describe and develop skills in applying the theories and practices in program and resource management
5. Describe and develop skills in applying the theories and practices of accounting and budgeting in government and nonprofits.
6. Describe and evaluate the role of community groups in local government.
7. Describe and analyze ethical situations.
8. Develop an experimental design, including a testable research hypothesis to address a current problem in public administration.
9. Complete a research project in the area of 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 of undergraduate admission requirements for specific information regarding application and matriculation.

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 45 units at the upper-division level and 4.5 units in diversity enriched course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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)

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AREA D: ARTS AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic, or American Sign Language. Students who satisfy competency by examination must still meet the overall general education unit requirement. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

Preparation for the Major

(3 courses, 13.5 quarter units)

ACC 201	Financial Accounting Fundamentals
ECO 203	Principles of Microeconomics*
MNS 205	Introduction to Quantitative Methods for Business*

*May be used to satisfy general education Requirements

Requirements for the Major

(12 courses, 54 quarter units)

PAD 400	Introduction to Public Administration
PAD 401	Public Policy Development
PAD 402	Public Administration and Urban Environments
PAD 403	Government and Community Relations
PAD 404	Public Administration and the Nonprofit Sector
ACC434	Government and Nonprofit Accounting
MGT 400	Ethics in Law, Business and Management
ODV 420	Introduction to Organizational Behavior
MGT 422	Team Building, Interpersonal Dynamics, and Empowerment
LED 420	Adaptive Leadership
MNS 407	Management Science (Prerequisite MNS 205)
PAD 405	Senior Research Project (Prerequisite: completion of 36 quarter units of BPA core courses)

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

(620)

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

◆ Major in Accountancy

(620-411)

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

This major is designed to prepare students for entry into the accounting profession. In addition to a series of required core business and accounting courses, students can elect courses in one of two professional accounting tracks:

CPA Certified Public Accountant Track

CMA/CFM Certified Management Accountant Track

Students who elect the CPA track will be prepared to sit for the CPA

School of Business and Management

Exam upon earning this baccalaureate degree. Students should then consider enrolling in the MBA program in order to meet the 150 semester units of higher education required by California and most other states. (See also BS/MBA transition program, below)

BS/MBA Transition Program

The BS in accountancy / MBA transition program allows currently enrolled BS in Accountancy students with a cumulative grade point average of at least 3.0 who are within completing their last six courses to register for three MBA courses as electives for their baccalaureate degree. Students can select any three graduate-level accounting or tax courses for which required course prerequisites (if any) have been met, or may select from the following MBA core courses: BKM 600, ELB 620, MKT 602, and LED 601. The number of courses required to earn an MBA degree for transition program students is reduced by the number of graduate courses taken in the undergraduate program, with a maximum of three. To be eligible for the transition program, students must apply for the MBA and begin their program of study within six months after completing their final baccalaureate degree course. Students must complete their 10-course MBA program within four years with no break exceeding 12 months.

Students must complete graduate-level course work taken as part of the BBA degree with a grade of B or better. This 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. Grades earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

1. Comprehend and apply the conceptual framework underlying the principles of accounting.
2. Measure and properly report information related to accounting for the assets, liabilities, equities, revenues and expenses of business and not-for-profit entities, and of the entity's cash flows.
3. Apply the basic concepts underlying taxation of individuals and business enterprises.
4. Prepare financial statements for external use and managerial accounting reports for internal decision-making.
5. Demonstrate written communication skills at the level required for accounting professionals.

Degree Requirements

To receive a Bachelor of Science with a major in accountancy, 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 of undergraduate admission requirements for specific information regarding admission and matriculation.

Preparation for the Major

(5 courses, 22.5 quarter units)

MNS 205	Introduction to Quantitative Methods for Business *
ECO 203	Principals of Microeconomics*
ECO 204	Principles of Macroeconomics*
ACC 201	Financial Accounting Fundamentals**

* May be used to satisfy general education Requirements

** Eligible for Credit-By-Exam waiver: contact Faculty Advisor

Requirements for the Major

(13 courses, 58.5 quarter units)

To receive a Bachelor of Science with a major in accountancy,

students must successfully complete the courses listed below.

Students can request waivers of any of the courses if they have completed an upper-division undergraduate or graduate course of similar content at a regionally-accredited college or university with a grade of "C" or better. Students must take at least six of the courses in the major in residence at National University.

Core Business Courses

(5 courses, 22.5 quarter units)

BKM 400 Business Knowledge Management Strategies (New course replaces CIS 301)

LAW 304 Legal Aspects of Business I

MGT 409C Principles of Management and Organization

FIN 310 Business Finance
(Prerequisite: ACC 201)

and

MGT 430 Survey of Global Business
(Prerequisites: ECO 203 and ECO 204)

or

MKT 402A Marketing Fundamentals

or

MNS 407 Management Science
(Prerequisite: MNS 205)

(Recommended for students considering the CMA or CFM designation)

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 an equivalent grade is received on the Accounting Aptitude Exam.

Accounting Core

(8 courses, 36 quarter units)

To be adequately prepared for the accounting courses listed below, students should take ACC 410A first since it starts with a review of the fundamentals upon which much of the subsequent material is based. Students who wish to start at a later point in the program are advised to test their retention of accounting fundamentals by working the end-of-chapter exercises in the first five chapters of an Intermediate Accounting text. Students also have the option of taking the free self-study online course BUS 501A as a refresher.

ACC 410A Intermediate Accounting I
(Prerequisite: ACC 201)

ACC 410B Intermediate Accounting II
(Prerequisite: ACC 201)

ACC 432B Taxation Business
(Prerequisite: ACC 201)

ACC 300 Applied Technology for Accounting**

ACC 433A Managerial Accounting I
(Prerequisite: ACC 201)

ACC 433B Managerial Accounting II
(Prerequisite: ACC 433A)

ACC 434 Government and Nonprofit Accounting
(Prerequisite: ACC 201)

ACC 435A Auditing I
(Prerequisite: ACC 201)

**Eligible for Credit-By-Exam waiver: contact Faculty Advisor

Upper-Division Electives

(3 courses, 13.5 quarter units)

Recommended Electives for CPA Track

ACC 435B Auditing II
(Prerequisite: ACC 435A)

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- ACC 410C Intermediate Accounting III
(Prerequisite: ACC 201)
- ACC 431 Advanced Accounting
(Prerequisite: ACC 201)
- ACC 432A Taxation – Individual
(Prerequisite: ACC 201)

Recommended Electives for CMA/CFM (Corporate Accounting) Track

It is recommended that students considering the CMA (Certified Management Accountant) designation and/or the CFM (Certified Financial Manager) designation select courses in Information Systems and/or Finance.

◆ Major in Criminal Justice

Administration

(620-405)

Faculty Advisor: James Larson • (858) 642-8418 • jl Larson@nu.edu

The major in criminal justice administration 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 core program 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.

BS in Criminal Justice Administration/ Master of Forensic Science Transition Program and BS in Criminal Justice Administration/ Master of Public Administration Transition Program

The criminal justice administration/forensic science transition program and criminal justice administration/public administration transition program allow 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 Master of Forensic Sciences program or the Master of Public Administration program as electives for the bachelor's degree. The two graduate courses are restricted to those that do not require a prerequisite and must be completed with a grade of B or better for the forensic sciences program. Students pursuing the public administration program can take any two courses with the exception of PAD 631. The number of courses required to earn an MFS or MPA degree for transition program students is reduced from 12 to 10 courses. Graduate-level course work taken as part of the criminal justice administration program cannot be applied to the Master of Forensic Science program 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.

Program Learning Outcomes

Upon completion of this program candidates will be able to:

1. Describe and synthesize the contributions of the various forensic science disciplines to the current state-of-the-art of detecting and solving crimes.
2. Develop an experimental design, including a testable research hypothesis to address a current problem in criminal justice.
3. Provide a written description of the causes and patterns of juvenile delinquency.
4. Apply biological, psychological, sociological, and economic explanations for criminal behavior from a variety of disciplines, and present findings orally and in writing.
5. Analyze and evaluate the role of criminal sanctions in rehabilitating offenders.
6. Complete a research project in the area of criminal justice: Collect data, conduct a literature review, analyze data, write and explain findings, and present results.

Requirements for the Major

To receive a Bachelor of Science in criminal justice administration, students must complete at least 180 quarter units as articulated 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. 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. Refer to the section on undergraduate admission requirements for specific information regarding application and matriculation.

Requirements for the Major

(10 courses, 45 quarter units)

CJA 429	Introduction to Policing
CJA 449	Research Methods
CJA 431	Criminology
CJA 437	The Juvenile Offender
CJA 446	Criminal Justice Management and Leadership
CJA 460	Principles of Investigation
CJA 451	Court Systems and the Judicial Process
CJA 452	Criminal Law
CJA 440	Corrections
CJA 470	Supervised Criminal Justice Senior Project* (Prerequisite: CJA 449)

* A two-month course that meets once per week for 4.5 quarter units. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" or below). Accelerated study is not permitted with CJA 470.

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 "K" 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.

Upper-Division Electives

(6 courses, 27 quarter units)

Recommended Courses

CJA 400	Gangs in America
CJA 401	Criminal Intelligence
CJA 434	Survey of Forensic Sciences
CJA 443	Current Issues in Law Enforcement
CJA 441	Organized and White Collar Crime
CJA 448	Violence in Society
CJA 456	Criminal Evidence
CJA 457	Minorities, Crime and Social Justice
CJA 464	Constitutional Law for Criminal Justice
CJA 465	Practicum in Criminal Justice (1.5-9 quarter units)

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CJA 467	International and Domestic Terrorism
HUB 420	Human Communication
HRM 409B	Survey in Human Resource Management and Organization Development
HRM 432	Recruiting, Selection, Promotion, and Retention
ODV 420	Introduction to Organizational Behavior
HUB 410	Psychology for Managers
PSY 437	Theories of Psychotherapy
SOC 445	Contemporary Social Problems (Prerequisites: ENG 100/101)

General Elective Requirements

Students can use courses from any area to fulfill total unit requirements for the degree based on the results of matriculation.

◆ Major in Domestic Security Management

(620-417)

Faculty Advisor: Chandrika Kelso • (858) 642-8433 • ckelso@nu.edu

Description of Program and Potential Career Paths

The Bachelor of Science in domestic security management (BS-DSM) provides graduates with a foundation in the politics and cultures of terrorism, and best security practices to cope with a pending emergency, operations during an emergency, and recovery from an emergency. The program focuses on the management aspects of disasters and emergencies. More importantly, the program focuses on developing well rounded decision makers with a strong 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 with a variety of 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 policy makers on recovery issues.

The Bachelor of Science in domestic security management is designed for students who aspire to work in the private security industry or city, state or federal levels. It is also appropriate for military personnel of all ranks, mid-level managers and managers seeking promotion within the private sector to various levels of government.

The BS-DSM program is composed of ten core courses and six electives offered in an accelerated one-month onsite format. As an introduction, students are offered a broad overview of security management, current issues in domestic security, and the culture and politics of terrorists. The remaining six courses expose the student to direct management strategies for emergencies including leadership and ethics. Together these courses provide a theoretical and practical foundation for managing emergencies.

Program Learning Outcomes

At the completion of the Bachelor of Science in domestic security management, students will possess the knowledge and skills needed to actively participate in writing pre-emergency plans, assisting with the decision making process during and after an emergency, and will be able to participate in writing after-action reports using the skills learned in the capstone course. Specifically, by the end of this program, students will be able to:

- Demonstrate undergraduate level written communications skills.
- Demonstrate undergraduate level oral communications skills.

- Apply analytical and critical thinking skills.
- Conduct independent research and 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.
- Engage in informed critical discussion, both oral and written, of past breaches of security within the United States.
- Evaluate, both oral and written, emergency disaster pre-plans, recovery plans, and after-action reports.
- Apply analytical skills in approaching ethical dilemmas faced in government and private industry.
- Identify the ethical implications of technology's convergence on management.
- Describe, both oral and written, the political and religious implications of the terrorist climate.

Requirements

To earn a Bachelor of Science with a major in domestic security management, students must complete at least 180 quarter units as described below. 76.5 quarter units must be completed at the upper-division level and 45 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.)

Requirements for the Major

(10 courses, 45 quarter units)

DSM 401	Survey of Domestic Security Management
CJA 446	Criminal Justice Management and Leadership
CJA 467	International & Domestic Terrorism
DSM 420	Information Security
DSM 430	Land Borders, Seaports, and Airport Security
DSM 440	Crisis Response Planning and Management
DSM 444	Disaster Management
DSM 470	Legal Issues of Security Management
DSM 475	Techniques of Interviewing and Interrogation
DSM 490	Supervised Senior Project* (Prerequisite: Students must have satisfied all degree requirements prior to beginning this course.)

The Supervised Senior Project

The Supervised Senior Project is designed to be a comprehensive project. Therefore, students should schedule DSM 490 toward the end of their degree program. The minimum requirements are the completion of at least 27 quarter units of core requirements in the DSM 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" 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 DSM 490. No grade of "I" (Incomplete) can be given for this course.

Upper-Division Electives

(6 courses, 27 quarter units)

Students can select any six of the courses listed below to complete this requirement

CJA 434	Survey of Forensic Sciences
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CJA 456	Criminal Evidence
CJA 400	Gangs in America
CJA 457	Minorities, Crime and Social Justice
CJA 440	Corrections
COM 380	Democracy in Information Age
MGT 422	Team Building, Interpersonal Dynamics and Empowerment
MGT 409C	Principles of Management and Organization
HUB 420	Human Communications
CJA460	Principles of Investigation

◆ Major in Financial Management

(620-409)

Faculty Advisor: Farhang Mossavar-Rahmani • (858) 642-8409 • fmossava@nu.edu

The objective of the major in financial management is to prepare students for positions in the field of corporate financial management. The program helps prepare students for the Certified in Financial Management (CFM) exam which is the principal certification for corporate financial officers, and also prepares students for the Certified Cash Manager (CCM) exam. The CCM designation signifies a high degree of expertise in the field of cash and treasury management.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Develop essential skills in problem-solving with emphasis on wealth maximization
2. Integrate ethical and global issues that impact business and finance.
3. Gain a greater understand of political, social, legal, regulatory, and technological issues in the context of micro and macro finance.
4. Equip themselves with an integrated view of the theoretical and practical aspects of Finance.
5. Prepare themselves for careers in financial management, financial institutions, financial markets, law, government service, and related fields.

Requirements for the Degree

To receive a Bachelor of Science with a major in financial management, students must complete at least 180 quarter units as articulated 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. The following are specific degree requirements.

Prerequisites for the Major

(5 courses, 22.5 quarter units)

MNS 205	Introduction to Quantitative Methods for Business *
ECO 203	Principles of Microeconomics *
ECO 204	Principles of Macroeconomics *
ACC 201	Financial Accounting Fundamentals
ACC 202	Managerial Accounting Fundamentals (Prerequisite: ACC 201)

* May be used to satisfy general education requirements.

Requirements for the Major

(17 courses, 76.5 quarter units)

Core Business Requirements

(7 courses, 31.5 quarter units)

BKM 400	Business Knowledge Management Strategies
MNS 407	Management Science (Prerequisite: MNS 205)
MGT 409C	Principles of Management and Organization

FIN 310	Business Finance (Prerequisites: ACC 201 and ACC 202)
MKT 402A	Marketing Fundamentals
LAW 304	Legal Aspects of Business I
ACC 300	Applied Technology for Accountants (Prerequisite: ACC 201)

Finance and Accounting Courses in the Major (10 courses, 45 quarter units)

FIN 440	Financial Institutions (Prerequisite: FIN 310)
FIN 442	Investments (Prerequisites: FIN 310 and FIN 440)
FIN 443	Working Capital Management (Prerequisite: FIN 310)
FIN 444	Risk Management and Insurance (Prerequisite: FIN 310)
FIN 446	International Financial Management (Prerequisite: FIN 310)
FIN 447	Financial Planning (Prerequisite: FIN 310)
FIN 449	Analysis of Financial Statements (Prerequisite: FIN 310)
FIN 450	Bank Management (Prerequisite: FIN 310)
FIN 451	Real Estate Finance (Prerequisite: FIN 310)
FIN 448	Seminar in Finance (Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443 and FIN 446)

◆ Major in Organizational Leadership

(620-435)

Faculty Advisor: Julia Buchanan • 858.642.8453 • jbuchanan@nu.edu

The degree is intended to provide students who are interested in starting or who are currently working in business enterprises to develop 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 degree in organizational leadership is designed to give students the opportunity to develop 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.

Requirements for the Degree

To receive a Bachelor of Science with a major in organizational leadership, students must complete at least 180 quarter units as articulated 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 requirements for specific information regarding application and matriculation. Students must maintain a C average. The following are specific degree requirements:

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Develop a personal leadership approach
2. Compare and contrast the concepts of leadership and power

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3. Identify challenges and advantages of diverse groups in organizations
4. Analyze negotiating styles of leaders and evaluate their effectiveness
5. Analyze the strategies leaders use to motivate and evaluate members of groups and teams
6. Analyze and evaluate aspects of leadership in organizational culture
7. Evaluate the ethical implications of leadership decisions and strategies
8. Compare and analyze strategies and frameworks used by leaders to initiate change in organizations
9. Compare and explain classic studies that inform the understanding and application of leadership and organizational theory
10. Apply appropriate technology to leadership decision making in organizations
11. Communicate orally and in writing using proper business communication formats.

Requirements for the Major

(14 courses, 63 quarter units)

Non Leadership Course Requirements

(4 courses, 18 quarter units)

MGT 409C	Principles of Management and Organization
MKT 442A	Public Relations
HRM 409B	Survey in Human Resource Management and Organization Development
LAW 400	Current Legal Issues

Leadership Courses in the Major

(10 courses, 45 quarter units)

LED 400	Introduction to Leadership
LED 410	Leading in Diverse Groups and Teams
LED 420	Adaptive Leadership in Change
LED 430	Conflict and Negotiation for Leaders
LED 440	Leadership Overview of Organizational Functions
LED 450	Advanced Group Dynamic Theory (Prerequisites: LED 400 and LED 410)
LED 460	Ethics and Decision Making in Leadership
LED 470	Classic Studies of Leadership
LED 480	Research for Leaders (Prerequisites: LED 410 and LED 420)
LED 490	Leadership Capstone Project (Prerequisites: completion of 6 LED courses)

Upper-Division Electives

(3 courses, 13.5 quarter units)

Students select from upper-division courses with the following prefixes: ECD, ECO, FIN, HCM, HRM, MGT, ODV, SMG, and SOC.

◆ Major in Paralegal Studies

(620-488)

Director, Paralegal Studies: Marlene Amara Alhandy • (310) 662-2116 • malhandy@nu.edu

Offered by the School of Business and Management in partnership with Extended Learning. Degree and transcript to be conferred out of the School of Business and Management.

Requirements

(17 courses, 76.5 quarter units)

To receive a Bachelor of Science in paralegal studies, students must complete 180 quarter units. They must meet the general education requirements described in this catalog. For the major in paralegal

studies, they must complete 76.5 quarter units of upper-division course work described below. 45 quarter units 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.)

Note: No person shall practice law in California unless the person is an active member of the State Bar.

Core Courses

(10 courses, 45 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 305	Property
PLA 306	Torts
PLA 308	Contracts
PLA 309	Directed Research and Writing A
PLA 310	Directed Research and Writing B
PLA 425	Litigation I
PLA 318	Remedies and Judgments
PLA 324	English for Professionals

Specialty Concentrations

(4 courses, 18 quarter units)

(3 courses, 13.5 quarter units, for students choosing Litigation)

All students must take two of the two-course concentrations listed below. Students must take the level I and level II courses for each area. Because Litigation I is required in the core, students who select Litigation II will be required to take an additional elective.

PLA 407	Family Law I
PLA 421	Family Law II
PLA 426	Litigation II
PLA 427	Probate and Estate Planning I
PLA 428	Probate and Estate Planning II
PLA 429	Corporations I
PLA 430	Corporations II
PLA 431	Real Estate I
PLA 432	Real Estate II
PLA 433	Criminal Law I
PLA 434	Criminal Law II

Elective Courses

(3 courses, 13.5 quarter units)

(4 courses, 18 quarter units, for students who choose the Litigation concentration)

PLA 302	Computers and the Law
PLA 404	Wills, Trusts, & Estate Planning
PLA 407	Family Law I
PLA 421	Family Law II
PLA 311	Internship
PLA 413	Juvenile Law and Procedure
PLA 314	Workers' Compensation
PLA 315	Bankruptcy Law and Procedure
PLA 316	Entertainment Law
PLA 317	Immigration Practice
PLA 433	Criminal Law I
PLA 434	Criminal Law II
PLA 335	Employment Law

● Legal Assistance Certificate

(672-000-521)

Program Description

The Legal Assistance Certificate may serve as a starting point for students whose goal is to earn a baccalaureate degree. Students must complete 27 quarter units of general education courses. The course

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work and the accompanying credits in this program may be transferred to the B.S. in paralegal studies if all other requirements for admission are met.

Note: No person shall practice law in California unless the person is an active member of the State Bar.

Certificate Requirements

(17 courses, 76.5 quarter units)

Core Courses

(10 courses, 45 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 305	Property
PLA 306	Torts
PLA 308	Contracts
PLA 309	Directed Research and Writing A
PLA 310	Directed Research and Writing B
PLA 425	Litigation I
PLA 318	Remedies and Judgments
PLA 324	English for Professionals

Specialty Concentrations

(4 courses, 18 quarter units)

(3 courses, 13.5 quarter units, for students choosing Litigation)

All students must take two of the two-course concentrations listed below. Students must take the level I and level II courses for each area. Students who select Litigation II will be required to take an additional elective because Litigation I is required in the major.

PLA 407	Family Law I
PLA 421	Family Law II
PLA 426	Litigation II
PLA 427	Probate and Estate Planning I
PLA 428	Probate and Estate Planning II
PLA 429	Corporations I
PLA 430	Corporations II
PLA 431	Real Estate I
PLA 432	Real Estate II
PLA 433	Criminal Law I
PLA 434	Criminal Law II

Elective Courses

(3 courses, 13.5 quarter units)

(4 courses, 18 quarter units, for students who choose the Litigation concentration)

PLA 302	Computers and the Law
PLA 404	Wills, Trusts, & Estate Planning
PLA 407	Family Law I
PLA 421	Family Law II
PLA 311	Internship
PLA 413	Juvenile Law and Procedure
PLA 314	Workers' Compensation
PLA 315	Bankruptcy Law and Procedure
PLA 316	Entertainment Law
PLA 317	Immigration Practice
PLA 433	Criminal Law I
PLA 434	Criminal Law II
PLA 335	Employment Law

● Paralegal Specialist Certificate

(672-000)

Program Description

To be eligible for a Paralegal Specialist Certificate, a student must

have completed a minimum of 90 transferable quarter units, an AA degree or a BA/BS degree prior to admission. Upon successful completion of the program, students earn the Paralegal Specialist Certificate in one of the following six areas of specialization:

Litigation
Corporations
Real Estate Law
Probate and Estate Planning
Criminal Law
Family Law

Students may earn more than one Paralegal Specialist Certificate. Generally, any course completed for any one Paralegal Specialist Certificate need not be repeated

Each certificate is tailored to include training in substantive legal analysis, drafting of relevant legal documents, and managing of procedural matters. Each specialization requires the completion of 40.5 quarter units.

Note: No person shall practice law in California unless the person is an active member of the State Bar.

▲ Litigation Specialization

(672-000-515)

This certificate covers case analysis, legal research, drafting of pleadings, motion and discovery documents, evidence law, and preparation of civil cases for trial.

Certificate Requirements

(9 courses, 40.5 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 306	Torts
PLA 308	Contracts
PLA 309	Directed Research & Writing A
PLA 324	English for Professionals
PLA 425	Litigation I
PLA 426	Litigation II
PLA 318	Remedies and Judgments

▲ Corporations Specialization

(672-000-516)

This certificate covers case analysis, legal research, and preparation of documents for the formation and management of the corporate entity, including regulation of securities, acquisitions, and mergers.

Certificate Requirements

(9 courses, 40.5 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 305	Property
PLA 308	Contracts
PLA 309	Directed Research & Writing A
PLA 318	Remedies and Judgments
PLA 429	Corporations I
PLA 430	Corporations II
PLA 324	English for Professionals

▲ Real Estate Law Specialization

(672-000-517)

This certificate covers case analysis, legal research, analysis and preparation of documents involving leases, sale of property, real estate syndications, condominiums, zoning, and other related matters.

School of Business and Management

Certificate Requirements

(9 courses, 40.5 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 305	Property
PLA 308	Contracts
PLA 309	Directed Research & Writing A
PLA 318	Remedies and Judgments
PLA 431	Real Estate I
PLA 432	Real Estate II
PLA 324	English for Professionals

▲ Probate and Estate Planning Specialization

(672-000-518)

This certificate covers case analysis, legal research, preparation of documents, including wills and trusts, and handling administration of decedent's estate, including tax matters.

Certificate Requirements

(9 courses, 40.5 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 404	Wills, Trusts, and Estate Planning
PLA 305	Property
PLA 407	Family Law I
PLA 309	Directed Research & Writing A
PLA 427	Probate and Estate Planning I
PLA 428	Probate and Estate Planning II
PLA 324	English for Professionals

▲ Criminal Law Specialization

(672-000-519)

This certificate covers the prosecution of criminal defendants and their defense, whether in public or private practice.

Certificate Requirements

(9 courses, 40.5 quarter units)

PLA 301	Legal Theory and Ethics
PLA 306	Torts
PLA 407	Family Law I
PLA 309	Directed Research & Writing A
PLA 310	Directed Research & Writing B
PLA 413	Juvenile Law and Procedure
PLA 433	Criminal Law I
PLA 434	Criminal Law II
PLA 324	English for Professionals

▲ Family Law Specialization

(672-000-520)

This certificate covers case analysis, legal research, analysis, and preparation of family law pleadings involving dissolution of marriage, paternity actions, domestic violence actions, adoptions, and other related matters.

Certificate Requirements

(9 courses, 40.5 quarter units)

PLA 301	Legal Theory and Ethics
PLA 303	Law Office Administration
PLA 404	Wills, Trusts, and Estate Planning
PLA 305	Property
PLA 309	Directed Research & Writing A
PLA 413	Juvenile Law and Procedure
PLA 425	Litigation I
PLA 407	Family Law I
PLA 421	Family Law II

School of Business and Management Minors

● Minor in Accountancy

(450)

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

Requirements for the Minor

(6 courses, 27 quarter units)

Students can earn a minor in accountancy if they have successfully completed ACC 410A and at least five of the upper-division accounting courses required in the major. See "Major in Accountancy." Prerequisites may be required depending on courses chosen.

● Minor in Alternative Dispute Resolution

(482)

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. The minor in Alternative Dispute Resolution is designed for those students majoring in Business Administration who may seek entry into the Alternative Dispute Resolution field. 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 Processes
ADR 405	Negotiation Fundamentals
ADR 410	Facilitation Fundamentals
ADR 415	Mediation Fundamentals

Choose any two of the following:

ADR 420	Communication and Conflict
ADR 425	Cultural Issues in Conflict Management
ADR 430	Ethics and Neutrality

● Minor in Business Administration

(463)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • 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 Fundamentals
ACC 202	Managerial Accounting Fundamentals (Prerequisite: ACC 201)
ECO 203	Principles of Microeconomics*
ECO 204	Principles of Macroeconomics*
MNS 205	Introduction for Quantitative Methods for Business* (Prerequisite: Placement Evaluation)

*May be used to satisfy general education requirements

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Core Requirements

(6 courses, 27 quarter units)

FIN 310	Business Finance (Prerequisite: ACC 201 and ACC 202)
MGT 409C	Principles of Management
MNS 407	Management Science (Prerequisite: MNS 205)
HRM 409B	Survey in Human Resource Management and Organization Development
MKT 402A	Marketing Fundamentals
MGT 430	Survey of Global Business (Prerequisites ECO 203 and ECO 204)

● Minor in Business Law

(483)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Requirements

(6 courses, 27 quarter units)

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.

LAW 400	Current Legal Issues
LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II (Prerequisite: LAW 304)
MGT 400	Ethics in Law, Business and Management
ADR 400	Alternative Dispute Processes
ADR 405	Negotiation Fundamentals

● Minor in Business Studies

(451)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • 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 Fundamentals
ACC 202	Managerial Accounting Fundamentals (Prerequisite: ACC 201)
ECO 203	Principles of Microeconomics*
MNS 205	Introduction for Quantitative Methods for Business*
ECO 204	Principles of Macroeconomics*

*May be used to satisfy general education requirements

Core Requirements

(6 courses, 27 quarter units)

MGT 409C	Principles of Management and Organization
FIN 310	Business Finance (Prerequisites: ACC 201 and ACC 202)
LAW 410	Introduction to Law and Legal Analysis
MGT 430	Survey of Global Business (Prerequisites: ECO 203 and ECO 204)
MKT 402A	Marketing Fundamentals
MNS 407	Management Science (Prerequisite: MNS 205)

● Minor in Criminal Justice Administration

(466)

Faculty Advisor: James Larson • (858) 642-8418 • jlars@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 Economics

(481)

Faculty Advisor: Brian P. Simpson • (858) 642-8431 • bsimpson@nu.edu

Requirements for the Minor

(8 courses, 36 quarter units)

This minor is designed for those students who seek to gain specialized knowledge in the field of economics. It emphasizes market process (or free market) economics. Economics prepares students for careers in business, government, and non-profit organizations. Economics also provides very good preparation for graduate level work, including in business, law, public policy, and public administration.

Knowledge of economics can increase one's earning potential relative to other academic fields (including business and management). According to a U.S. Department of Commerce report, those with undergraduate economic degrees are among the highest paid workers. They place third out of fifteen academic fields (behind only engineering and agriculture/forestry). By minoring in economics, students can take advantage of some of the increased earnings potential that economics makes possible. Students must successfully complete the following courses for a minor in economics.

Prerequisites for the Minor

(2 courses, 9 quarter units)

ECO 203 Principles of Microeconomics*

ECO 204 Principles of Macroeconomics*

* May be used to satisfy general education requirements.

Note: ECO 203 and ECO 204 are not prerequisites for all courses in the minor.

Core Requirements

(6 courses, 27 quarter units)

ECO 401	Market Process Economics I
ECO 402	Market Process Economics II
ECO 447	Money and Banking (Prerequisites: ECO 203 and 204)
ECO 415	Labor Economics (Prerequisites: ECO 203 and 204)
ECO 420	International Economics (Prerequisites: ECO 203 and 204)
ECO 430	Economics and Philosophy

● Minor in Pre-Law Studies

(455)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Requirements for the Minor

(6 courses, 27 quarter units)

A minor in pre-law studies helps prepare business professionals for

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the increasing legal implications of business in a global environment.

LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II (Prerequisite: LAW 304)
LAW 408	Legal Writing, Research and Oral Argument
LAW 400	Current Legal Issues
ADR 405	Negotiation Fundamentals
MGT 400	Ethics in Law, Business and Management

Students should consult with faculty before selecting a minor. They must also meet prerequisite requirements.

Graduate Degrees

■ EXECUTIVE MASTER IN BUSINESS ADMINISTRATION

(737)

Faculty Advisor: Don Schwartz • (858) 642-8420 • dschwartz@nu.edu

The mission of the Executive Master in Business Administration (EMBA Program) is to provide current and potential executives with the knowledge and skills needed for effective management and decision-making in a competitive, global economy.

Program Description

The EMBA program is designed to provide students with a balance of theoretical concepts and practical approaches to business problems, along with analytical skills, critical thinking, communication, and interpersonal skills. Emphasis is placed on developing the leadership and team-building abilities needed to manage change and make sound decisions within the framework of a strategic plan. The EMBA program is characterized by students progressing through the program in a cohort group, and by team-based learning, faculty-student interaction, and current and relevant curriculum. Student learning is enhanced by sharing the management experience of classmates who have achieved mid-level to senior-level management positions in business enterprises.

Program Learning Outcomes

Upon successful completion of the program, students will be able to:

1. Evaluation of new strategies, evaluation of entry and exit strategies.
2. Evaluation of acquisition, joint ventures, and growth.
3. Describe the ethical and legal responsibilities in organizations and society.
4. Evaluate organizational structure and culture as supportive of organization direction and strategy.
5. Specify the human resource issues associated with the production of a product or service.
6. Explain the use of accounting and financial resources to achieve the firm objectives.
7. Utilize current methodologies, systems, and technology to plan, execute, implement, and analyze performance of the organization and its resources.
8. Develop the skills necessary to become an effective manager.
9. Utilize statistical data analysis and management science as they support decision-making processes throughout an organization.
10. Utilize economic tools and theory to attain the optimal business decisions.

Admission to the Program

Applicants must have a minimum of five years of work experience, including three years of supervisory experience with an upward progression in responsibilities, and must have achieved a mid-level or senior-level management position with significant decision-making responsibility. Such positions include, but are not limited to supervision of other employees, responsibility for budgets or financial performance, and project management or similar responsibilities.

Core Requirements

(12 courses, 54 quarter units)

Module I – Analytical Tools

MGT 605	Organizational Management and Leadership
MKT 602	Marketing Management
BKM 600	Knowledge Management in Business
MNS 682	Data Analysis for Decision Making
ECO 635	Economics for Executives
FIN 670	Finance and Accounting for Executives
LAW 605	Legal Issues in Business
MGT 640	Operation Planning and Implementation

Module II – Integrating Experience (At least six Module I courses must be completed successfully before a student can enroll in any Module II courses)

EMB 651	Cases in Business Decision-Making
EMB 652	Business Simulations
IBU 653	Global Business & Strategic Planning
EMB 696	EMBA Project

■ EXECUTIVE MASTER IN BUSINESS ADMINISTRATION (SPANISH VERSION)

(738)

Faculty Advisor: Ramon Corona • (858) 642-8427 • rcorona@nu.edu

Offered online and conducted entirely in the Spanish language, the Spanish EMBA 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.

Spanish EMBA Core Requirements

(12 courses, 54 quarter units)

EMB 689S	Liderazgo y Negociaciones (Leadership and Negotiations)
MKT 631S	Mercadotecnia Global (Global Marketing)
ELB 620S	Principios de Negocios Electrónicos (Principles of Electronic Business)
MNS 601S	Estadística para Negocios (Statistics for Business)
EMB 674S	Estrategias Competitivas Globales (Global Competitive Strategies)
EMB 682S	Contabilidad Gerencial (Managerial Accounting)

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EMB 673S	Alianzas Estratégicas Internacionales (International Strategic Alliances).
EMB 683S	Estrategias Económicas Internacionales (International Economic Strategies)
EMB 672S	Administración del Riesgo Internacional (International Risk Management)
EMB 671S	Simulación de Negocios Globales (Global Business Simulation)
MGT 602S	Administración Estratégica (Strategic Decision-Making)
EMB 696S	Proyecto EMBA (EMBA Project)

■ MASTER OF ARTS IN HUMAN RESOURCE MANAGEMENT

(710-817)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • 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 multi-disciplinary approach to the growing field of human resource management and the continuum of organizational change in the 21st century.

Tracks

It is highly recommended that students complete the field of study 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 completion of this program candidates will be able to:

1. Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training, and compensation.
2. Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
3. Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
4. Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
5. 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).

6. Develop a consulting proposal and course of action for an organization regarding a particular organizational challenge and/or change process.
7. Recognize, analyze, and effectively address ethical, legal, and safety challenges faced in the workplace.

Degree Requirements

(12 courses, 54 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.

Program Requirements

(9 courses, 40.5 quarter units)

HRM 660	Theory and Practice of Human Resource Management
HRM 630	Legal, Ethical and Safety Issues in Human Resource Management
HRM 637	Workforce Planning, Development, and Outsourcing
HRM 633A	Seminar in Employee Relations, Labor Relations, and Union Management
HRM 667	Compensation and Benefits
HRM 669	Research Seminar in Human Resource Management Corporate Strategy
ODV 600	Theory and Practice of Organizational Development
ODV 601	Integrating Performance Management, Technology & Organizational Communication
HRM 670	Capstone Project Course (Prerequisite: Completion of six of the required core courses)

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 total course amount by one.

▲ Specialization in Organizational Development and Change Management

(890)

(4 courses, 18 quarter units)

ODV 606	Seminar in Training and Development
ODV 608	Research Seminar in Current Issues/trends in Applied Organizational Development
LED 602	Developing and Implementing Groups and Teams
ODV 610	Advanced Studies in Organizational Behavior in a Diverse Society

▲ Specialization in Organizational Leadership

(888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that

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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.

The area of specialization in organizational leadership 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 Requirements

(4 courses, 18 quarter units)

LED 602	Developing and Implementing Groups and Teams
LED 603	Organizational Leadership
LED 604	Change and Adaptation within Organizations
LED 605	Negotiation, Bargaining, Conflict Resolution

■ MASTER OF ARTS IN MANAGEMENT

(710-804)

Faculty Advisor: Richard Weaver • (858) 642-8490 • rweaver@nu.edu

The Master of Arts in Management gives students in professional and mid-management careers the opportunity to obtain decision-making skills through a sequence of core courses in basic management and business subjects. Open electives allow students to achieve individual program design and to focus their studies on their professional disciplines.

This program is designed primarily for students who have undergraduate degrees in fields other than business, desire a flexible program, and are seeking graduate work in management.

Bachelor of Arts in Management/Master of Arts in Management Transition Program

The Bachelor of Arts in management/Master of Arts in management (BAM/MAM) 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 MAM courses as electives for their BAM degree. Students can select any two of the following three courses: LED 601, ODV 610 and ELB 620. The number of courses required to earn an MAM degree for transition program students is reduced from 12 to 10 courses. To be eligible for the transition program, students must apply for the MAM and begin their program of study within six months after completing their final BAM course. Students must complete the 12-course MAM 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:

1. Analyze ethical issues and frameworks for ethical decision-making in business today.
2. Analyze and evaluate current business strategy and structure in relation to core competencies and competitive advantage.
3. Evaluate the economic advantages and disadvantages of increased U.S. trade activities.
4. Apply business and professional ethical theories and practices to all stages of the consulting process.
5. Compare the structures and management styles of multinational corporations based upon their origin, objectives, capabilities, experience and cultural environment.
6. Analyze and evaluate the contemporary issues of safety and health program management and their effect on business and the

work environment.

7. Analyze and evaluate the concept and reality of the global imperative.

Degree Requirements

(12 courses, 54 quarter units)

To receive a Master of Arts in 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.

Refer to the section on graduate admission requirements for specific information regarding application and matriculation.

Core Requirements

(9 courses, 40.5 quarter units)

Students can take the following courses in any order.

LED 601	Theories, Practices, and Ethics of Leadership
LED 602	Developing and Implementing Groups and Teams
ELB 620	Principles of E-Business
ODV 610	Advanced Studies in Organizational Behavior in a Diverse Society
ODV 600	Theory and Practice of Organizational Development
MGT 630	Global Business Environment
MGT 600	Ethical Concerns in Business and Management
MGT 635	The Organization Consulting Process
ODV 606	Seminar in Training and Development (Prerequisites: All Core Courses)

Program Electives

(3 courses, 13.5 quarter units)

To complete their program, students can select electives from any graduate course with appropriate prefixes (ACC, CIS, ITM, ECO, FIN, HCA, HRM, MKT, MGT, EMB, LED, ODV and MNS), if they have met all the necessary prerequisites.

MA in Management Area of Specialization

▲ Specialization in Organizational Leadership

(888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • 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.

The area of specialization in organizational leadership 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 Requirements

(4 courses, 18 quarter units)

LED 602	Developing and Implementing Groups and Teams
LED 603	Organizational Leadership
LED 604	Change and Adaptation within Organizations
LED 605	Negotiation, Bargaining, Conflict Resolution

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■ MASTER OF BUSINESS ADMINISTRATION



(730)

Faculty Advisor: Don Schwartz • (858) 642-8420 • dschwartz@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.

Self-paced Foundation Courses (optional)

The following non-credit, self-paced and self-study courses are offered online, free of charge to registered MBA students. Self-assessment tests are available for students to ascertain their level of competency.

- BUS 500A Intermediate Algebra Foundation (recommended for ECO 607)
BUS 500C Macro and Microeconomics Foundation (recommended for ECO 607)

2-Week Foundation Courses (required)

The following two Foundation Courses are required for all MBA students, but may be waived if a score of 75% 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 do not provide academic credit, they have substantial content that is not covered in the related core courses, and they must be successfully completed in order to graduate from the MBA program.

- ACC 501 Accounting Fundamentals
(Prerequisite for ACC 604)
FIN 501 Finance Fundamentals (Prerequisite for FIN 609A)
(Prerequisite: ACC 501)

MBA Transition Program

National University students who complete graduate courses as part of their undergraduate degree program and who satisfy MBA transition program requirements described in the catalog description of various undergraduate programs must complete at least 49.5 quarter units for their MBA degree.

Degree Requirements

(14 courses, 63 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 graduate work completed at another regionally accredited institution may be applied to this degree, 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 matriculation.

Core Requirements

(10 courses, 45 quarter units)

- BKM 600 Knowledge Management for Business Strategies
LED 601 Theories, Practices, and Ethics of Leadership
ELB 620 Principles of Electronic Business
MKT 602 Marketing Management
MNS 601 Statistics for Business
ECO 607 Economics for Managerial Decision-Making
ACC 604 Managerial Accounting
(Prerequisite: ACC 501)
FIN 609A Financial Management
(Prerequisite: FIN 501)
MGT 602 Strategic Decision-Making
(Prerequisite : completion of 27 quarter units of MBA Core Requirements)
MGT 610C* MBA Project
(Prerequisite : completion of 31.5 quarter units of MBA Core Requirements)

* MBA project course MGT 610C is conducted in the manner described below (see "The MBA Project"). MGT 610C is two months in length.

General Electives

(4 courses, 18 quarter units)

Students can select any four electives from 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).

The MBA Project: The MBA Project is a comprehensive project that integrates prior course material. Therefore, students should schedule MGT 610C toward the end of their degree program, and after completing their Area of Specialization, if any. The minimum requirements are the completion of at least 31.5 quarter units of core requirements in the MBA 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 distraction. For more information, refer to the MBA Project Handbook in the School of Business and Management section of the university's web site.

MBA Areas of Specialization

Requirements for Areas of Specialization

In lieu of general electives, student can choose an area of specialization. In order to qualify for graduation with an area of specialization, students must complete all courses specified in the desired area in addition to all of the MBA program requirements. Students must take at least three-fourths of the courses in the area of specialization while in residence at National University.

▲ Specialization in Accountancy

(730-000-850)

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

Designed for those whose undergraduate degree is not in accounting, the goals of this program are to provide students with the accounting knowledge and skills needed to pursue a career in the financial management of a commercial or nonprofit organization and to help prepare students for national certification examinations. Relevant professional designations include Certified Public Accountant (CPA), Certified Management Accounting (CMA) and Certified in Financial Management (CFM).

Note that the specialization courses listed below provide content in

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accounting subjects other than managerial accounting, since the latter is contained in the required MBA core course, ACC 604 Managerial Accounting. In order to sit for the CPA Exam in California, candidates are required to have a baccalaureate degree in any discipline and to have completed 24 semester units (8 courses, 36 quarter units) in accounting, plus 24 semester units (8 courses, 36 quarter units) in business which includes business law, mathematics, statistics, computer science and information systems.

Before taking any of the courses in the Area of Specialization, students are advised to contact a full-time faculty person in the department for a brief interview by phone or personal visit. The purpose of this visit is to review the student's career objectives and educational requirements.

Prerequisite for Specialization

(1 course, 4.5 quarter units)

ACC 201 Financial Accounting Fundamentals

Program Requirements

(4 courses, 18 quarter units)

ACC 650A Financial Accounting Theory I
ACC 650B Financial Accounting Theory II
ACC 652 Taxation for Investors and Managers
ACC 655 Auditing and Internal Control

Optional Elective

ACC 657 Accounting Information Systems

▲ Specialization in Alternative Dispute Resolution

(730-000-898)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This area of specialization is designed for students who wish to complete an MBA program while focusing their graduate studies in Alternative Dispute Resolution, which is one of the fastest growing fields in the U.S. and the world at large. The program provides students with a broad knowledge of Alternative Dispute Resolution subjects and will enable students to not only become effective mediators and negotiators but to also use these skills to resolve conflict in the workplace. Expertise in Alternative Dispute Resolution is in high demand in the business community, local, state and federal governments, and neighborhood communities.

Program Requirements

(4 courses, 18 quarter units)

ADR 600 Alternative Dispute Resolution
ADR 605 Negotiation
ADR 610 Facilitation
ADR 615 Mediation

▲ Specialization in Electronic Business

(730-000-874)

Faculty Advisor: Mohammed Nadeem • (408) 236-1150 • mnadeem@nu.edu

This specialization enables MBA students to become familiar with the principles and theories of electronic business, defined as business conducted on the Internet and/or the World Wide Web. Online marketing, websites and programming languages are some of the topics covered in the curriculum.

Program Requirements

(4 courses, 18 quarter units)

ELB 621 E-Strategies and Business Models
(Prerequisite: ELB 620)

ELB 624 Internet Marketing
ELB 625 Electronic Payment Systems and Internet Security
(Prerequisite: ELB 620)
ELB 638 E-Business Information and Knowledge Systems
(Prerequisite: ELB 620)

▲ Specialization in Financial Management

(730-000-851)

Faculty Advisor: Farhang Mossavar-Rahmani • (858) 642-8409 • fmossava@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 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 Requirements

(4 courses, 18 quarter units)

FIN 631 Security Analysis and Portfolio Management
(Prerequisite: FIN 609A)
FIN 632 Managing Financial Resource
(Prerequisite: FIN 609A)
FIN 633 Financing Capital Requirements
(Prerequisite: FIN 609A)
FIN 635 International Finance
(Prerequisite: FIN 609A)

▲ Specialization in Health Care Administration

(730-000-858)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

This area of specialization is designed for students who want to complete an MBA program while focusing their graduate studies in health care, one of the largest and fastest growing industries in the U.S. The program teaches students how to apply general business and management skills in the specialized field of health care. The required and elective courses provide students with a broad knowledge of health care and the unique management and organizational issues inherent to health care. Students must take the capstone course in the general MBA program, but they can take the capstone in health care administration as well. The residency portion of the health care administration program is not required, but is suggested by the health care faculty, health care leaders and recruiters.

Program Requirements

(4 courses, 18 quarter units)

Students can select any four of the following courses:

HCA 620A Health Care Management
HCA 636 Ambulatory Care Continuum
HCA 640 Biostatistics and Research
HCA 641 Eldercare – Issues into Practice
HCA 634 Program Planning, Strategic Planning and Evaluation
HCA 629 Health Care Finance, Budget and Managed Care
HCA 609A Health Care Law, Policy and Politics

School of Business and Management

▲ Specialization in Human Resource Management

(730-000-852)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • 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 Requirements

(4 courses, 18 quarter units)

Students electing to specialize in human resource management must select four of the following courses.

- HRM 630 Legal, Ethical, and Safety Issues in Human Resource Management
- HRM 633A Seminar in Employee Relations, Labor Relations and Union Management
- ODV 600 Theory and Practice of Organizational Development
- ODV 601 Integrating Performance Management, Technology, and Organizational Communication
- ODV 606 Seminar in Training and Development
- ODV 610 Advanced Studies in Organizational Behavior in a Diverse Society
- HRM 637 Workforce Planning, Development, and Outsourcing
- HRM 667 Compensation and Benefits
- MGT 651 Managing Safety Issues and Regulations

▲ Specialization in International Business

(730-000-853)

Faculty Advisor: Juan España • (858) 642-8448 • jespaña@nu.edu

The goal of this area of specialization is to enable students to do business globally. Students acquire theoretical principles and practical skills that will allow them to perform cross-border transactions regionally or on a global scale. The ongoing globalization of businesses has led to increased demand for international business expertise. This program familiarizes students with international trade, investment and management issues, requiring students to make decisions in settings involving diverse national business environments, a situation typically encountered by managers of multinational corporations. Students will be able to apply different techniques to penetrate foreign markets such as exporting, franchising, licensing, direct investment, etc., matching products/services with markets and managing global operations.

Program Requirements

(4 courses, 18 quarter units)

Students electing to specialize in international business can select four of the following courses.

- ECO 630 Global Economic Geography
(Prerequisite: ECO 203)
- or
- EMB 683 International Economic Strategies
- MGT 637 Comparative International Management
- or
- EMB 673 International Strategic Alliances

- MGT 680 Topics in International Business
- MKT 631 Global Marketing
(Prerequisite: MKT 402A or MKT 602 or EMB 684)

or

- EMB 672 International Risk Management

▲ Specialization in Marketing

(730-000-855)

Faculty Advisor: Susan Silverstone • (858) 642-8430 • ssilver@nu.edu

This area of specialization prepares students with the knowledge and tools they need to perform as a marketing department director or officer. The program emphasizes the global aspects of marketing, the preparation of various specialized plans for marketing, sales and advertising and the relationship between the marketing department and other departments of the firm.

Program Requirements

(4 required courses, 18 quarter units)

- MKT 620 Consumer Behavior
(Prerequisite: MKT 602)
- MKT 631 Global Marketing
(Prerequisites: MKT 602, MKT 620)
- MKT 634 Market Research
(Prerequisites: MKT 602, MKT 620, MKT 631)
- MKT 660 Strategic Operational Marketing
(Prerequisites: MKT 602, MKT 620, MKT 631, MKT 634)

▲ Specialization in Organizational Leadership

(730-000-888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • 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.

The area of specialization in organizational leadership 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 Requirements

(4 courses, 18 quarter units)

- LED 602 Developing and Implementing Groups and Teams
- LED 603 Organizational Leadership
- LED 604 Change and Adaptation within Organizations
- LED 605 Negotiation, Bargaining, Conflict Resolution

▲ Specialization in Technology Management

(730-000-857)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@nu.edu

The field of technology management provides students with the essential management skills and understanding to take a proactive role in developing strategies to fully employ technology within their organization.

Program Requirements

(4 courses, 18 quarter units)

- TMG 620 Principles of Technology Management
- TMG 635 Strategic Management of Technology and Innovation
- TMG 640 Managing Technology Change

School of Business and Management

TMG 625 Systems Analysis and Design

Consult faculty advisor or the Chair of the Department of Computer Science and Information Systems.

■ MASTER OF FORENSIC SCIENCES

(760)

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 Medical Examiner's Office. The field of forensics focuses on the application of scientific methods to the resolution of legal problems.

Program Learning Outcomes

The intended outcome of the MFS courses is to prepare students with the foundation, knowledge and skills needed to meet the scientific and practical demands of the forensic profession as it interfaces with the community at all levels.

Upon successful completion of this program, students will be able to:

1. Describe the component of medico-legal investigations and implications of death investigations with respect to the roles and responsibilities of the different forensic disciplines, and demonstrate knowledge of the forensic/medico-legal terminology and the scientific techniques used in medico-legal investigations.
2. Identify the characteristics that differentiate the manner of death (natural, homicide, suicide or accidental), and the principles of methods used for estimation of the time of death and human Identification.
3. Explain the methods and procedures applied by the forensic/crime laboratories to identify and characterize the genetic markers and DNA from the forensic biological evidentiary samples such as blood, semen, saliva and other body fluids and stains, to associate a person, place or item with a crime, in addition to the civil applications of analysis the biological sample to solve the cases of disputed paternity and baby mix-up.
4. Describe the principles and fundamentals of poisons and the circumstances of poisoning cases and identify the required toxicological samples, methods of collection, preservation and analysis.
5. Describe items of physical evidence at crime scene, and methods of collection, preservation, analysis, comparison, and report preparation.
6. Describe and demonstrate the basic principles of forensic photography, and explain the legal issues related to forensic photography and courtroom or trial presentation.
7. Identify the legal issues involved in crime scene processing and evidence collection and explain fundamental crime scene processing techniques with various types of physical evidence.
8. Describe different methods used for human identification with the role played by the forensic anthropologist in death investigations.
9. Develop a realistic and broader perspective of the theories, techniques and practices which apply to virtually all investigations.
10. Explain the intrinsic factors to all successful investigations that it is more art than science; and that a course of advanced study must finally be discussed in terms of precepts rather than rigid methods despite the methodical and exhausting treatment of a particular case. The course will also employ general principles and special theorems; and dispel the myths that every crime is intrinsically solvable, or that there exists a normative criteria for

- judging the success or failure of an investigation.
11. Describe methods used in crime scene analysis and demonstrate full awareness of methods appropriate to profiling with applying profiling knowledge to crime scene variables.
12. Describe the legal and psychological issues involved in competency to stand trial, diminished capacity, and insanity defenses.
13. Evaluate the current state of the art, tools and techniques of psychological and psychiatric testing.
14. Understand the role of the forensic scientists as expert witnesses.
15. Fully understand the meaning and objective of scientific research, develop research question and apply the appropriate research methodology, discuss the data and make recommendations based on the obtained data and the analyzed results.

The Master of Forensic Sciences degree program offers two areas of specialization (AOS). It is required that the student take one AOS.

Degree Requirements

(12 courses, 54 quarter units)

For students in the BS in criminal justice administration/MFS transition program, the University will waive the two forensic sciences courses 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.

To receive an MFS, students must complete at least 54 quarter units of graduate course 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 matriculation.

Students must have an undergraduate degree in a laboratory science in order to enroll in the Master of Forensic Sciences with a specialization in criminalistics. The Master of Forensic Sciences 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	Principles of Forensic Medicine
FSC 642	Forensic Pathology (Prerequisite: FSC 630)
FSC 643	Forensic Psychology, Psychiatry and the Law
FSC 648	Forensic and Crime Scene Photography
FSC 631	Major Case Investigation
FSC 647	Crime Scene Investigation
FSC 654	Criminal Investigation Analysis: Profiling
FSC 662	Supervised Graduate Research Project*

*This is a two-month, one-meeting-per week course with a significant research component. Grading is by "H" (for Honors, "B" or better work), "S" (for marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

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 "K" 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.

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MFS Areas of Specialization

▲ Specialization in Criminalistics

(886)

This AOS is a specialization in criminalistics and requires that students have an undergraduate degree in physical science. 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	Advanced Forensic Serology and DNA
FSC 635	Forensic Anthropology and Archeology

▲ Specialization in Investigation

(887)

This AOS is a specialization in investigation. This program 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 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 620	Advanced Criminalistics
FSC 621	Electronic Crime Scene Investigation: Computer Forensics
FSC 622	Constitution and Criminal Procedure
FSC 623	Advanced Fingerprint Analysis

Program Electives

For electives, students can take courses with prefixes from the School of Business and Management, or they can take:

FSC 661	Internship in Forensic Sciences (1.5-4.5 quarter units)
FSC 651	Selected Topics in Forensic Sciences

■ MASTER OF PUBLIC ADMINISTRATION

(740)

Faculty Advisor: Kenneth Goldberg • (858) 642-8478 • kgoldber@nu.edu

The Master of Public Administration is designed for students who want to pursue the challenging career of government management at

the federal, state, or local level and nonprofit management. With an emphasis on the proactive public administrator, it is for those public administrators who aspire to top-level positions. The degree provides a wide range of skills in financial management, budgeting, quantitative methods, urban planning and redevelopment, personnel policies, politics and grant writing.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Demonstrate critical thinking skills relevant to public administration in a global world.
2. Analyze and evaluate the concept of new public management within a historical context.
3. Identify and analyze the impact of political influences on the public sector decision-making process.
4. Explain the division of power within American government as established by the U.S. Constitution.
5. Describe, analyze and evaluate the various approaches to managing government employees.
6. Describe the basic concepts and methodologies of statistics and research in public administration.
7. Evaluate the effectiveness of public administration strategies for dealing with the media and issue networks.
8. Explain and evaluate community relations in reference to government support, justice and law enforcement.
9. Analyze and evaluate the impact of public administration decisions on urban planning and redevelopment.
10. Explain and evaluate public administration trends and strategies for financing local government.
11. Identify resources and approaches for developing grant proposals for community programs and services.
12. Describe the role and function of public administration in today's multicultural environment.

Degree Requirements

(12 courses, 54 quarter units)

For students in the BS in criminal justice administration/MPA transition program, the University will waive two public administration courses taken as part of the bachelor's degree (see BS in criminal justice administration transition program), but these students must still meet the residency requirements for the MPA.

To receive 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 matriculation.

Core Requirements

(8 courses, 36 quarter units)

ODV 600	Theory and Practice of Organizational Development
PAD 620	Foundations of Public Administration
PAD 622	Seminar in Urban Affairs
PAD 626	Public Personnel Policy
PAD 627	Quantitative Methods in Public Administration
PAD 632	Financial Management and Grant Administration
PAD 631	Urban Planning and Redevelopment
PAD 644	MPA Project

Program Electives

(4 courses, 18 quarter units)

For electives, students should select a general set of 600-level courses offered in the School of Business and Management, or those offered

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in other schools with the approval of the dean of the School of Business and Management.

MPA Areas of Specialization

▲ Specialization in Alternative Dispute Resolution

(740-000-898)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

This area of specialization is designed for students who wish to complete an MPA program while focusing their graduate studies in Alternative Dispute Resolution, which is one of the fastest growing fields in the U.S. and the world at large. The program provides students with a broad knowledge of Alternative Dispute Resolution subjects and will enable students to not only become effective mediators and negotiators but to also use these skills to resolve conflict in the workplace. Expertise in Alternative Dispute Resolution is in high demand in the business community, local, state and federal governments, and neighborhood communities.

Program Requirements

(4 courses, 18 quarter units)

ADR 600	Alternative Dispute Resolution
ADR 605	Negotiation
ADR 610	Facilitation
ADR 615	Mediation

▲ Specialization in Human Resource Management

(852)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • 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 Requirements

(4 courses, 18 quarter units)

Students electing to specialize in human resource management must select four of the following courses.

HRM 630	Legal, Ethical, and Safety Issues in Human Resource Management
HRM 633A	Seminar in Employee Relations, Labor Relations and Union Management
ODV 600	Theory and Practice of Organizational Development
ODV 601	Integrating Performance Management, Technology, and Organizational Communication
ODV 606	Seminar in Training and Development
ODV 610	Advanced Studies in Organizational Behavior in a Diverse Society
HRM 637	Workforce Planning, Development, and Outsourcing
HRM 667	Compensation and Benefits
MGT 651	Managing Safety Issues and Regulations

▲ Specialization in Organizational Leadership

(888)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • 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.

The area of specialization in organizational leadership 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 Requirements

(4 courses, 18 quarter units)

LED 602	Developing and Implementing Groups and Teams
LED 603	Organizational Leadership
LED 604	Change and Adaptation within Organizations
LED 605	Negotiation, Bargaining, Conflict Resolution

▲ Specialization in Public Finance

(882)

Faculty Advisor: Kenneth Goldberg • (858) 642-8478 • kgoldber@nu.edu

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	Seminar in Public-Private Financing
PAD 643	Contract Negotiation in the Public Sector

■ MASTER OF SCIENCE IN CORPORATE AND INTERNATIONAL FINANCE

(720-819)

Faculty Advisor: Farhang Mossavar-Rahmani • (858) 642-8409 • fmossava@nu.edu

The Master of Science in Corporate and International Finance (MSCIF) program prepares students for a professional career in corporate and international finance. This program is designed to provide students with advanced skills in applied finance required in today's competitive international financial environment. It also provides an opportunity for in-depth study of the sophisticated analytical techniques and market transactions that drive financial innovation. Students with MS in Corporate and International Finance will be able to enter into one of four career paths: (1) a financial position in a private domestic and international corporate setting; (2) an investment strategist position; (3) a managerial position in financial institutions; and (4) a treasurer position in various governmental organizations..

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

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- Evaluate financial position of organizations through examination of financial statements, budget, financial planning and make proper recommendations.
- Conceptualize a complex issue, analyze it and build on the existing body of knowledge in the area of finance.
- Integrate information technology and ethics into global financial activities and policies.
- Analyze important corporate financial issues in the overall context of maximization of firm value.

Degree Requirements

(16 courses, 72 quarter units)

To receive a Master of Science degree in Finance, students must complete at least 12 courses for 54 quarter units as described below. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at other institutions, as they apply to this program and provided the units were not used in earning another advanced degree.

Program Prerequisites

(4 courses, 18 quarter units)

Students who do not have an undergraduate business degree must satisfactorily complete the courses listed below or their equivalent before undertaking the program's core courses.

ACC 201	Financial Accounting Fundamentals
ACC 202	Managerial Accounting Fundamentals (Prerequisite: ACC 201)
FIN310	Business Finance (Prerequisite: ACC 201)
ECO203	Microeconomics

Core Requirements

(12 courses, 54 quarter units)

FIN 609A	Seminar in Financial Management (Prerequisite: FIN310)
FIN 631	Security Analyses and Portfolio Management Prerequisite: FIN 609A)
FIN 671	Credit Management (Prerequisite: FIN 609A)
FIN 672	U.S. and International Accounting Standards (Prerequisite: FIN 609A)
FIN 673	Valuation of a Business Enterprise (Prerequisite: FIN 609A)
FIN 674	Managing Financial Institutions and Banking (Prerequisite: FIN 609A)
FIN 675	World Economy, Trade and Finance (Prerequisite: FIN 609A)
FIN 635	International Finance (Prerequisite: FIN 609A)
FIN 676	International Banking (Prerequisite: FIN 609A)
FIN 677	Financial Derivatives (Prerequisite: FIN 609A)
FIN 652	Real Estate Finance (Prerequisite: FIN 609A)
FIN 655	Research Project (Capstone Course) (Prerequisites: completion of FIN 609A and at least 36 quarter units of core courses)

■ MASTER OF SCIENCE (M.S.) IN ELECTRONIC BUSINESS

(720-811)

Faculty Advisor: Mohammed Nadeem • (408) 236-1150 • mnadeem@nu.edu

Internet enabled business transactions are making their way into every organization and industry. Today's E-Business environment

functions with a changed set of success factors compared to its infancy stage a few years ago. It is not sufficient enough today to design a visually appealing website. E-Business highly complex and multidisciplinary field that requires flexible, innovate and creative skills both in business and Internet technology. Tomorrow's E-Business leaders need to be able to take a holistic and strategic approach to transform their organization and its business processes for E-Business.

The revised National University Master of E-Business program is built upon future robust expertise in the E-Business field and is focused on a promising outlook in a field that will soon become the pillar for the majority of business related transactions.

The new program has a strong managerial and business focus but still expects students to be very familiar with the Internet Technology, Web-authoring tools and Internet applications

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Envision, design, implement, and effectively use new models of electronic business.
2. Marry the traditional marketplace needs with electronic marketplace capabilities
3. Successfully start new e-ventures or manage e-enterprises that operate in a complex, global and competitive environment
4. Apply cutting edge e-management theory to real-world business situations
5. Meet the demands of current e-businesses and industry to achieve and sustain international competitive advantage

MASTER OF SCIENCE E-BUSINESS TRANSITION PROGRAMS

BBA/MSEB Transition Program

The BBA/MSEB transition program allows currently enrolled BBA students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSTM courses as electives for their BBA degree. Students can select ELB 620 and one of the following two courses: ELB 621 or ELB 624. The number of courses required to earn an MSEB degree for transition program students is reduced from 12 to 10 courses. To be eligible for the transition program, students must apply for the MSEB and begin their program of study within six months after completing their final BBA course. Students must complete the 10-course MSEB program within four years with no break exceeding 12 months.

Students must complete graduate-level course work taken as part of the BBA degree with a grade of B or better. This 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. Grades earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

BSITM/MSEB Transition Program

The BSITM/MSEB transition program allows currently enrolled BSITM students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSEB courses as electives for their BSITM degree. Students can select ELB 620 and one of the following two courses: ELB 621 or ELB 624. The number of courses required to earn an MSEB degree for transition program students is reduced from 12 to 10 courses. To be eligible for the transition program, students must apply for the MSEB and begin their program of study within six months after completing their final BSITM course. Students must complete the 10-course MSEB program within four years with no break exceeding 12 months.

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Students must complete graduate-level course work taken as part of the BSITM degree with a grade of B or better. This 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. Grades earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

BSIS/MSEB Transition Program

The BSIS/MSEB transition program allows currently enrolled BSIS students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSEB courses as electives for their BSIS degree. Students can select ELB 620 and one of the following two courses: ELB 621 or ELB 624. The number of courses required to earn an MSEB degree for transition program students is reduced from 12 to 10 courses. To be eligible for the transition program, students must apply for the MSEB and begin their program of study within six months after completing their final BSIS course. Students must complete the 10-course MSEB program within four years with no break exceeding 12 months.

Students must complete graduate-level course work taken as part of the BSIS degree with a grade of B or better. This 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. Grades earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

Degree Requirements

(12 courses, 54 quarter units)

To receive a Master of Science in Electronic Business, students must complete 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 graduate admission requirements for specific information regarding application and matriculation.

Core Requirements

(12 courses, 54 quarter units)

ELB 620	Principles of E-Business
ELB 621	E-Strategies and Business Models (Prerequisite: ELB 620)
ELB 622	E-Business Systems Development (Prerequisite: ELB 620)
ELB 623	Advanced Web Design (Prerequisite: ELB 620)
ELB 624	Internet Marketing
ELB 625	Electronic Payment Systems and Internet Security (Prerequisite: ELB 620)
ELB 635	E-Logistic and Supply Chain Management (Prerequisite: ELB 620)
ELB 638	E-Business Information and Knowledge Systems (Prerequisite: ELB 620)
ELB 640	Emerging Communication Technologies in E-Business (Prerequisite: ELB 620)
ELB 656	Cyber Law and E-Public Policies
ELB 650A	Master's Research Project I (Prerequisite: All core requirements)
ELB 650B	Master's Research Project II (Prerequisite: ELB 650A)

■ MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP

(720-815)

Faculty Advisor: Julia Buchanan • (858) 642-8453 • jbuchanan@nu.edu

The mission of the MSOL program is to prepare diverse adult learners to become effective, change-oriented leaders in an international society. The program uses distinctive and challenging curriculum that integrates theory with practice, university with community, personal success with ethical service to others, and information technology with creativity, empathy, and democracy.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Apply effective, change-oriented leadership skills in problem solving situations.
2. Evaluate leadership styles within the context of an interdependent, pluralistic, global society.
3. Integrate leadership theories and practices derived from differing disciplines to change personal and organizational performance.
4. Integrate ethical principles in social and diverse contexts
5. Integrate appropriate technology skills into personal and organizational leadership
6. Use appropriate written and oral presentation skills in discussing, evaluating, comparing and contrasting organizational setting and leadership.

Degree Requirements

(12 courses, 54 quarter units)

To receive a Master of Science in Organizational Leadership, students must complete 10 courses (45 quarter units) of the MSOL core curriculum and 2 courses (9 quarter units) of the designated elective courses.

Program Requirements

(10 courses, 45 quarter units)

LED 601	Theories, Practices, and Ethics of Leadership
MNS 601	Statistics for Business
LED 602	Developing and Implementing Groups and Teams
LED 603	Organizational Leadership
LED 604	Change and Adaptation within Organizations
LED 605	Negotiation, Bargaining, and Conflict Resolution
LED 606	Information Management for Leaders
FIN600	Finance for Non-Financial Managers
LED 608	Seminars in Leadership (Prerequisite: completion of 6 of the preceding core courses)
LED 609	Capstone Project Course (Prerequisite: completion of 6 of the preceding core courses)

Program Electives

(2 courses, 9 quarter units)

Each student must complete two graduate courses from the School of Business and Management to meet the electives requirement.

■ MASTER OF SCIENCE IN TAXATION

(720-805)

Faculty Advisor: Forrest Young • (805) 437-3035 • fyoung@nu.edu

The goal of this program is to provide students with the advanced level of knowledge and skills needed for a professional career in tax return preparation and tax planning and consulting for individuals, business and nonprofit entities. It is recommended that candidates possess an undergraduate degree in accounting or finance.

School of Business and Management

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Prepare tax returns for individuals, sole proprietorships, "C" corporations, "S" corporations, partnerships, limited liability companies, trusts, estates, exempt organizations and foreign corporations.
2. Apply knowledge from the core areas of taxation using the lifecycle (formation, operation, and liquidation) approach.
3. Synthesize and communicate tax information orally and in writing to support decision-making.
4. Apply ethical concepts to tax-related issues

Degree Requirements

(12 courses, 54 quarter units)

To receive a Master of Science in Taxation, 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 matriculation.

Program Prerequisite

(1 course, 4.5 quarter units)

ACC 201 Financial Accounting Fundamentals

Core Requirements

(12 courses, 54 quarter units)

- TAX 601 Tax Research and Decision Making
(Prerequisite: ACC 201)
- TAX 602 Federal Tax Procedure
(Prerequisite: ACC 201)
- TAX 603A Federal Income Taxation Theory for Individuals
(Prerequisite: ACC 201)
- TAX 603B Technological and Practical Aspects of Federal Taxation for Individuals
(Prerequisite: TAX 603A)
- TAX 605A Federal Taxation of Partners and Partnerships
(Prerequisite: ACC 201)
- TAX 605B Federal Taxation Theory of Corporations and Shareholders
(Prerequisite: ACC 201)
- TAX 605C Technological and Practical Aspects of Federal Taxation for Partnerships and Corporations
(Prerequisites: TAX 605A and 605B)
- TAX 608A Estate, Gift and Trust Taxation
(Prerequisite: ACC 201)
- TAX 611 Taxation of Exempt Organizations
(Prerequisite: ACC 201)
- TAX 612 Retirement Plans and Deferred Compensation
(Prerequisite: ACC 201)
- TAX 614 Taxation of International Transactions
- TAX 619 Master's Project
(Prerequisite: 27 quarter units of required core courses, including TAX 601)

Certificate Programs

(670-770)

Students who are pursuing a bachelors or masters degree may qualify for one of the certificates listed below provided that the student requests the certificate prior to the completion of their degree program. Certificates will not be issued once a degree has been awarded.

Note: For further information regarding certificate programs, please see an admissions advisor.

● Certificate in Accountancy

Faculty Advisor: Connie Fajardo • (916) 855-4137 • cfajardo@nu.edu

Designed for students who wish to prepare for entry into the accounting profession and have as an objective one of the recognized professional accounting designations, including Certified Public Accountant (CPA), Certified Management Accounting (CMA) and Certified in Financial Management (CFM). All three designations require a baccalaureate degree. Though the degree can be in any discipline, CPA exam candidates in California must have completed 24 semester units (8 courses, 36 quarter units) in accounting or tax and 24 semester units (8 courses, 36 quarter units) in business which includes business law, mathematics, statistics, computer science and information systems.

Students who wish to pursue a baccalaureate degree, or 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 the requirements of that 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 person for a brief interview by phone or personal visit 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)

ACC 201 Financial Accounting Fundamentals

(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).

Certificate Requirements

(6 courses, 27 quarter units)

To receive a Certificate in Accountancy, students must complete six of the courses listed below. To assist students in selecting the six courses, the abbreviations in brackets, e.g. [CPA], indicate the professional exam(s) for which that course is most beneficial. "ALL" refers to all three exams: CPA, CMA and CFM. It should be noted that six courses may not provide all the subject matter covered by these exams. It is strongly recommended that students consult with full-time accounting faculty before enrolling in the Certificate in Accountancy.

Undergraduate Series

(670-000-450)

Available to both undergraduate and graduate students.

- ACC 202 Managerial Accounting Fundamentals [CPA]
LAW 304 Legal Aspects of Business I [CPA]
ACC 410A Intermediate Accounting I [ALL]
(Prerequisite: ACC 201)
ACC 410B Intermediate Accounting II [ALL]
(Prerequisite: ACC 201)
ACC 432B Taxation-Business [ALL]
(Prerequisite: ACC 201)
ACC 433A Managerial Accounting I [CMA]
(Prerequisite: ACC 201)
ACC 433B Managerial Accounting II [CMA]
(Prerequisite: ACC 433A)
ACC 434 Government and Nonprofit Accounting [CPA]
(Prerequisite: ACC 201)

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- ACC 435A Auditing I [ALL]
(Prerequisite: ACC 201)
- ACC 435B Auditing II [CPA]
(Prerequisite: ACC 435A)
- ACC 410C Intermediate Accounting III [CPA]
(Prerequisite: ACC 201)
- ACC 431 Advanced Accounting [CPA]
(Prerequisite: ACC 201)
- ACC 432A Taxation – Individual [CPA]
(Prerequisite: ACC 201)

Graduate Series (770-000-850)

Certificate Prerequisite (1 course, 4.5 quarter units)

ACC 201 Financial Accounting Fundamentals
(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).

Certificate Requirements (6 courses, 27 quarter units)

- ACC 604 Managerial Accounting [ALL]
(Prerequisite: ACC 201)
- ACC 650A Financial Accounting Theory I [ALL]
(Prerequisite: ACC 201)
- ACC 650B Financial Accounting Theory II [ALL]
(Prerequisite: ACC 201)
- ACC 652 Taxation for Investors and Managers [CPA]
(Prerequisite: ACC 201) [DELETE WITHOUT REPLACEMENT]
- ACC 655 Auditing and Internal Control [ALL]
(Prerequisite: ACC 201)
- ACC 657 Accounting Information Systems [ALL]
(Prerequisite: ACC 201)

● Undergraduate Certificate in Alternative Dispute Resolution

(670-000-482)

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

- Non-Profit 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 core courses and two electives from the courses listed below.

- ADR 400 Alternative Dispute Resolution Processes
- ADR 405 Negotiation Fundamentals
- ADR 410 Facilitation Fundamentals
- ADR 415 Mediation Fundamentals

Electives

Choose two of the following:

- ADR 420 Communication and Conflict
- ADR 425 Cultural Issues in Conflict Management
- ADR 430 Ethics and Neutrality

● Graduate Certificate in Alternative Dispute Resolution

(770-000-898)

Faculty Advisor: Jack Hamlin • (858) 642-8405 • jhamlin@nu.edu

Expertise in Alternative Dispute Resolution is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR certificate program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

Students who wish to pursue a master’s 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
- Non-Profit 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 core courses and two electives from the courses listed below.

- ADR 600 Alternative Dispute Resolution
- ADR 605 Negotiation
- ADR 610 Facilitation
- ADR 615 Mediation

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Electives

Choose two of the following:

- ADR 620 Arbitration
- ADR 625 Crisis Negotiation
- ADR 630 Labor Negotiation

● Certificate in Criminal Justice Administration

(670-000-466)

Faculty Advisor: James Larson • (858) 642-8418 • jl Larson@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 Criminal Justice Management and Leadership
- CJA 440 Corrections
- CJA 431 Criminology
- CJA 451 Court Systems and the Judicial Process

● Certificate in Electronic Business

(770-000-874)

Faculty Advisor: Mohammed Nadeem • (408) 236-1150 • mnadeem@nu.edu

Students may take the certificate program in electronic business. 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. To receive certification, students are required to successfully complete four courses and to achieve a passing grade on a comprehensive test covering these four areas. No credit is offered for courses taken in this format. This certificate program is designed for individuals who want to become proficient in the new business models and technology involved in conducting business on the Internet and/or the World Wide Web. Qualified people in electronic business are needed as this field of study has matured. E-Business is a complex area of study that requires the ability to integrate managerial, technical and strategic knowledge. Students who later want to pursue a master's degree can apply some or all of the academic credits awarded in the certificate program toward their degrees. To apply these credits to a degree program, students must meet the GPA and other requirements of that degree program.

Certificate Requirements

(5 courses, 22.5 quarter units)

- ELB 620 Principles of E-Business
- ELB 621 E-Strategies and Business Models
(Prerequisite: ELB 620)
- ELB 622 E-Business Systems Development
(Prerequisite: ELB 620)
- ELB 624 Internet Marketing
- ELB 625 Electronic Payment Systems and Internet Security
(Prerequisite: ELB 620)

● Certificate in Finance

(670-000-474)

Faculty Advisor: Farhang Mossavar-Rahmani • (858) 642-8409 • fmossava@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.

A Certificate in Finance is designed for students who are interested in buttressing their business acumen, in acquiring analytical skills, or who may desire to supplement 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 Fundamentals
- ACC 202 Managerial Accounting Fundamentals
(Prerequisite: ACC 202)
- FIN 310 Business Finance
(Prerequisites: ACC 201 and ACC 202)
- FIN 442 Investments
(Prerequisites: FIN 310 and FIN 440)
- FIN 443 Working Capital Management
(Prerequisites: FIN 310 and FIN 440)

Certificate Requirements

(4 courses, 18 quarter units)

- FIN 440 Financial Institutions
(Prerequisite: FIN 310)
- FIN 444 Risk Management and Insurance
(Prerequisites: FIN 310 and FIN 440)
- FIN 446 International Financial Management
(Prerequisites: FIN 310 and FIN 440)
- FIN 448 Seminar in Finance
(Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443, and FIN 446)

● Certificate in Hospitality and Casino Management

(670-000-178)

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 to a degree program are met.

Certificate Prerequisite

(1 course, 4.5 quarter units)

- MKT 402A Marketing Fundamentals

Certificate Requirements

(6 courses, 27 quarter units)

- HCM 400 Principles of Hospitality and Casino Accounting
- HCM 410 Hospitality and Gaming Law

School of Business and Management

HCM 420 Hospitality and Casino Marketing
HCM 430 Principles of Hospitality and Casino Staffing
HCM 440 Cultural Diversity and Hospitality Management
HCM 450 Native American Tribal Community Development

● Certificate in Human Resource Management

(670-000-475)

Faculty Advisor: Bernadette Baum • (858) 642-8404 • 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 Human Resource Management and Organization Development
HRM 432 Recruiting, Selection, Promotion, and Retention
HRM 433 Pay and Benefit Administration, and HR Technology
HRM 439 Legal, Regulatory and Labor Relation Concerns in HRM

● Certificate in International Business

(770-000-883)

Faculty Advisor: Juan España • (858) 642-8448 • jespana@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 program is designed for students who are either employed by a multinational company or interested in pursuing a career in International Business. Expertise in International Business 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, students will have developed skills enabling them to match markets with goods and services from a global perspective.

Certificate Requirements

Certificate Prerequisites

(3 courses, 13.5 quarter units)

ECO 203 Principles of Microeconomics
MKT 402A Marketing Fundamentals
or
MKT 602A Marketing Management
ECO 630 Global Economic Geography
(Prerequisites: ECO 203 or BUS 500C)

Certificate Requirements

(4 courses, 18 quarter units)

MGT 630 Global Business Environment
MGT 637 Comparative International Management
MKT 631 Global Marketing
(Prerequisites: MKT 402A or MKT 602 or EMB 684)
ECO 631 Global Trade Policy and Procedures
(Prerequisite: ECO 630)

● Certificate in Marketing

(670-000-476)

Faculty Advisor: Susan Silverstone • (858) 642-8430 • ssilverstone@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. 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 402A Marketing Fundamentals
MKT 420 Consumer Behavior
(Prerequisite: MKT 402A)
MKT 434 Market Research
(Prerequisite: MKT 402A)
MKT 443 Introduction to Advertising

● Certificate in Sports Management

(670-000-179)

Faculty Advisor: George Drops • (858) 642-8438 • gdrops@nu.edu

This coursework and the accompanying credits may be transferred to the BBA programs if all other requirements for admission to a degree program are met.

Certificate Requirements

(6 courses, 27 quarter units)

SMG 430 Introduction to Sports Management
SMG 432 Principles of Leisure Services Management
SMG 433 Sports Financial Management
SMG 434 Principles and Problems of Coaching
SMG 435 Legal Aspects of Sports Administration
SMG 436 Sports Marketing and Promotions

School of Education

Dean, **Gloria Johnston**
Ph.D., Public Policy Analysis
University of Illinois at Chicago

Associate Dean, **C. Kalani Beyer**
Ph.D., Curriculum Design
University of Illinois at Chicago

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The University of Values



Degree Programs Offered

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Associate of Arts in Teaching

Bachelor of Arts

with a Major in:

Early Childhood Education

with Concentrations in:

Early Childhood Administration

Teacher Education

Graduate Degrees

Master of Arts in Teaching

with Areas of Specialization in:

Best Practices

Reading

Teaching and Learning

Special Education

National Board Certified Teacher Leadership

Early Childhood Special Education

Master of Education in Cross-Cultural Teaching

(with a Single or Multiple Subject Credential with BCLAD Option and Intern Credential Option)

Master of Education in Best Practices

(with a Single or Multiple Subject Credential with BCLAD Option and Intern Credential Option. Sacramento only)

Master of Education in Teaching

Master of Science in Educational Administration

Master of Science in Educational Counseling

Master of Science in School Psychology

Master of Science in Special Education

Master of Science in Exceptional Student Education

Master of Science in Special Education with an Emphasis in the Deaf and Hard-of-Hearing

Nevada Programs

Master of Education in Elementary Education with Nevada Licensure Program

Master of Education in Secondary Education with Nevada Licensure Program

Master of Science with Licensure in Special Ed (Nevada Only)

FOR FURTHER INFORMATION

contact **The School of Education**

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fax: **(858) 642-8724**

e-mail: **soe@nu.edu**

Credential Programs

Preliminary Multiple Subject Teaching Credential Program with BCLAD Option

Preliminary Single Subject Credential Program with BCLAD Option

Holders of a Ryan Credential with clad and AB 1059

Holders of a Preliminary 2042 MS/SS Teaching Credential

Intern Credential Program for Multiple Subject/Single Subject Teaching

Advanced 5th Year Study – Clear SB 2042 Credential

Preliminary Tier I Administrative Services Certificate/Credential

Internship - Preliminary Administrative Services Credential - Tier I

Professional (Tier II) Administrative Services Credential

Pupil Personnel Services Credential School Counseling (PPSC)

Pupil Personnel Services Credential School Psychology (PPSP)

Preliminary Level I Education Specialist Credential: Mild/Moderate Disabilities with CLAD Certificate

Preliminary Level I Education Specialist Credential: Moderate/Severe Disabilities with CLAD Certificate

Preliminary Level I Education Specialist: Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option

Preliminary Level I Education Specialist: Moderate/Severe Disabilities with Multiple or Single Subject Concurrent Credential with BCLAD option

Special Education Internships

Professional Level I Education Specialist Credential: Mild/Moderate Disabilities

Professional Level I Education Specialist Credential: Moderate/Severe Disabilities

Professional Level II Education Specialist: Mild/Moderate Disabilities

Professional Level II Education Specialist: Moderate/Severe Disabilities

Certificate Programs

Early Childhood

Early Childhood Special Education

CLAD Certificate

Educational Technology Certificate

CA Reading Certificate

Certificate in Behavioral Analysis

Teaching in Diverse Learning Settings

National Board Certified Teacher Leadership

☎ denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

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School of Education

Undergraduate Degrees

■ ASSOCIATE OF ARTS IN TEACHING

(600-301)

Program Faculty Advisor: Mary Anne Weegar • (858) 642-8360 • mweegar@nu.edu

The Associate of Arts in Teaching (A.A.T.) consists of 66 quarter units of general education courses and 24 quarter units of undergraduate teacher education courses. This program is designed for paraprofessionals/educational assistants to bridge the general education program with the requirements of *No Child Left Behind* (NCLB). The A.A.T. also meets the universal requirements to be employed in a Childhood Development Center. The student must meet the general education course requirements prior to enrolling in the sequence of undergraduate teacher education courses. The eight undergraduate teacher education courses can be taken in any order, but the Department recommends that students first enroll in the Schools, Children, and Their Teachers course (TED 200) and complete their program by enrolling in the Content Preparation course (TED 207).

Program Outcomes

The National University Associate of Arts in Teaching Degree Program is designed for the candidate who is interested in employment as paraprofessional/educational assistant within an educational setting. The program includes:

- Qualifying paraprofessional/educational assistant to work cooperatively with children and teachers within the classroom setting.
- Qualifying paraprofessionals/educational assistants to meet No Child Left Behind requirements
- Bridging the general education programs to teacher licensure programs
- Supporting the development of teacher/students and student/student relationships within the classroom
- Assisting in the development of effective methodologies and instructional strategies that incorporate technology in support of achievement for ALL students
- Preparing the pre-service teaching candidates to pass qualifying examinations required by the licensure program

Degree Requirements

(22 courses, 90 quarter units)

General Education Requirements

(16 courses, 66 quarter units)

AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

Category 1

Writing (10.5 quarter units required)

- ENG 100 Effective College English I (3.0 quarter units)
(Prerequisite: Placement Exam)
- ENG 101 Effective College English II (3.0 quarter units)
(Prerequisite: ENG 100)
- ENG 240 Advanced Composition
(Prerequisite: ENG100/ 101)
(No 300-level English course may fulfill this requirement)

Category 2

Speech and Communications (4.5 quarter units required)

- COM 100 Introduction to Communications
- COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(minimum 9 quarter units)

- MTH 209A Structure and Concepts of Mathematical Fundamentals I
(Prerequisite: Placement Evaluation)
- and one of the following courses:
- MTH 204 Mathematics for Business and Science
(Prerequisite: MTH 012A & MTH 012B)
- MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)
- MTH 215 College Algebra and Trigonometry
(Accelerated Course)
(Prerequisite: Placement Evaluation)
- MTH 216A College Algebra and Trigonometry I (3 quarter units)
(Prerequisite: Placement Evaluation)
- MTH 216B College Algebra and Trigonometry II (3 quarter units)
(Prerequisite: MTH 216A)
- MTH 220 Calculus I
(Prerequisite: MTH 215)
- MTH 301 Structure and Concepts of Mathematical Fundamentals II
(Prerequisite: MTH209A)
- CST 206B Discrete Structures and Logic Design
(Prerequisite: MTH 215)
- CST 208B Calculus for Computer Science
(Prerequisite: MTH 215)
- MNS 205 Introduction to Quantitative Methods for Business
(Prerequisite: Placement Evaluation)

AREA D: ARTS AND HUMANITIES

(9 quarter units required)

- ART 200 Visual Arts
- MUS 100 Fundamentals of Music

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(18 quarter units required)

- HIS 220A History of the United States I [+]
(Prerequisite: ENG 100/101)
- HIS 220B History of the United States II [+]
(Prerequisite: ENG 100/101)
- PSY 100 Introduction to Psychology
- SOC 260 Cultural Anthropology
(Prerequisites: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

(Note: One science lab is required @ 1.5 quarter units)

- SCI 100 Survey of Bioscience
- SCI 100A Survey of Bioscience Laboratory (1.5 quarter units)
- SCI 101 General Chemistry
- SCI 101A General Chemistry Laboratory (1.5 quarter units)
(Prerequisites: MTH 204 and SCI 101)
- SCI 104 General Physics
- SCI 104A General Physics Laboratory (1.5 quarter units)
(Prerequisites: MTH 204 and SCI 104)
- SCI 201 Human Anatomy and Physiology I
- SCI 201A Human Anatomy and Physiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 201)
- SCI 103 Fundamentals of Geology
- SCI 103A Fundamentals of Geology Laboratory (1.5 quarter units)
(Prerequisite: SCI 103)
- SCI 202 Human Anatomy and Physiology II
- SCI 202A Human Anatomy and Physiology Laboratory II (1.5 quarter units)
(Prerequisite: SCI 202)
- SCI 203 Introduction to Microbiology

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SCI 203A Introduction to Microbiology Laboratory I (1.5 quarter units)
(Prerequisite: SCI 203)

AREA G: MODERN LANGUAGE

(9 quarter units required)

(In addition to the course work listed below, students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

ASL 120 American Sign Language I
ASL 220 American Sign Language II
(Prerequisite: ASL 120)
ASL 320 American Sign Language III
(Prerequisite: ASL 220)
LAS 100 Spanish I
LAS 200 Spanish II
(Prerequisite: LAS 100)
LAS 300 Spanish III
(Prerequisite: LAS 200)
LAS 101 Spanish for the Native Speaker
(Prerequisite: Native speaking ability and/or recommendation of instructor.)
LAS 201 Spanish for the Native Speaker II
(Prerequisite: LAS 101)

Major Course Requirements

(8 courses, 24 quarter units)

TED 200 Schools: Children and Their Teachers (3 quarter units)
TED 201 Supporting Positive Behavior (3 quarter units)
TED 202 Reading Lab: From Content to Teaching (3 quarter units)
TED 203 Writing Lab: From Content to Teaching (3 quarter units)
TED 204 Science Lab: From Content to Teaching (3 quarter units)
TED 205 Math Lab: From Content to Teaching (3 quarter units)
TED 206 Technology in the Classroom (3 quarter units)
TED 207 Content Assessment Preparation (3 quarter units)

■ BACHELOR OF ARTS

◆ Major in Early Childhood Education

(610-444)

Lead Faculty: John Carta-Falsa • (714) 429-5135 • jcartafa@nu.edu

The Bachelor of Arts with a major in early childhood education degree program is structured according to the national and state requirements for degree programs in early childhood education. The program is based on the competencies and guidelines established by the following:

- National Association for the Education of Young Children (NAEYC)
- Child Development Associates Competency Standards (CDA)
- National Headstart Association (NHSA)
- California Child Development Permit Matrix
- California Pre-Kindergarten Learning Development Guidelines

The program provides a broad-based foundation of normal and challenged child development in the areas of learning, cognition, language, and social/ emotional development. Professional courses are intended to develop knowledge and competence in key areas: child development, curriculum, family and community, assessment, special needs, health and professionalism. Field experiences support and enhance professional development in each of these domains. Students are required to think critically, write clearly, and speak

articulately. The program will prepare students to work in a variety of settings involving young children

Degree Requirements

To receive a Bachelor of Arts degree with a major in early childhood education, students 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. 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 matriculation.

Prerequisites for the Major

(2 courses, 9 quarter units)

PSY 100 Introduction to Psychology
PSY 301 Child and Adolescent Development

Requirements for the Major

(9 courses, 40.5 quarter units)

ECE 310 Child, Family, School and Community
(Prerequisites: PSY 100 and 301)
HED 320 Health, Nutrition and Safety
(Prerequisites: PSY 100 and 301)
ECE 330 Early Cognition
(Prerequisite: PSY 301)
ECE 410 Language Acquisition
(Prerequisite: ECD 330)
ECE 415 Meaningful Curriculum: Creative and Integrative Arts
(Prerequisite: ECD 330)
ECE 420 Nature and Numbers
(Prerequisite: ECD 330)
ECE 430 Play: Early Social-Emotional Development
ECE 440 Observation and Assessment of Young Children
(Prerequisites: PSY 301 and ECD 310)
ECE 450 Seminar/Practicum in Early Childhood Development
(Prerequisite: Student must have successfully completed all core courses with an average grade of "C" (2.0) or better in the core and have approval from his/her faculty mentor.)

Upper-Division Electives Requirements

(6 courses, 27 quarter units)

Approved Electives

ECE 312 Infant and Toddler Care
ECE 314 Creative Experiences with Infants and Toddlers
ECE 490 Guided Study
(1.5-4.5 units)

Students may choose one of the two concentrations listed below to fulfill their upper division elective requirement or a combination of approved elective courses within the concentrations.

▲ Concentration in Early Childhood Administration

(353)

Students must successfully complete the following courses for a concentration in early childhood administration. It is recommended that students take these classes at or near the end of their program after completing the upper division major requirements.)

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Program Requirements

(6 courses, 27 quarter units)

ECE 460	Administering Early Childhood Programs
ECE 462	Volunteer Management and Financial Resources Management (Prerequisite: PSY 460)
ECE 464	Legal and Ethical Issues in Early Childhood (Prerequisite: HED 320)
ECE 466	Planning the Physical Environment for the Young Child
HUB 401	Psychology for Managers (Prerequisites: ENG 100/101 and PSY100)
HUB 401	Conflict Resolution (Prerequisites: ENG 100/101 and PSY100)

▲ Concentration in Teacher Education

(354)

Students must successfully complete the following courses for a concentration in teacher education. It is recommended that students take these classes at or near the end of their program 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 SOE prerequisite courses for the teaching credential program as electives for their BAECE degree. Students can select HED 602, EDX 1201X and EXC 625. 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.

Program Requirements

(6 courses, 27 quarter units)

LIT 430	Children's Literature and Literacy (Prerequisites: Waived for ECD Majors)
HED 602	Introductory Health Education: K-12
EDX 1201X	Computer-Based Technology in the Classroom
EXC 625	Exceptional Children in the Classroom
ENG 350	Fundamentals of Linguistics (Prerequisites: ENG 100/101)
ART 400	Expressive and Integrative Art (Prerequisites: Waived for ECD Majors)

Graduate Degree Programs

■ MASTER OF ARTS IN TEACHING

(710-716)

Program Faculty Advisor: Cynthia J. Schubert • (858) 642-8339 • cschubert@nu.edu
Lead Faculty Advisor: Carl Beyer • (858) 642-8340 • cbeyer@nu.edu

The Master of Arts in Teaching is designed for practicing and educators who want to enhance their teaching skills, broaden their intellectual and professional understanding by interrelating educational theory and practice for the purposes of promoting their lifelong learning efforts as well as sustaining their commitment as instructional leaders in the K-12 settings.

National Board Certification

Lead Faculty Advisor: Romarae Adams • (858) 642-8352 • radams@nu.edu

National University embraces the mission and vision of the National

Board for Professional Teaching Standards and we encourage and support teachers in their efforts to pursue certification as part of their professional journey.

National University's School of Education and National Board Certified Teacher Center provide the following services, opportunities and program enhancements for new, practicing, and retired practitioners.

- Support and Assistance for Candidates and School Districts
- Access to Resources
- Teacher Leader and Administrator Opportunities
- University Credit
- Celebration and Sharing of Accomplishments.

Program Goals

National University's Master of Arts in Teaching degree supports and activates the following goals:

- 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 examining cross-cultural educational issues and relating those to enhancing student learning.
- Teachers know how to teach their subjects by effectively accessing and using research based learning theories, assessment strategies, teaching models, technology and classroom management strategies to educate all learners.

Program Learning Outcomes

By the end of the MAT program, students are expected to be able to:

- Reflect on their own teaching practice;
- Build professional relationships/networks;
- Build learning communities within their school/classroom;
- Analyze cross-cultural educational issues;
- Identify, describe, and apply theories of curriculum as they relate to State approved standards;
- Implement standards-based assessment in the classroom, school and district;
- Use technology for research and teaching;
- Use multiple teaching models and assessment strategies;
- Implement assess and evaluate standards-based curriculum;
- Conduct action research in their teaching.

Degree Requirements

(10 courses, 45 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.

Program Core Requirements

(6 courses, 27 quarter units)

EDT 612	Technology as a Learning Tool for Teaching
MAT 641	Cultural Democracy: Contemporary, Local and Global Issues

- MAT 642 Program Design: Curriculum Theory, Design and Assessment
- MAT 643 Models of Teaching, Theories, Applications and Practice
- MAT 644 Foundations and Principles of Curriculum
- MAT 640 Applications of Research for the Art of Teaching (To be taken as the last course in the MAT program except in the Reading Specialization)
- or
- NBC 639 Capstone Project: The Accomplished Teacher-Leadership Portfolio (NBCT)*
(Only for students in the National Board Certified Teacher Leadership Specialization)

▲ Best Practices Specialization

(744)
(4 courses, 18 quarter units)

- MAT 670 The Theory of Research-Based Best Practice Instruction
- MAT 671 Applied Best Practice Strategies in Classroom Instruction
- MAT 672 Integrating Multimedia-Interactive Technology in Best Practice Instruction
- MAT 673 Differentiated Instruction and Target Teaching

▲ Reading Specialization and Certificate

(740)
Lead Faculty Advisor: Marilyn Moore • (858)642-8320 • mmoore@nu.edu
(4 courses, 18 quarter units)

- MAT 645 Developing Fluency in Reading
- MAT 646 Comprehension Strategies and Procedures
- MAT 647A Field Based Language Arts Assessment and Instruction I
(Prerequisites: MAT 645, MAT 646)
- MAT 647B Field Based Language Arts Assessment and Instruction II
(Prerequisites: MAT 645, MAT 646, MAT 647A)

Completion of the reading specialization qualifies the student for a State of California Reading Certificate. Upon successful completion, the student should contact their advisor for the reading certification application procedures.

▲ Teaching and Learning Specialization

(746)
(4 courses, 18 quarter units)

Requirements include a combination of any four courses from the described specialization areas and/or elective courses.

- TED 665 Cognition, Language and Culture
- TED 666 The Cultural Foundations of Linguistics
- TED 667 Diversity and Change: A Critical Pedagogy
- TED 668 Survey of Children's Multicultural Literature

▲ Special Education Specialization

(747)
(5 courses, 18 quarter units)

This area of specialization was primarily designed for Level II education Specialists majors. Other interested students should contact the Chair of Special Education

- EXC 655A Professional Induction Seminar (3 quarter units)
- EXC 656 Best Practices for Special Needs Students
- EXC 657 Community Resources and Transition
- EXC 658 Advanced Specialization in Mild/Moderate Disabilities
- or

- EXC 659 Advanced Specialization in Moderate/Severe Disabilities
- EXC 655B Exit Seminar (1.5 quarter units)

▲ National Board Certified Teacher Leadership Specialization and Certificate

(897)
Lead Faculty Advisor: Romarae Adams • (858)642-8352 • radams@nu.edu

The five course sequence is designed to meet the needs of two groups of teachers: (NBC 639 is the fifth course and is taken in the Field of Study.)

- For those who want to improve their teaching and prepare themselves to achieve National Board Certification sometime during their career
- For those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to submission deadlines

Required Courses
(4 courses, 18 quarter units)

- NBC 680 Measuring and Informing Quality Teaching, Learning and Leadership
- NBC 681 Membership in Learning Communities
- NBC 682 Evidence of Student Learning — Based on Videotapes
- NBC 683 Evidence of Student Learning — Student Work Samples

▲ Early Childhood Special Education Specialization

(898)

This specialization is designed for individuals who have completed Level II coursework in special education and hold a Professional Specialist Credential, Mild/Moderate or Moderate/Severe disabilities. Completion of the specialization extends teaching authorization from birth through 22.

Prerequisites

Completion of Level II coursework in either Mild/Moderate, Moderate/Severe Education Specialist credential, Learning, Handicapped or Severely Handicapped credentials and experience in early childhood development with a concentration in infants, toddlers, and preschoolers. Professionals in other fields should schedule an appointment with lead regional faculty in special education for admission.

Program Requirements
(6 courses, 27 quarter units)

- EXC 603 Typical and Atypical Development in Young Children
- EXC 605 Assessment in Young Children
- EXC 606 Family Systems & Partnership
- EXC 607 IFSP Process: Collaboration & Consultation
- EXC 608 Interventions for Young Children with Disabilities
- EXC 609 Field Experience

Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to complete and submit to the Commission on Teacher Credentialing application form for the certificate. The University issues an official C-19 letter of completion.

School of Education

■ MASTER OF EDUCATION IN CROSS-CULTURAL TEACHING WITH A SINGLE OR MULTIPLE SUBJECT CREDENTIAL WITH BCLAD OPTION AND INTERNSHIP OPTION

(750-710-362/363)

(753-710-362/363)-Internship

(20 courses, 88.5 quarter units TED)

(21 courses, 93 quarter units BCLAD)

The Master of Education in Cross-Cultural Teaching is designed for students who are committed to being instructional leaders in the K-12 setting. Courses for this degree meet the California Commission on Teacher Credentialing requirements for a preliminary credential as well as meet requirements for a master's degree that interrelates theory and practice and promotes lifelong learning. The program, which has an internship option, is intended for students who want to obtain a preliminary credential and master's degree at the same time. Students seeking to complete only a master's degree should enroll in the Master of Arts in Teaching. Students who are pursuing a credential and who want to make a program change to the Master of Education in Cross-Cultural Teaching may do so under these conditions:

- The student must make the program change before beginning student teaching,
- The student must pass the subject matter competency exam before enrolling in student teaching and bilingual emphasis students must pass language proficiency examinations.

Note: Students must have access to Microsoft Office on either a PC or Mac platform.

Degree Requirements

To receive a Master of Education in Cross-Cultural Teaching, students must complete at least 57 quarter units of graduate work, 48 of which must be taken in residence at National University. Students enrolled in the joint degree-credential program will not be awarded the master's degree until they complete all graduate and credential coursework, including student teaching.

Core Requirements

(4 courses, 18 quarter units TED)

(5 courses, 22.5 quarter units BCLAD)

Recommended Sequence

TED 615	Foundations of Education
TED 605	The Diverse Classroom
TED 611	Educational Psychology
BTE 612	History and Culture of Latinos (taught in language of emphasis) (BCLAD students only)
MAT 640	Applications of Research for the Art of Teaching (must be taken as the last course in the program)

Methods Courses

(4 courses, 18 quarter units)

(Prerequisites: TED 615, TED 605, TED 611, and BTE 612 for BCLAD students)

Multiple Subject

(363/365)

TED 621A	Language Development Methods for the Elementary School <i>(Prerequisites: TED 615 or BTE 612 for BCLAD students only)</i>
TED/BTE 621B	Reading and Language Arts Methods for the Elementary School

(Prerequisites: TED 615 and TED 621A)

TED/BTE 622A

Curriculum and Instruction I: History, Social Studies, Physical Education and Visual and Performing Arts
(Prerequisites: TED 615 and TED 621A)

TED/BTE 622B

Curriculum and Instruction II: Mathematics and Science
(Prerequisites: TED 615 and TED 621A)

or

Single Subject

(362/364)

TED 623 Language Development Methods for Secondary and Middle Schools
(Prerequisite: TED 615)

TED/BTE 625A Curriculum Development for Secondary and Middle Schools
(Prerequisites: TED 615 and TED 623)

TED/BTE 625B Instruction and Classroom Management for Secondary and Middle Schools
(Prerequisites: TED 615 and TED 625A or BTE 625A and TED 623)

TED/BTE 624 Content Area Literacy for the Secondary and Middle Schools
(Prerequisites: TED 615 and TED 623)

Co-requisites

(3 courses, 13.5 quarter units)

These courses can be taken at any time in their program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom

EDT 608 Computer-Based Technology in the Classroom

Student Teaching

The student teaching courses are required for the preliminary credential, but do not grant graduate credit, except for TED 629 or TED 629I, which carries 3.0 quarter units of graduate credit.)

(Students in the Internship program do not take the four student teaching modules. Interns that are not funded by Alt. Cert. grant, will register for TED628 A-D, the full year of field experience required for interns.)

Note: Students must have met subject matter competency prior to student teaching. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a subject matter equivalency letter from a regionally accredited CCTC-approved program verifying completion of the appropriate subject matter program. The California Commission on Teacher Credentialing (CCTC) requires that all multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET). (CCTC coded correspondence 03-0025)

Student Teaching Requirements

(5 courses, 21 quarter units)

(1 course, 3 quarter units)-Internship only

(Prerequisites: TED 615, TED 605, TED 611 and TED 621A, TED 621B, TED 622A, TED 622B; or TED 623, TED 624, TED 625A, TED 625B)

TED 629 Student Teaching Seminar*
(3.0 quarter units)

or

TED 629 I Intern Student Teaching Seminar
(3.0 quarter units)-(Intern students only)

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BTE/TED 630A	Beginning Student Teaching
BTE/TED 630B	Student Teaching
BTE/TED 630C	Student Teaching
BTE/TED 630D	Student Teaching

*TED 629 Student Teaching Seminar must be taken concurrently with TED 630A-D or BTE 630A-D

An electronic portfolio is required for the assessment of all teacher credential 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 TPE Domains. A fee of \$45.00 will be charged to students for the portfolio.

The portfolio must be reviewed and approved by an NU faculty member prior to exiting the credential program.

Note: Courses TED 615, TED 605, TED 611, BTE 612, TED 621A, BTE 621B, TED 621B, TED 622A, BTE 622A, TED 622B, BTE 622B, TED 623, TED 624, BTE 624, TED 625A, BTE 625A, TED 625B, BTE 625B all require four hours of fieldwork in K-12 schools.

Note: Candidates must obtain a Certificate of Clearance from the California Commission on Teacher Credentialing prior to beginning fieldwork in K-12 schools.

Candidates must meet all State of California requirements for the multiple and single subject credential to be recommended to the Commission on Teacher Credentialing. (See Credential Program Requirements)

Cross-Cultural Emphasis

(4 courses, 18 quarter units)

TED 665	Cognition, Language and Culture
TED 666	The Cultural Foundation of Linguistics
TED 667	Diversity and Change: A Critical Pedagogy
TED 668	Survey of Children's Multicultural Literature

■ MASTER OF EDUCATION (M.ED.) IN BEST PRACTICES WITH A SINGLE OR MULTIPLE SUBJECT CREDENTIAL WITH BCLAD OPTION AND INTERNSHIP OPTION

(750-722-362/363)

(753-722-362/363)-Internship

(20 courses, 88.5 quarter units TED)

(21 courses, 93 quarter units BCLAD)

The Master of Education in Best Practices is designed for students who are committed to completing the requirements for a credential in Multiple Subject or Single Subject in the State of California and specialize in Best Practices. Courses for this degree meet the California Commission on Teacher Credentialing requirements for a preliminary credential as well as meet requirements for a master's degree that interrelate theory and practice to drive assessment and reflection as bases for sound instructional decision making. The program, which has an internship option, is intended for students who want to obtain a preliminary credential and master's degree at the same time. Students seeking to complete only a master's degree should enroll in the Master of Arts in Teaching. Students who are pursuing a credential and who want to make a program change to the M.Ed. in Best Practices may do so under these conditions:

The student must make the program change before beginning student teaching.

The student must pass the subject matter competency exam before enrolling in student teaching.

Degree Requirements

To receive a Master of Education in Best Practices, students must complete at least 57 quarter units of graduate work, 48 of which must be taken in residence at National University. Students enrolled in the joint degree-credential program will not be awarded the master's degree until they complete all graduate and credential coursework, including student teaching.

Core Requirements

(4 courses, 18 quarter units TED)

(5 courses, 22.5 quarter units BCLAD)

Recommended Sequence

TED 615	Foundations of Education
TED 605	The Diverse Classroom
TED 611	Educational Psychology
BTE 612	History and Culture of Latinos (taught in language of emphasis) (BCLAD students only)
MAT 640	Applications of Research for the Art of Teaching (must be taken as the last course in the program)

Methods Courses

(4 courses, 18 quarter units)

(Prerequisites: HED 602, EXC 625, EDT 608, TED 615, TED 605, TED 611, and BTE 612 for BCLAD students)

Multiple Subject

(363/365)

TED 621A	Language Development Methods for the Elementary School <i>(Prerequisites: TED 615 or BTE 612 for BCLAD students only)</i>
TED/BTE 621B	Reading and Language Arts Methods for the Elementary School <i>(Prerequisites: TED 615 and TED 621A)</i>
TED/BTE 622A	Curriculum and Instruction I: History, Social Studies, Physical Education and Visual and Performing Arts <i>(Prerequisites: TED 615 and TED 621A)</i>
TED/BTE 622B	Curriculum and Instruction II: Mathematics and Science <i>(Prerequisites: TED 615 and TED 621A)</i>

or

Single Subject

(362/364)

TED 623	Language Development Methods for Secondary and Middle Schools <i>(Prerequisite: TED 615)</i>
TED/BTE 625A	Curriculum Development for Secondary and Middle Schools <i>(Prerequisites: TED 615 and TED 623)</i>
TED/BTE 625B	Instruction and Classroom Management for Secondary and Middle Schools <i>(Prerequisites: TED 615 and TED 625A or BTE 625A and TED 623)</i>
TED/BTE 624	Content Area Literacy for the Secondary and Middle Schools <i>(Prerequisites: TED 615 and TED 623)</i>

Co-requisites

(3 courses, 13.5 quarter units)

These courses can be taken at any time in their program but are

School of Education

recommended prior to student teaching. These courses are required prior to applying for the credential.

HED 602 Health Education Across the Curriculum
EXC 625 Exceptional Children in the Classroom
EDT 608 Computer-Based Technology in the Classroom

Student Teaching

The student teaching courses are required for the preliminary credential, but do not grant graduate credit, except for TED 629 or TED 629I, which carries 3.0 quarter units of graduate credit.)

(Students in the Internship program do not take the four student teaching modules. Interns that are not funded by Alt. Cert. grant, will register for TED628 A-D, the full year of field experience required for interns.)

Note: Students must have met subject matter competency prior to student teaching. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a subject matter equivalency letter from a regionally accredited CCTC-approved program verifying completion of the appropriate subject matter program. The California Commission on Teacher Credentialing (CCTC) requires that all multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET). (CCTC coded correspondence 03-0025)

Student Teaching Requirements

(5 courses, 21 quarter units)

(1 course, 3 quarter units)-Internship only

(Prerequisites: TED 615, TED 605, TED 611 and TED 621A, TED 621B, TED 622A, TED 622B; or TED 623, TED 624, TED 625A, TED 625B)

TED 629 Student Teaching Seminar*
(3.0 quarter units)

or

TED 629 I Intern Student Teaching Seminar
(3.0 quarter units)-(Intern students only)

BTE/TED 630A Beginning Student Teaching
BTE/TED 630B Student Teaching
BTE/TED 630C Student Teaching
BTE/TED 630D Student Teaching

*TED 629 Student Teaching Seminar must be taken concurrently with TED 630A-D or BTE 630A-D

An electronic portfolio is required for the assessment of all teacher credential 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 TPE Domains. A fee of \$45.00 will be charged to students for the portfolio.

The portfolio must be reviewed and approved by an NU faculty member prior to exiting the credential program.

Note: Courses TED 615, TED 605, TED 611, BTE 612, TED 621A, BTE 621B, TED 621B, TED 622A, BTE 622A, TED 622B, BTE 622B, TED 623, TED 624, BTE 624, TED 625A, BTE 625A, TED 625B, BTE 625B all require four hours of fieldwork in K-12 schools.

Note: Candidates must obtain a Certificate of Clearance from the California Commission on Teacher Credentialing prior to beginning fieldwork in K-12 schools.

Candidates must meet all State of California requirements for the multiple and single subject credential to be recommended to the

Commission on Teacher Credentialing. (See Credential Program Requirements)

Accelerated Credential Program

Students may be eligible to apply to accelerate their credential program by taking designated courses during student teaching. Eligible candidates must meet minimum qualifications for accelerated studies and will be restricted to the provisions outlined in the Policies and Procedures section. Students approved to accelerate their studies will be limited to register for two courses concurrently while student teaching.

Best Practices Emphasis

(4 courses, 18 quarter units)

MAT 670 The Theory of Research-Based Best Practice Instruction
MAT 671 Applied Best Practice Strategies in Classroom Instruction
MAT 672 Integrating Multimedia-Interactive Technology in Best Practice Instruction
MAT 673 Differentiated Instruction and Target Teaching

■ MASTER OF EDUCATION IN TEACHING

(CURRENTLY OFFERED IN OFFSITE COHORTS ONLY)

(750-719-744)

Program Faculty Advisor: Lynne Anderson • (858) 642-8330 • landerso@nu.edu

The Master of Education degree is designed for practicing teachers who are currently working in a school district to complete their Induction program. National University is able to partner with districts to combine a teacher's work in the Induction program with the university requirements for a master's degree. This program works to combine the work completed in the Preliminary teaching credential, the district Induction program, the Professional Clear SB2042 credential requirements, as well as a particular focus of preparing teachers for National Board Certification.

Program Requirements

(13 courses, 58.5 quarter units)

There are four different components of coursework:

Component 1—Preliminary Credential Coursework

(2 courses, 9 quarter units)

A candidate may use two of their methodology courses completed towards their Preliminary Multiple or Single Subject teaching credential, or complete the two methodology courses that would be required if the candidate wanted to pursue another type of credential (multiple or single subject). Candidates who have taken equivalent courses at another university should submit a course equivalency request with their Admissions Advisor or Credential Advisor. These courses must be graduate courses, and must not have been counted towards another master's degree.

Multiple Subject (choose two)

BTE/TED 621B Reading and Language Arts Methods for the Elementary School

BTE/TED 622A Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts

BTE/TED 622B Curriculum and Instruction II: Mathematics and Science

or

Single Subject (choose two)

BTE/TED 625A Curriculum and Development for Secondary and Middle Schools

BTE/TED 625B Instruction and Classroom Management for Secondary and Middle Schools

BTE/TED 624 Reading in the Content Areas in Secondary and

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Middle-Level Classrooms

Component 2–District Induction Program

(2 courses, 9 quarter units)

MTE 600	Demonstrating Effective Teaching and Learning I: Assessment and Portfolio
MTE 601	Demonstrating Effective Teaching and Learning II: Assessment and Portfolio

Component 3–SB2042 Professional Clear Coursework

(4 courses, 18 quarter units)

National University partnering with a district induction program may provide the following courses towards a candidate's SB2042 Professional Clear credential.

EXC 604	Exceptionality and Diversity in the Classroom
HED 620	Comprehensive School Health Programs
EDT 655	Issues and Trends in Educational Technology
MAT 650	Teaching English Language Learners

Once the candidate has completed the district Induction program and the courses from Component 3, they may apply for their Professional Clear teaching credential through their employing agency.

Component 4–Specialization in Best Practices

(744)

(5 courses, 22.5 quarter units)

MAT 670	The Theory of Research-Based Best Practice Instruction
MAT 671	Applied Best Practice Strategies in Classroom Instruction
MAT 672	Integrating Multimedia-Interactive Technology in Best Practice Instruction
MAT 673	Differentiated Instruction and Target Teaching
MAT 640	Applications of Research for the Art of Teaching

■ MASTER OF SCIENCE IN EDUCATIONAL ADMINISTRATION

(720-700)

Regional Lead Faculty Advisors:

Costa Mesa: Robert Infelise • (714) 429-5148 • sinfelise@nu.edu

Fresno: Daniel Cunniff • (559) 256-4930 • dcunniff@nu.edu

Los Angeles: Robert Scharf • (310) 258-6725 • rscharf@nu.edu

Ontario: Ron Cooper • (909) 806-3313 • rcooper@nu.edu

Redding: Charles Menoher • (530) 226-4020 • cmenoher@nu.edu

Sacramento: Robert Kibby • (906) 855-4209 • rkibby@nu.edu

San Bernardino: Ron Cooper • (909) 806-3313 • rcooper@nu.edu

San Diego: Cheryl Cox • (858) 642-8351 • ccox@nu.edu

San Diego: Gary Hoban • (858) 642-8144 • ghoban@nu.edu

San Jose: Clifford Tyler • (408) 236-1135 • ctyler@nu.edu

Stockton: Robert Kibby • (916) 855-4209 • rkibby@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 credential option for those pursuing a career in the nonpublic education sector.

Master's Degree/Tier I Learning Outcomes/Program Goals

Upon completion of the program, the student will have an:

- Understand organizational development, the benefits of mobilizing human and fiscal resources, restructuring, creating a school environment that identifies institutional needs for diversity and the administrative tasks of the principal and vice principal
- Build consensus among stake-holders, evaluate, analyze and develop new school programs and paradigms from the politics

- of school organizations for the improvement of instruction.
- Understand landmark court cases, legislation, and federal and state regulations governing student rights, due process, delivery of instruction, and general operation of school districts.
- Understand various social and political forces that impact effective school community relations with an emphasis on diversity.
- Understand school district procedures for curriculum implementation and instructional improvement, based on assessment and appropriateness of multi-cultural classroom environments.
- Understanding financial policies and practices used in schools and districts, which emphasize federal, state and local revenue sources as well as district and school budgeting and financial management procedures.
- Examine the total operation of personnel and school management functions and staff development, which includes personnel management and administration, personnel relations, personnel laws, and collective bargaining.
- Make better decisions regarding the management of information technology within the organization, and how information and educational technology can be used to improve instructional programs and to drive the professional development of the staff.
- Apply his or her acquired understanding and knowledge to a field experience in practical and real-world school settings, which is documented in a portfolio supervised by a mentor in partnership with the University.

Engage in the examination of philosophy of educational leadership, including a study of ethics through reflective reading of great educational thinkers/leaders.

Degree Requirements

(13 courses, 58.5 quarter units)

To receive a Master of Science in Educational Administration, 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 if the units were not used in earning another advanced degree.

Core Requirements

(13 courses, 58.5 quarter units)

- | | |
|----------|--|
| EDA 617 | Historical and Philosophical Foundations of Leadership (recommended to be completed as one of the first three courses in the program) |
| EDA 623 | Curriculum Alignment, Assessment, and Accountability * |
| EDA 624 | Supervision and Evaluation of Instruction * |
| ILD 680 | Research in Education |
| EDA 625 | Technology and Data Analysis for Effective Instruction * |
| EDA614 | Educational Leadership in Schools Today |
| EDA 626 | Human Resources in Diverse School Communities * |
| EDA 618 | Legal and Ethical foundations of Education * |
| EDA 619 | Financial Leadership and Management * |
| EDA 620B | Field Experience in Educational Administration* (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 the course being scheduled. Students must complete three courses in the credential sequence – EDA 623, EDA 624, EDA 625, EDA 614, EDA 626, EDA 618, EDA 619 – before taking this course. This course must be completed in residence.) |
- or
- | | |
|-----------|---|
| EDA 620 C | Field Experience (non-credential). This course must be completed in residence. |
| EDA 628 | Seminar in Educational Leadership and Management* |

School of Education

EDA 650 Ethics and Leadership in the Educational Setting
EDA 694 Thesis
(Prerequisite: ILD 680)

or

EDA 637 Action Research
(Prerequisite: ILD 680)

* Required for the Preliminary Administrative Services Certificate/Credential. This credential is required for most administrative positions in California, such as school principals, assistant principals, educational directors and assistant superintendents.

■ MASTER OF SCIENCE IN EDUCATIONAL COUNSELING

(720-701)

Program Chair: Susan Eldred (858) 642-8372 seldred@nu.edu

Program Lead Faculty Advisors:

San Diego: Lisa R. Spencer • (858) 642-8379 • lspencer@nu.edu

San Diego: James Ruby • (858) 642-8320 • jruby@nu.edu

Costa: Mesa Harvey Hoyo • (714) 429-5143 • [hhoyo@nu.edu](mailto:hoyo@nu.edu)

Los Angeles: Joseph White • (310) 258-6621 • obraman@nu.edu

Sacramento: Joe Cunha • (906) 855-4303 • jcunha@nu.edu

San Diego Internship Coordinator: Joseph Naradzay • (858) 541-7762 • jnaradzay@nu.edu

The Department of Pupil Personnel Services-School Counseling offers a graduate degree leading to the Master of Science in Educational Counseling. This program is aligned with national standards and prepares students for the position of school counselor. Graduates of this program generally seek employment as school counselors in K-12 school districts.

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 enrolled in the degree and credential program are not awarded the master's degree until they have completed all coursework including practicum and internship. Course equivalence cannot be granted for life experiences.

Admission Requirements

- Possess an appropriate master's degree in Educational Counseling, Social Work or Psychology if entering the credential ONLY program. All students need to have their previous coursework evaluated by the PPS lead faculty advisor.
- Attend CED 604, (Orientation and Field Experience in School Counseling). Attendance to all sessions are mandatory and completion of required assignments are necessary.
- Receive a credential packet and complete a "candidate statement" that is reviewed and signed by faculty advisor for admission to School of Education.
- Return the credential packet to the credential advisor by the end of the course, otherwise students will receive an "I" for the course.
- Complete all program prerequisites.
- See a credential advisor for specific information regarding any of these requirements. Students are not eligible for financial aid until matriculation is complete.

Program Advisement

Students who are absent for a period of 12 months or more must re-enroll and re-matriculate under a new catalog. All coursework must be completed within seven years with a 3.0 GPA.

All PPSC students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor upon admission into the program, upon completion of the program and throughout

the program as needed.

Students must maintain a 3.0 GPA. Students who receive a grade of a "C" or lower in more than two courses will be evaluated by the faculty and will be required to repeat the coursework at their own expense before being allowed to continue in the program. A grade lower than a B- is not accepted in CED 610, CED 611, CED 603, and CED 601.

Students will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 604 and prerequisites can be taken prior to admission.

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school age children, preferably in a school or other institutional setting.

Before being formally admitted into this program, students must complete the prerequisite coursework or equivalent.

Program Learning Outcomes

Students who successfully complete the program will be able to:

- Identify major theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and their impact on school behavior and learning.
- Identify and effectively address relevant social and diversity concerns of individuals and groups of students.
- Demonstrate knowledge and skills to advocate for cultural differences.
- Develop and coordinate prevention, early intervention, and remedial programs and services, appropriate to the diverse needs of the community, school, and district.
- Conduct assessments and use data to plan, develop, and implement guidance programs.
- Develop and present classroom and large group guidance activities through which pupils develop competency in personal/social, academic and career domains.
- Apply individual counseling methods to help students cope with personal and interpersonal problems.
- Demonstrate knowledge in cross-cultural counseling and recognize the nature of cultural, social, economic, ethnic, linguistic, gender, and religious and other differences as they apply to the counseling process.
- Develop a repertoire of group counseling techniques that can be implemented to help students cope with personal and interpersonal problems.
- Apply a repertoire of skills to effectively counsel individuals regardless of ethnicity, gender, socio-economic level, cultural background, life style, native language and/or sexual orientation.
- Effectively form positive consultative and collaborative relationships with school staff, parents, and community agencies in support of student academic, career, and personal/social success.
- Effectively plan and implement crisis interventions strategies.
- Develop and implement proactive career development programs.
- Counsel a student on postsecondary requirements.
- Demonstrate knowledge of legal mandates affecting school counselors and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Demonstrate a basic understanding of basic statistics and test construction.
- Understand the Student Assistance Team process and major laws affecting assessment, including IDEA, PL 94-142 and Section 504 of the Rehabilitation Act of 1973.
- Understand the purpose of tests in the following areas: Group

School of Education

and individual achievement and intelligence, learning disabilities, speech and language, adaptive behavior, projective or emotional, and vocational tests.

- Implement an action research project to demonstrate accountability as a school counselor.
- Understand and utilize computer technology relevant to the tasks of school counselors.

Degree Requirements

(22 courses, 94.5 quarter units)

To receive a Master of Science in Educational Counseling, a total of three graduate courses (13.5 quarter units) may be transferred 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 must complete all coursework with a GPA of 3.0 or better within seven years.

Advancement to Candidacy

After admission as a degree and credential seeking student, a student must also advance to candidacy. To qualify for candidacy, a student must:

- Complete prerequisite coursework or equivalent
- Complete CED 604, and four other program requirements.
- Candidacy review is one of several evaluative steps to help ensure that program objectives are met and that student outcomes are attained.

Program Prerequisites

(3 courses, 13.5 quarter units)

MTH 210	Introduction to Probability and Statistics
PSY 301	Child and Adolescent Development
PSY 100	Introduction to Psychology/Counseling

Program Requirements

(15 courses, 64.5 quarter units)

CED 604	Orientation and Field Experience in School Counseling
TED 611	Educational Psychology
CED 600	Advanced Child and Adolescent Development
CED 602	Contemporary Issues in School Counseling
CED 606	Development and Evaluation of School Counseling Programs and Services
CED 610	Advanced Counseling Theories and Techniques
CED 611	Group Counseling (Prerequisite: CED 610)
CED 603	Multicultural Counseling (Prerequisite: CED 611)
CED 601	Consultation in the Schools (Prerequisite: CED 603)
CED 612	Career and Academic Counseling
CED 613	Psycho-educational Assessment
CED 614	Legal and Ethical Practices for School Counselors
PED 676	Introduction to Applied Behavior Analysis
ILD 680	Research in Education

Choose either:

CED 694	Thesis (Prerequisite: ILD 680)
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or

CED 637	School Counseling Action Research (Prerequisite: ILD 680, taken concurrently with internship)
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Required for all non-teacher credentials PPS candidates (Choose one)

TED 622A	Curriculum and Instruction I
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or

TED 622B	Curriculum and Instruction II
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Practicum

Students are required to complete 100 hours of practicum prior to starting their internship. Students must complete the practicum experience under the supervision of a credentialed and experienced (two years) school counselor. National University school counseling students will complete the 100 hours during school-based practicum experiences that are imbedded within all CED courses. Student performance will be evaluated by course instructor and a school site school counselor through completion of course requirements.

Internship Prerequisites

Before students can begin internship, they must:

- Provide proof of Certificate of Clearance
- Provide verification of a TB Clearance
- Complete prerequisite coursework, 10 CED courses (including CED 610, CED 611, CED 603, CED 601)
- Complete 100 hours of logged, approved practicum
- Submit an Internship application to the Internship Coordinator/Lead faculty and be assigned a University Supervisor.
- Pass CBEST
- Internships are then scheduled by the Placement Specialist.

Students should refer to the *PPS Graduate Handbook for School Counseling* for specific information about the practicum and internship requirements.

Internship

(4 courses, 16.5 quarter units)

CED 620	Best Practices Seminar in School Counseling (Must be taken concurrently with internship)
CED 616	School Counseling Internship Part I
CED 617	School Counseling Internship Part II
CED 618	School Counseling Internship Part III
****	Exit Interview with University Supervisor

Internship Requirements for Master's Degree Only

(4 courses, 16.5 quarter units)

For students that are only pursuing the MS degree in Educational Counseling (without the PPSC credential).

CED 619	School Counseling Internship Experience
CED 620	Best Practices Seminar in School Counseling (3 quarter units)

and any two of the following courses. *Other electives may be chosen with approval from lead faculty.*

EDA 615A	School-Community Relations in a Diverse Society
TED 605	The Diverse Classroom
EDT 660	Multimedia and Interactive Technologies

Exit Requirements

In order to receive a Master's degree and PPSC credential, students must complete courses within seven years and do the following:

- Successful completion of coursework, portfolio, practicum and internship.
- Successful completion of thesis or action research project.
- Successful completion of the ETS National Praxis examination in School Counseling (passage score is 570).
- Submit written evaluations of performance in internship experiences by Site Supervisor to University Supervisor.
- Schedule and pass an Exit interview with faculty advisor and University Supervisor.
- Complete online Program Evaluation, form-School Counseling.
- Schedule an exit appointment with credential advisor for final clearance and credential documents.
- Have a zero account balance.

School of Education

■ MASTER OF SCIENCE IN SCHOOL PSYCHOLOGY

(720-709)

Program Chair: Susan Eldred • (858) 642-8372 • seldred@nu.edu

Program Lead Faculty Advisors:

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Sacramento: Joe Cunha • (906) 855-4303 • jcunha@nu.edu

Internship Coordinator: Joseph Naradzay • (858) 541-7762 • jaradzay@nu.edu

The Department of Pupil Personnel Services-School Psychology offers a graduate degree leading to the Master of Science in School Psychology. This program is aligned with national standards and prepares students for the position of school psychologist. Graduates of this program generally seek employment as a school psychologist in K-12 school districts and must hold a PPSP credential for public school employment. 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 enrolled in the degree and credential program are not awarded the master's degree until they have completed all coursework including practicum and internship. Course equivalence cannot be granted for life experiences.

Admission Requirements

- Complete all program prerequisites
- Possess an appropriate master's degree in Educational Counseling or Psychology if entering the credential ONLY program. All students need to have their previous work evaluated by the PPS lead faculty advisor.
- Attend PED 604, (Orientation and Field Experience in School Psychology).
- Attendance to all sessions and completion of all required assignments is mandatory.
- Receive a credential packet and complete a "candidate statement" that is reviewed and signed by the faculty advisor for admission to the School of Education.
- Return the credential packet to the credential advisor by the end of the course, otherwise students will receive an "I" for the course.

Program Advisement

All PPSP students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor at the following times: (1) upon admission into the program, (2) at several designated checkpoints, (3) before starting their internship, (4) after completion of coursework and (5) at the completion of internship hours. All coursework must be completed within seven years with a 3.0 GPA. Students who are absent for a period of 12 months or more must re-enroll and re-matriculate under a new catalog.

Students must maintain a 3.0 GPA. Students who receive a grade of a "C" in two or more courses will be evaluated by the faculty and will be required to repeat the coursework at their own expense before being allowed to continue in the program. A grade lower than B- is not accepted in CED 600, PED 665, PED 680 and PED 667.

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.

Program Learning Outcomes

A student who has successfully completed this program:

- Demonstrates adept/advanced skills in all aspects of psycho-

educational assessment; keeps current with technology in the field; presents information and teaches others new assessment techniques; becomes expert at aspects of various disabilities/ learning problems of children and teaches others ways to evaluate

- Demonstrates outstanding leadership skills; well-versed in communicating results and information to others; demonstrates and applies consultation/collaboration techniques and models, and teaches those to others
- Independently researches cutting edge technologies related to learning, and learning problems; fully aware of current theories and is adept at instructing others; presents information on advances in the field; is completely competent in practice.
- Demonstrates full implementation of school-wide programs for social/behavioral needs of children; keeps up to date on emerging interventions and techniques; provides in-service training and expertise in the area of social and behavioral interventions
- Demonstrates advanced training and competence in working with individuals with diverse backgrounds; teaches other techniques and concerns for working with individuals of specific backgrounds.
- Demonstrates expertise in school systems knowledge and practice; works at both local and district level in programming and planning for effective schools; is knowledgeable about cutting edge technologies and programs for effective schools and teaches that material to others
- Demonstrates expertise in crisis prevention and intervention; consults with others in developing and implementing programs; demonstrates extensive knowledge in specific health related disorders and school-related safety issues; provides education and training in working with specific student populations
- Demonstrates expertise in collaboration skills; consults with others in developing programs and obtaining resources; acts as a resource to the school and community
- Demonstrates expert knowledge and ability in research; consults with others in developing and evaluating intervention or research plans; continues with independent research; produces published, or publishable, material
- Demonstrates in-depth knowledge of legal issues and shows the highest ethical standards in practice; educates others in developing ethical decision-based models for practice
- Demonstrates in-depth knowledge and understanding of technologies related to the field; can instruct others in the uses available; and can assess and make program or system-wide decisions for technology use.

Degree Requirements

(30 courses, 130.5 quarter units)

To receive a Master of Science in School Psychology, A total of three graduate courses (13.5 quarter units) may be transferred 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.

Advancement to Candidacy

After admission as a degree and credential seeking student, a student must advance to candidacy. To qualify for candidacy, a student must:

- Complete prerequisite coursework or equivalent
- Complete PED 604, next four graduate PED courses successfully.

Candidacy review is one of several evaluative steps to help ensure that program objectives are met and that student outcomes are attained.

School of Education

Program Prerequisites

(4 courses, 18 quarter units)

MTH 210	Introduction to Probability and Statistics
PSY 430	Abnormal Psychology/Psychopathology
PSY 301	Child and Adolescent Development
EXC 625	Exceptional Children in the Classroom

Note: Only PED 604 and prerequisites can be taken prior to admission.

Program Requirements

(21 courses, 91.5 quarter units)

PED 604	Orientation and Field Experience in School Psychology (1.5 quarter units)
CED 600	Advanced Child/Adolescent Development
PED 665	Tests and Measurements
PED 680	Roles, Issues and Ethics in School Psychology
PED 666	Graduate Seminar in Human Neuropsychology
PED 667	Graduate Seminar in Child/Adolescent Psychopathology
CED 610	Advanced Counseling Theories and Techniques (Prerequisite: CED 600)
CED 601	Consultation in the Schools
PSY 652	Psychopharmacology
PED 683	Program Evaluation
PED 670	Graduate Seminar in Social Psychology
PED 671	Assessment of Cognitive Abilities (Prerequisites: PED 665, PED 680)
PED 672	Advanced Psycho-educational Assessment (Prerequisite: PED 671)
PED 673	Emotional/Behavioral Assessment of Children and Adolescents (Prerequisite: PED 672)
PED 674	Preschool/Low Incidence Assessment (Prerequisite: PED 673)
PED 675	Alternative Assessment for Multicultural Populations (Prerequisite: PED 674)
PED 676	Introduction to Applied Behavior Analysis
PED 677	Graduate Seminar in Curriculum Assessment and Interventions
PED 678	Practicum in School Psychology (Prerequisites: all assessment courses)
ILD 680	Research in Education
Choose either:	
PED 694	Thesis (Prerequisite: ILD 680)
<i>or</i>	
PED 637	School Psychology Action Research (Prerequisite: ILD 680)

Practicum (450 hours)

- Students should refer to the current PPS Graduate Handbook for School Psychology for specific information about the practicum and internship requirements.
- Students are required to complete 450 hours of practicum prior to starting their internship. Students must complete the practicum experience under the supervision of a credentialed and experienced (two years) school psychologist. National University school psychology students will complete school-based practicum during the PED 678 course.
- In PED 678 (Practicum in School Psychology) students will do their practicum hours and experiences through self-analysis, feedback, group activities and video critiques only in school based settings. Student performance will be evaluated by program faculty and a school site psychologist through completion of course requirements.

Internship Prerequisite

Before students can begin the internship, they must:

- Complete PED 678
- Provide proof of Certificate of Clearance
- Provide verification of a TB Clearance
- Complete prerequisite coursework, all PED courses (except PED 685)
- Complete 450 hours of logged, approved practicum
- Submit an Internship application to the Internship Coordinator/Lead faculty and be assigned a University Supervisor.
- Pass the CBEST

Internship is then scheduled by the lead faculty or internship coordinator.

Internship

(1200 hours/2 levels)

(5 courses, 21 quarter units)

PED 685	Best Practices Seminar in School Psychology (To be taken concurrently with internship)(3 quarter units)
PED 687	School Psychology Internship Part I (300 hours)
PED 688	School Psychology Internship Part II (300 hours)
PED 689	School Psychology Internship Part III (300 hours)
PED 690	School Psychology Internship Part IV (300 hours)

*****Exit Interview with University Supervisor*

Master's Degree Only Requirements

(5 courses, 21 quarter units)

For students that are only pursuing the MS degree in School Psychology (without the PPSP credential)

PED 685	Best Practices Seminar in School Psychology (3 quarter units)
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and any four of the following:

EXC 630	Assessment and Instructional Planning for Special Needs Students
EDT 660	Multimedia and Interactive Technology
PSY 652	Psychopharmacology
EDA 615A	School-Community Relations in a Diverse Society
TED 605	The Diverse Classroom
TED 611	Educational Psychology

Note: students who complete a Master of Science in School Psychology can also complete a certificate in behavior analysis with successful completion of PED 669A/PED 669B.

Exit Requirements

In order to receive a Master of Science degree in School Psychology and/or a PPSP credential, students must complete courses within seven years and do the following:

- Successful completion of graduate coursework, portfolio, practicum and internship
- Successful completion of thesis or action research project
- Successful completion of the ETS National Praxis examination in School Psychology (passage score is 590)
- Submit written evaluations of performance in internship experiences by site supervisor to university supervisor
- Schedule and pass exit interview with faculty advisor and University supervisor
- Schedule an exit appointment with credential advisor for final clearance and credential documents
- Have a zero account balance
- Complete online program evaluation form-School Psychology

School of Education

■ MASTER OF SCIENCE IN SPECIAL EDUCATION

(720-708)

Program Faculty Advisor: Jane Duckett • (858) 642-8346 • jduckett@nu.edu

Regional Lead Faculty Advisors:

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Fresno: Ennio Cipani • (559) 256-4943 • ecipani@nu.edu

Los Angeles: KayDee Caywood • (310) 258-6672 • kcaywood@nu.edu

Sacramento: Denise Hexom • (209) 475-1448 • dhexom@nu.edu

San Bernardino: Blanche Cook • (909) 806-3346 • bcCook@nu.edu

San Diego: Joan Sebastian • (858) 642-8137 • jsebasti@nu.edu

San Jose: Joy Kutaka-Kennedy • (650) 594-1334 • jkutakak@nu.edu

Stockton: Elizabeth Maloney • (209) 475-1448 • emaloney@nu.edu

The Master of Science in Special Education is designed for educators and other professionals who want to become knowledgeable about educational learning problems and teaching strategies to enhance student performance. To receive a Master of Science in Special Education, students must complete at least 64.5 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 if the units were not used in earning another advanced degree. Students enrolled in the joint degree credential program are not awarded the master's degree until they have completed all graduate and credential coursework, including student teaching. Course equivalence cannot be granted for life experience. Although many of the following courses are available online, EXC 630 and certain field experiences must be taken on site.

Program Learning Outcomes

Upon completion of the program:

- Students will demonstrate competence in the application of research methods including critiquing and synthesizing current education literature.
- Students will demonstrate competence in the ability to apply research methods including technology for research.
- Students will demonstrate consultation and collaboration skills, including the ability to implement professional development at their sites in the area of special education.
- Students will advocate for exceptional individuals.
- Students will understand federal and state laws regarding exceptional individuals.
- Students will demonstrate competence in instructional design including adaptations required to assist special education learners achieve the state standards for curriculum.
- Students will demonstrate competence in positive behavior support.
- Students will demonstrate expertise in use of technology as evidenced by development of adaptive devices, videos, toys/manipulatives, and software.
- Student teachers will demonstrate the ability to actively engage and support all students in learning.

Program Objectives

Upon graduation, students will be expected to:

- Demonstrate the competencies required by the California Commission on Teacher Credentialing and National University that will qualify them for the Education Specialist credential and an advanced degree.
- Understand the contemporary characteristics, issues, problems and future directions associated with the delivery of services for students with disabilities.
- Acquire knowledge and skills that will enable them to carry out their duties as teachers effectively and creatively.

- Gain experience and understanding of research and writing processes appropriate to the field of Special Education.
- Gain experience and understanding of the multicultural issues in the society in which they and their students live, and to devise strategies and techniques for enhancing their student's educational programs.
- Develop an intellectual curiosity and human concern for the problems of individuals and groups, especially those who manifest special needs.
- Know the major sources of information, knowledge, and changing trends in the community that make it possible to keep abreast of changing times and to continue learning upon program completion.

Degree Requirements

(17 courses, 64.5 quarter units)

Core Requirements

(9 courses, 37.5 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

- EXC 602A Field Experience: Special Education (3 quarter units)
- EXC 602B Field Experience: Inclusive Settings (3 quarter units)
- EXC 604 Exceptionality and Diversity in the Classroom
- ILD 680 Research in Education
- TED 611 Educational Psychology
- TED 621A Language Development Methods for the Elementary School
(Prerequisite: Master's only students are exempt from TED 615)
- or
- TED 623 Language Development Methods for Secondary and Middle Schools
(Prerequisite: Master's only students are exempt from TED 615)
- EXC 620 Positive Behavior Support
- EXC 630 Assessment and Instructional Planning for Special-Needs Students (one night per week over two months)
- EXC 650 Collaboration and Consultation for Special Education
- Generic Core Exam

Advanced Specialist Requirements

(7 courses, 22.5 quarter units)

- EXC 644 Reading and Language Arts Methods for Special Education (one night per week over two months)
- EXC 644A Field Study: Reading and Language Arts Methods for Special Education (1.5 quarter unit)
- EXC 660 Instruction of Learners with Mild/Moderate Disabilities
- EXC 660A Field Study: Instruction of Learners with Mild/Moderate Disabilities (1.5 quarter unit)
- or
- EXC 665 Instruction of Learners with Moderate/Severe Disabilities
- EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5 quarter unit)
- plus
- EXC 615 Technology for Persons with Disabilities
- EXC 615A Field Study: Technology for Persons with Disabilities (1.5 quarter unit)
- EXC 694 Thesis
(Prerequisite: ILD 680)
- or
- EXC 637 Action Research
(Prerequisite: ILD 680)
- Exit Exam

School of Education

(Note: students register for two months for the research courses, but individual projects may take 6-12 months)

Program Elective

(1 course, 4.5 quarter units)

To complete the Special Education program, students can select one elective from the SOE graduate course offerings approved by the Special Education faculty. Students who plan to teach at the secondary level are encouraged to take TED 624.

Students seeking the Preliminary Level I Education Specialist:

Mild/Moderate Disabilities credential must take:

EXC 603A Student Teaching Seminar (1.5 quarter units)

EXC 685A Student Teaching - Mild/Moderate Disabilities

EXC 685B Student Teaching - Mild/Moderate Disabilities

Students seeking the Preliminary Level I Education Specialist:

Moderate/Severe Disabilities credential must take:

EXC 603A Student Teaching Seminar (1.5 quarter units)

EXC 690A Student Teaching - Moderate/Severe Disabilities

EXC 690B Student Teaching - Moderate/Severe Disabilities

EXC 685A, EXC 685B, EXC 690A and EXC 690B do not fulfill elective requirements.

■ MASTER OF SCIENCE IN EXCEPTIONAL STUDENT EDUCATION

(720-722)

Lead Faculty: Ennio Cipani (661) 864-2360 ecipani@nu.edu

The Master of Science in Exceptional Student Education is designed for persons who are not residents of or teachers in California and who have a bachelor's degree. It is designed for persons who want to become knowledgeable about educational learning problems and strategies to enhance student performance. To receive a Master of Science in Exceptional Student Education, 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 if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience. All courses are available online.

Program Learning Outcomes

By the end of this program, students shall be able to:

- Apply research methods including critiquing and synthesizing current educational literature.
- Utilize a variety of methods and technology applications in order to complete action research and thesis projects.
- Demonstrate expertise in use of technology for instruction as evidenced by the development of adaptive devices, videos, toys/manipulatives, and software.
- Summarize federal and state laws, policies, and major court cases regarding exceptional individuals.
- Design and implement positive behavior supports for students with special needs.
- Utilize skills in instructional design including adaptations required to assist special education learners to achieve state standards-based curriculum.
- Demonstrate consultation and collaboration skills, including the ability to implement professional development at sites/districts for service delivery across all curricular areas and disabilities.
- Locate and utilize appropriate resources and practices in advocating for exceptional individuals.

Degree Requirements

(12 courses, 54 quarter units)

Prerequisite

(1 course, 4.5 quarter units)

TED 615 The Foundations of Education or a similar course from an accredited university.

Core Requirements

(7 courses, 31.5 quarter units)

EXC 604 Exceptionality and Diversity in the Classroom

EXC 620 Supporting Positive Behavior

EXC 615 Technology for Persons with Disabilities

EXC 644 Reading Methods for Special Education

EXC 650 Consultation and Collaboration for Special Education

EXC 656 Best Practices for Special Needs Students

EXC 657 Community Resources and Transition

Advanced Specialization

(3 courses, 13.5 quarter units)

EXC 660 Instruction of Learners with Mild/Moderate Disabilities

or

EXC 665 Instruction of Learners with Moderate/Severe Disabilities

ILD 680 Research in Education

EXC 637 Action Research

(Prerequisite: ILD 680)

or

EXC 694 Thesis (Note: Although the research courses are listed for two months in the catalog, individual projects may require from 6-12 months for completion.)

(Prerequisite: ILD 680)

Exit Exam

Program Elective

(1 course, 4.5 quarter units)

To complete the Exceptional Student Education program, students can select one elective from the SOE graduate course offerings

■ MASTER OF SCIENCE IN SPECIAL EDUCATION-EMPHASIS IN THE DEAF AND HARD OF HEARING

(720-721)

The Master of Science in Special Education with an emphasis in the deaf and hard of hearing is designed for educators and other professionals who want to become knowledgeable about educational learning problems and teaching strategies to enhance performance of students who are deaf and hard of hearing. To receive a Master of Science in Special; Education with an emphasis on deaf and hard of hearing, students must complete at least 81 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 enrolled in the joint degree credentials program are not awarded the master's degree until they have completed all graduate and credential coursework, including student teaching. Course equivalence cannot be granted for life experience.

Program Learning Outcomes

- Demonstrate graduate level written and oral communication

School of Education

skills and presentation skills.

- Apply analytical and critical thinking skills.
- Understand current laws with regard to DHH programs and participate in discussions on current issues.
- Understand historical perspective of the education of DHH learners.
- Interact with deaf children and their families.
- Learn to interpret nonverbal communication.
- Design lessons for children with cochlear implants.
- Plan and implement lessons and units for heterogeneous classes of DHH learners.
- Assess DHH learners, including those who are deaf/blind.
- Demonstrate literacy skills such as guided reading and ASL story-telling.
- Collaborate with health care professionals.
- Learn sighted guide techniques.
- Understand various learning theories including multiple intelligences.
- Observe trilingual education programs.
- Interview non-English speakers with DHH children.
- Participate in an IEP meeting.
- Prepare a professional portfolio.

Degree Requirements

(24 courses, 106.5 quarter units)

Prerequisite Courses

(9 courses, 39 quarter units)

PSY 100	Introduction to Psychology
PSY 301	Child and Adolescent Development
PSY 427	Biological Psychology
PSY 431	Theories and Techniques of Psychological Testing
HED 602	Introductory Health Education: K-12
EDT 608	Computer based Technology in the Classroom
EXC 603	Typical and Atypical Development in Young Children
EXC 604	Exceptionality and Diversity in the Classroom
EXC 602B	Field Experience: Inclusive Settings (3 quarter units)

Interdisciplinary Core Courses

(5 courses, 22.5 quarter units)

TED 605	The Diverse Classroom
TED 615	The Foundations of Education
EXC 620	Supporting Positive Behavior
TED 621A	Language Development Methods in Elementary School
CLD 627	Methodology for Cross-Cultural Instruction
Generic Core Exam	

Core Courses for the Education Specialist: Deaf and Hard-of-Hearing

(8 courses, 36 quarter units)

DHH 600	Introduction to Education of Learners Who are Deaf or Hard-of-Hearing: Theory and Practice
DHH 601	Signed and Spoken Language Acquisition and Development I
DHH 602	Signed and Spoken Language Acquisition and Development II
DHH 603	Assessment of Learners who are Deaf or Hard-of-Hearing
DHH 604	Development of Literacy with Learners who are Deaf or Hard-of Hearing
DHH 605	Teaching Deaf Learners with Additional Special Needs
DHH 606	Curriculum and Instruction in Programs for Deaf and Hard-of-Hearing Learners
DHH 607	Bilingual-Multicultural Education of Deaf and Hard-of-Hearing Learners

Research Coursework

(2 courses, 9 quarter units)

ILD 680	Research in Education
EXC 637	Action Research (Prerequisite: ILD 680)

or

EXC 694	Thesis (Note: although the research courses are listed as two month courses, individual projects may take from 6-12 months.) (Prerequisite: ILD 680)
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Exit Exam

Students seeking the Preliminary Level I Education Specialist- DHH credential must take:

DHH 608A and DHH 608B, Student Teaching Internship in Special Day and Residential Programs plus DHH 609, Student Teaching Seminar.

Nevada Programs

■ MASTER OF EDUCATION IN ELEMENTARY EDUCATION WITH NEVADA LICENSURE PROGRAM

(750-717)

Program Overview

The Master of Education in Elementary Education with Nevada Licensure 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 an initial teaching license as well as requirements for a master's degree from National University that interrelates 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.

To receive a Master of Education in Elementary Education with Nevada Licensure, students must complete at least 54 quarter units of graduate work, 40.5 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.

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 be recommended to the Nevada Department of Education.

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.

Program Requirements

(14 courses, 66 quarter units)

TED 615	Foundations of Education
TED 605	The Diverse Classroom
EXC 625	Exceptional Children in the Classroom

School of Education

TED 621A	Language Development Methodology for Elementary Schools
TED 621B	Reading and Language Arts Methodology for Elementary Schools
TED 668	Survey of Multicultural Literature
TED 616A	Curriculum and Instruction I: History and Social Science
TED 616B	Curriculum and Instruction II: Mathematics and Science
TED 616C	Curriculum and Instruction III: Visual and Performing Arts, Health and Physical Education
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)
TED 649	Classroom Management & The Student Teaching Seminar
MAT 644	Cultural Democracy: Contemporary, Local and Global Issues
MAT 640	Applications of Research for the Art of Teaching

Course of Study

National University's Professional Teacher Preparation program is structured around courses grouped into intra-related and inter-related "family courses" focused on themes of foundations, education methods and student teaching. Theory and practice as well as coursework and field experiences are developmental as candidates move from the "foundation family courses" to the "method family courses" and into "student teaching". Candidates who successfully complete the Professional Teacher Preparation program are eligible for a teaching license; those who choose to earn a Master in Education degree complete two additional courses.

Foundation Courses

The three foundation courses are considered the "foundation course family" because all the courses build upon each other in terms of conceptual knowledge and skill, field experiences, and assessments. Furthermore, two of the three courses share all three required textbooks so that teacher candidates can integrate foundational perspectives into an on-going and ever developing professional educator philosophical statement. The foundation course family is the theoretical basis for skill development and acquisition in the method courses. The courses that comprise this family are:

TED 615	Foundations of Education
TED 605	The Diverse Classroom
EXC 625	Exceptional Children in the Classroom

Methods Courses

As are the foundations courses, the pedagogy courses are formed around adult learning theory and fieldwork. So that each candidate gains a clear understanding of the realities of public education, the program's coursework and field experiences are interrelated to form a cohesive set of learning experiences. Teacher Performance Expectations (TPEs) inherent in the Domains of Professional Competence are highlighted throughout each course syllabus and course outline, and must be highlighted in each lesson plan developed by candidates so that each candidate will have extensive opportunities to learn and to teach the state adopted K-12 standards, with state adopted instructional materials throughout the program.

Elementary Education

TED 621A	Language Development Methodology for Elementary Schools.
TED 621B	Reading and Language Arts Methodology for Elementary Schools
TED 668	Survey of Multicultural Literature
TED 616A	Curriculum and Instruction I: History and Social Science
TED 616B	Curriculum and Instruction II: Mathematics and
TED 616C	Curriculum and Instruction III: Visual and Performing Arts, Health and Physical Education

Student Teaching

TED 649	Classroom Management & The Student Teaching Seminar
TED 640A	Student Teaching I
TED 640B	Student Teaching II

Master in Education

MAT 644	Cultural Democracy: Contemporary, Local and Global Issues
MAT 640	Applications of Research for the Art of Teaching (Must be taken as the last course in the Master of Education program.)

■ MASTER OF EDUCATION IN SECONDARY EDUCATION WITH NEVADA LICENSURE PROGRAM

(750-718)

Program Overview

The Master of Education in Secondary Education with Nevada Licensure 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 an initial teaching license as well as requirements for a master's degree from National University that interrelates 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.

To receive a Master of Education in Secondary Education with Nevada Licensure, students must complete at least 45 quarter units of graduate work, 40.5 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.

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 Secondary Education Teaching License to be recommended to the Nevada Department of Education. 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.

Program Requirements

(12 courses, 57 quarter units)

TED 615	Foundations of Education
TED 605	The Diverse Classroom
EXC 625	Exceptional Children in the Classroom
TED 623	Language Development Methodology for Secondary and Middle Schools
TED 624	Content Area Literacy for Secondary and Middle Schools
TED 625A	Curriculum Development for Secondary and Middle Schools
TED 625B	Instruction and Classroom Management for Secondary and Middle Schools
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)

School of Education

- TED 649 Classroom Management & The Student Teaching Seminar
MAT 643 Models of Teaching
MAT 640 Applications of Research for the Art of Teaching

Course of Study

National University's Professional Teacher Preparation program is structured around courses grouped into intra-related and inter-related "family courses" focused on themes of foundations, education methods and student teaching. Theory and practice as well as coursework and field experiences are developmental as candidates move from the "foundation family courses" to the "method family courses" and into "student teaching". Candidates who successfully complete the Professional Teacher Preparation program are eligible for a teaching license; those who choose to earn a Master in Education degree complete two additional courses.

Foundation Courses

The three foundation courses are considered the "foundation course family" because all the courses build upon each other in terms of conceptual knowledge and skill, field experiences, and assessments. Furthermore, two of the three courses share all three required textbooks so that teacher candidates can integrate foundational perspectives into an on-going and ever developing professional educator philosophical statement. The foundation course family is the theoretical basis for skill development and acquisition in the method courses. The courses that comprise this family are:

- TED 615 Foundations of Education
TED 605 The Diverse Classroom.
EXC 625 Exceptional Children in the Classroom

Methods Courses

As are the foundations courses, the pedagogy courses are formed around adult learning theory and fieldwork. So that each candidate gains a clear understanding of the realities of public education, the program's coursework and field experiences are interrelated to form a cohesive set of learning experiences. Teacher Performance Expectations (TPEs) inherent in the Domains of Professional Competence are highlighted throughout each course syllabus and course outline, and must be highlighted in each lesson plan developed by candidates so that each candidate will have extensive opportunities to learn and to teach the state adopted K-12 standards, with state adopted instructional materials throughout the program.

Secondary Education

As are the foundations courses, the pedagogy courses are formed around adult learning theory and fieldwork. So that each candidate gains a clear understanding of the realities of public education, the program's coursework and field experiences are interrelated to form a cohesive set of learning experiences. Teacher Performance Expectations (TPEs) inherent in the Domains of Professional Competence are highlighted throughout each course syllabus, and course outline, and must be highlighted in each lesson plan developed by candidates so that each candidate will have extensive opportunities to learn and to teach the state adopted K-12 standards, with state adopted instructional materials throughout the program.

- TED 623 Language Development Methodology for Secondary and Middle Schools
TED 624 Content Area Literacy for Secondary and Middle Schools
TED 625A Curriculum Development for Secondary and Middle Schools
TED 625B Instruction and Classroom Management for Secondary and Middle Schools

Student Teaching

- TED 649 Classroom Management & The Student Teaching Seminar
TED 640A Student Teaching I
TED 640B Student Teaching II

Master in Education

- MAT 643 Models of Teaching
MAT 640 Applications of Research for the Art of Teaching

■ MASTER OF SCIENCE WITH LICENSURE IN SPECIAL ED (NEVADA ONLY)

Generalist in Special Education - Endorsement to Teach Students with Mild to Moderate Needs for Assistance and Intervention

(720-719-356)

Faculty Advisor: Kyle Konold • kkonold@nu.edu

Program Purpose

The purpose of the Generalist in Special Education endorsement program is to prepare students to instruct learners with mild to moderate disabilities in the K-12 system.

Program Description

The Generalist in Special Education endorsement program at National University Nevada 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.

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.

Program Requirements

(15 courses, 70.5 quarter units)

Core Requirements

(11 courses, 49.5 quarter units)

- EXC 625 Exceptional Children in the Classroom
TED 611 Educational Psychology
EXC 603 Typical and Atypical Development in Children
EXC 604 Exceptionality and Diversity in the Classroom
EXC 620 Supporting Positive Behavior
EXC 630 Assessment and Instructional Planning for Special Needs
EXC 644 Reading Methods for Special Education
EXC 615 Technology for the Disabled Person
EXC 650 Consultation and Collaboration for Special Education
EXC 657 Community, Resources, and Transition
EXC 660 Instruction of Learners with Mild to Moderate Disabilities

Student Teaching

(2 courses, 12 quarter units)

EXC 686 A & B Student Teaching (9 weeks each)

Project Courses

(2 courses, 9 quarter units)

Students wishing to complete a Master's Degree in Special Education will need to complete two additional courses:

ILD 680 Research Methods

and

EXC 694 Thesis
(Prerequisite: ILD 680)

or

EXC 637 Action Research
(Prerequisite: ILD 680)

Teacher Preparation Program Outcomes; Domains of Professional Competence

National University designed the Professional Teacher Preparation program to build teacher candidates knowledge, skills, and dispositions displayed in integrated coursework and field experiences focused on the demonstration of the Domains of Professional Competence and related Teacher Performance Expectations (TPEs). Building upon foundation courses, Elementary Education content-specific method courses focus on the K-12 state-adopted academic content standards and frameworks in mathematics, language arts, reading, science, history-social-science, the visual and performing arts, and physical education.

Domain A: Making Subject Matter Comprehensible to Students

Teacher candidates exhibit strong working knowledge of subject matter and student development. Candidates organize curriculum to facilitate students' understanding of the central themes, concepts, and skills in the subject area. Teacher candidates interrelate ideas and information within and across curricular areas to extend students' understanding. Candidates use their knowledge of student development, subject matter, instructional resources and teaching strategies to make subject matter accessible to all students.

INTASC Foundations for the Domain

Principle 1: Content Knowledge and Foundations - The candidate demonstrates an appropriate depth of knowledge in all relevant subject areas, understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of subject matter meaningful to students.

Principle 4: Instructional Strategies - The candidate understands and uses a variety of instructional strategies to plan learning experiences that encourage students' development of critical thinking, problem solving, and performance skills.

Teacher Performance Expectations

TPE 1 Specific Pedagogical Skills for Subject Matter Instruction

National University's Professional Teacher Preparation program prepares teacher candidates to make subject matter comprehensible to students. Proficient candidates:

- understand major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the disciplines they teach;
- understand how students' conceptual frameworks and their

misconceptions for an area of knowledge can influence their learning;

- relate their disciplinary knowledge to other subject areas;
- understand the cognitive processes associated with various kinds of learning and how these processes can be stimulated;
- understand principles and techniques, along with advantages and limitations, associated with various instructional strategies; and
- enhance student learning through the use of a wide variety of materials as well as human and technological resources.

Domain B: Assessing Student Learning

Teacher candidates establish and clearly communicate learning goals for all students. Candidates collect information about student performance from a variety of sources. They involve all students in assessing their own learning. Teacher candidates use information from a variety of ongoing assessments to plan and adjust learning opportunities that promote academic achievement and personal growth for all students. They exchange information about student learning with students, families, and support personnel in ways that improve understanding and encourage further academic progress.

INTASC Foundations for the Domain

Principle 8: Assessment - The candidate understands and uses formal and informal assessment strategies to evaluate and ensure the intellectual, social, and physical development of the learner.

Teacher Performance Expectations

TPE 2 Monitoring Student Learning During Instruction
TPE 3 Interpretation and Use of Assessments

National University's Professional Teacher Preparation program prepares teacher candidates to assess student learning. Proficient candidates:

- understand the characteristics, uses, advantages, and limitations of different types of assessments for evaluating how students learn, what they know and are able to do, and what kinds of experiences will support their further growth and development;
- know how to select, construct, and use assessment strategies and instruments appropriate to the learning outcomes being evaluated and to other diagnostic purposes; and
- understand measurement theory and assessment-related issues, such as validity, reliability, bias, and scoring concerns.

Domain C: Engaging and Supporting All Students in Learning

Teacher candidates build on students' prior knowledge, life experience, and interests to achieve learning goals for all students. They use a variety of instructional strategies and resources that respond to students' diverse needs. Candidates facilitate challenging learning experiences for all students in environments that promote autonomy, interaction and choice. Teacher candidates actively engage all students in problem solving and critical thinking within and across subject matter areas. Concepts and skills are taught in ways that encourage students to apply them in real-life contexts that make subject matter meaningful. Teacher candidates assist all students to become self-directed learners who are able to demonstrate, articulate, and evaluate what they learn.

INTASC Foundations for the Domain

Principle 2: Student Development and Characteristics - The candidate understands how children learn, and can provide learning opportunities that support intellectual, social, and personal development.

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Principle 3: Adapting Instruction to Individual Learning Differences – The candidate understands how students differ in their approaches to learning and creates instructional opportunities that are developed for diverse learners.

Principle 6: Language and Communication – The candidate uses knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Teacher Performance Expectations

- TPE 4 Making Content Accessible
- TPE 5 Student Engagement
- TPE 6 Developmentally Appropriate Teaching Practices
- TPE 7 Teaching English Language Learners

National University's Professional Teacher Preparation program prepares teacher candidates to engage and support all students in learning. Proficient candidates:

- understand how learning occurs—how students construct knowledge, acquire skills, and develop habits of mind—and know how to use instructional strategies that promote student learning;
- understand that students' physical, social, emotional, moral and cognitive development influence learning and know how to address these factors when making instructional decisions;
- make appropriate provisions for individual students who have particular learning differences or needs including students with disabilities and English language learners;
- model effective communication strategies in conveying ideas and information and in asking questions; and
- support and expand learner expression in speaking, writing, and other media.

Domain D: Planning Instruction and Designing Learning Experiences for All Students

Teacher candidates plan instruction that draws on and values students' backgrounds, prior knowledge, and interests. They establish challenging learning goals for all students based on student experience, language, development, and home and school expectations. Candidates sequence curriculum and design long-term and short-range plans that incorporate subject matter knowledge, reflect grade-level curriculum expectations, and include a repertoire of instructional strategies. They use instructional activities that promote learning goals and connect with student experiences and interests. Teacher candidates modify and adjust instructional plans according to student engagement and achievement.

INTASC Foundations for the Domain

Principle 4: Instructional Strategies - The candidate understands and uses a variety of instructional strategies to plan learning experiences that encourage students' development of critical thinking, problem solving, and performance skills.

Principle 7: Instructional Planning - The candidate plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Teacher Performance Expectations

- TPE 8 Learning about Students
- TPE 9 Instructional Planning

National University's Professional Teacher Preparation program prepares teacher candidates to plan instruction and design learning experiences for all students. Proficient candidates:

- evaluate how to achieve learning goals, choosing alternative teaching strategies and materials to achieve different instructional purposes and to meet student needs;
- use multiple teaching and learning strategies to engage students in active learning opportunities that promote the development of critical thinking, problem solving, and performance capabilities and that help student assume responsibility for identifying and using learning resources;
- understand learning theory, subject matter, curriculum development, and student development and know how to use this knowledge in planning instruction to meet curriculum goals; and
- select and create learning experiences that are appropriate for curriculum goals, relevant to learners, and based upon principles of effective instruction.

Domain E: Creating and Maintaining Effective Environments for Student Learning

Teacher candidates create physical environments that engage all students in purposeful learning activities and encourage constructive interactions among students. They maintain safe learning environments in which all students are treated fairly and respectfully as they assume responsibility for themselves and one another. Candidates encourage all students to participate in making decisions and in working independently and collaboratively. Expectations for student behavior are established early, clearly understood, and consistently maintained. Teacher candidates make effective use of instructional time as they implement class procedures and routines.

INTASC Foundations for the Domain

Principle 5: Learning Environments, Social Interactions, Behavior Management - The candidate uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation for all students.

Teacher Performance Expectations

- TPE 10 Instructional Time
- TPE 11 Social Environment

National University's Professional Teacher Preparation program prepares teacher candidates to create and maintain effective environments for student learning. Proficient candidates:

- create a smoothly functioning learning community in which students assume responsibility for themselves and one another, participate in decision-making, work collaboratively and independently, and engage in purposeful learning activities;
- use effective classroom management and a range of strategies to promote positive relationships, cooperation, and purposeful learning in the classroom;
- engage students in individual and cooperative learning activities that help them develop the motivation to achieve; and
- organize, allocate, and manage the resources of time, space, activities, and attention to provide active and equitable engagement of students in productive tasks.

Domain F: Developing as a Professional Educator Hawai'i Teacher Performance Standard X: Fosters Parent and School Community Relationships

Teacher candidates create physical environments that engage all students in purposeful learning activities and encourage constructive interactions among students. They maintain safe learning environments in which all students are treated fairly and respectfully as they assume responsibility for themselves and one another.

Candidates encourage all students to participate in making decisions and in working independently and collaboratively. Expectations for student behavior are established early, clearly understood, and consistently maintained. Teacher candidates make effective use of instructional time as they implement class procedures and routines.

INTASC Foundations for the Domain

Principle 9: Professionalism and Ethical Practice - The candidate is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Principle 10: Collaboration - The candidate fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Teacher Performance Expectations

TPE 12 Professional, Legal and Ethical Obligations
TPE 13 Professional Growth

Credential Programs

Credential Information Applicable to all Programs

Certain credential programs may require enrollment into an electronic portfolio. Please see your credential advisor for further information.

Admission Requirements

Students seeking a California Credential 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 a CCTC-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 credential 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 credential students must attend a Faculty/Credential Advisement orientation seminar and complete a candidate statement within 30 days of starting their first course or pre-requisite 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 credential packet and return this to the credential advisor within 30 days to avoid matriculation or scheduling errors. Candidates enrolled in both master's degree and credential programs are matriculated after the credential packet is returned to the credential advisor. Students are not eligible for financial aid until the matriculation 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.

Credential Residency Requirements

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.

The resident requirement does not apply to candidates in the following programs:

CLAD certificate
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

All credential programs must be completed with a GPA of 3.0 ("D" and "F" grades are not accepted).

Students who are absent for a period of 12 months or more must re-enroll and re-matriculate under a new catalog. All credential courses are valid for seven years.

The Student Agreement

To ensure that graduates of National University's teaching and services credential programs are able to meet the legal requirements of the California Commission on Teacher Credentialing (CCTC), all applicants for admission to education credential programs must enter into a student agreement. A copy of the student agreement is contained in the credential information packet that is available from a credential advisor in the advisement orientation meeting. The student agreement gives National University the right to suspend or terminate the student's participation in the credential program upon a showing that the student has:

- 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; or
- demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the student for an education credential. The student agreement also authorizes National University to release to the Commission all pertinent information pertaining to the student's qualification or fitness for a credential.

Student Assistance, Notice of Need to Improve, and Dismissal from School of Education Programs

National University is committed to maintaining quality standards throughout its credential and masters programs and to graduating competent professional educators. As required by the California Commission on Teacher Credentialing (CCTC), National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry to or advancement in the education profession. The CCTC is charged by the State with evaluating the moral character and fitness of all persons who wish to teach or perform certified services in California public schools. Every person who is an applicant for, or who now holds, any credential, certificate, permit, or license authorizing service in California public schools is answerable to the CCTC and the Committee on Credentials for his or her fitness-related conduct. California's Laws and Rules Pertaining to the Discipline of

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Professional Certificated Personnel (2002), available on the CCTC website at www.ctc.ca.gov, address legal, ethical, and behavioral standards to which all such persons must adhere.

If a student is identified as being deficient or needing assistance to meet program standards at any point during his or her program, the student's instructor of record during coursework or University supervisor during a fieldwork assignment will issue the student a Professional growth and development plan form. The form will indicate one of three possible actions that the instructor/supervisor intends to recommend to the lead faculty in the program:

1. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student will be permitted to continue taking classes or continue in his/her fieldwork assignment while completing the plan.
2. The student is identified as needing improvement in designated areas. A plan of improvement, with an expected date of completion, is attached to the form. The student receives a failing grade in the class or an unsatisfactory grade in the fieldwork assignment. The student will not be permitted to continue taking classes or continue in his/her fieldwork assignment until the plan is completed and the class or fieldwork assignment is re-taken, at the student's expense.
3. The student is identified as being unsuited for the education profession and is recommended for dismissal from the program.

Upon receiving a Professional growth and development plan form, the student will meet with his/her instructor of record or University supervisor, along with the regional lead faculty and/or the lead supervisor. This Faculty Assistance Team will discuss any recommended plan of improvement with the student and will later meet with the student to evaluate the student's performance of the expectations listed on the plan.

If the candidate is allowed to continue in the program and receives a second unsatisfactory grade in a practicum or student teaching assignment, the student will be recommended for dismissal from the program. The process for a hearing and appeal, upon recommendation for dismissal from a program, is outlined in the Academic Dismissal Procedure under the Academic Information for Graduate Degrees section of this catalog.

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 the specific program you enrolled in and these advisors are a resource for specific questions you may have about classes, curriculum and instructors.

Each student also has a Credential Advisor available to them to help navigate the specifics of the California State credentialing requirements. These requirements can vary and are in constant flux due to changing legislation and the dynamic nature of public education. It is very important for you to work closely with your local Credential Advisor to understand and educate yourself on the specifics of your particular credentialing requirements.

Credential Candidate Placement File Service

When requested, the School of Education provides a placement file service for credential candidates. A placement file contains a standardized resume form, two student teacher evaluations and three letters of recommendation. Placement files are prepared and sent to school districts upon written authorization from the student.

State of California Requirements for Multiple and Single

Subject Teacher Credential Programs

In California, the multiple subject credential authorizes the holder to teach in a self-contained classroom, typically in grades K-8. The single subject credential authorizes the holder to teach in a departmentalized situation, typically at the junior high or high school level. The SB2042 multiple subject credential and the single subject credential carry with them an authorization to teach English Language Learners both in the general education classroom and in designated classes. The BCLAD credential has an added language component which authorizes teachers to teach academic subjects to English Learners in their primary language and in English.

All initial multiple subject and single subject credentials are granted as preliminary credentials under Commission SB 2042 standards.

- 1) Candidates for the multiple subject and single subject credentials who complete their teacher preparation through a Commission-approved program in California must be recommended for the credential by their college or university. Teachers who completed their professional preparation outside of California must apply directly to the commission for their initial credentials.
- 2) Candidates with three or more years of accredited private school experience may be able to waive student teaching under SB 57. See a credential advisor for details.
- 3) Candidates with six or more years of accredited private school experience may apply directly to the California Commission on Teacher Credentialing (CCTC) under SB 57 by submitting application form 41-4, fingerprint clearance materials, transcripts, other requested materials and current applicable fees. See CCTC website at www.ctc.ca.gov/credentialinfo/credinfo.html or call (888) 921-2682 (toll free).

In order to be recommended for a California Preliminary Teaching Credential by National University, students must have:

- Proof of a conferred bachelor's degree from a regionally accredited institution of higher education (IHE) or an international degree of U.S. equivalence
- Successful completion of the NU admission process
- Successful completion of the teacher education program within seven years.
- Proof of passing with grade of "C" or better coursework or an examination covering the U.S. Constitution
- Official transcripts from all colleges/universities attended on file at National University
- Proof of passage of CBEST. Highly recommended prior to admission.
- Proof of meeting the subject matter competency requirement. Single subject teacher candidates may meet subject matter either by passing the appropriate Commission-approved examinations or by obtaining a complete subject matter equivalency letter from a regionally accredited CCTC-approved program verifying completion of the appropriate subject matter program. Multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, must demonstrate subject matter competency by passing a Commission-approved examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET).
- Completion of a minimum of 31.5 TED or 36 BCLAD quarter units in residence
- Maintenance of a GPA of 3.0 in credential program coursework, ("D" and "F" grades are not accepted).
- Successful completion of the exit process, including portfolio requirements
- Proof of passing the Reading Instruction Competence Assessment (RICA). (Initial Multiple Subject and Education

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- Specialist teacher candidates only)
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)
Valid certificate of clearance or valid equivalent document.

Note: A letter of completion is issued from the processing center in San Diego following receipt of all documents in San Diego.

Student Teaching Requirements

Applicable to all Multiple Subject and Single Subject Credentials and Special Education Credentials

Before beginning any part of student teaching, candidates must:

- Return the completed credentials packet within 30 days of admission and orientation
- Provide proof of passage of the CBEST
- Demonstrate subject matter competency
- Provide proof of possession of a Certificate of Clearance
- Provide verification of a negative tuberculin examination within four years of student teaching
- Interview with a School of Education faculty member
- Attend student teacher interview and orientation
- Complete the prerequisite coursework with a 3.0 GPA; "D" and "F" grades are not accepted
- Complete a minimum of 31.5 quarter units in residence.
- Have a zero account balance.
- See a credential advisor or placement specialist for specific information regarding any of these requirements.

Multiple and Single Subject 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 Multiple Subject/Single Subject and Special Education and in the NU1 for Teacher Education and EXC 602A for Special Education packets.

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. Special Education student teaching is nine weeks and no equivalency is granted for Special Education student teaching.

Candidates will be placed:

- By the University in their student teaching school under the supervision of a University Supervisor and Supervising 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 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.
- Out-of-state courtesy placements in state-accredited schools outside California may be considered if the candidate moves out of state. Prior approval must be given by the field experience coordinator in San Diego.
- In a supervised full-time student teaching assignment within the appropriate credential area for one full academic semester.
- In two different teaching settings. BCLAD candidates must be in classrooms that provide literacy and academic content taught in the language of emphasis for at least one extended teaching assignment.
- In two different grade spans.
- Multiple Subject Candidates will be placed:

- In classrooms to observe and participate at two or more of the following grade spans: K-2, 3-5, and 6-9. A K-2 class experience is required unless there is documented fieldwork experience with beginning readers.

Single Subject 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.

Credential Candidates Teaching Under Contract

National University provides a program whereby actively employed teachers can complete the requirements for their 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:

- In an approved multiple subject 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 single subject assignment (within the credential 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 (WASC) approved non-public school setting must complete a minimum of one course of the four-course sequence student teaching experience in a public school.
- Teach under the supervision of a University Supervisor and Supervising Teacher who model effective teaching, implement state-adopted academic core curriculum, mentor the candidate, and work with the University Supervisor.

Recommendation for a California Credential

To be formally recommended for California credentials, students must meet the following requirements:

- 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 credential advisor for deadline and review dates.

Each candidate must have on file:

- A completed CCTC credential application with current CCTC application fee
- A zero account balance
- Official transcripts from all colleges/universities attended
- Proof of passing the Reading Instruction Competence Assessment (RICA). (Multiple Subject Teacher Education/BCLAD and Special Education candidates only.)

BCLAD only - verification of passing scores on oral and written language proficiency examinations.

- Verification of subject matter competency with score reports or cards from CSET, PRAXIS, MSAT, or SSAT. (Single subject teacher candidates may submit a subject matter equivalency letter from a regionally accredited CCTC-approved program verifying completion of the appropriate subject matter program to verify this requirement.)
- Proof of passing with a grade of "C" or better coursework or an 163

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- examination covering the U.S. Constitution
- Certificate of Clearance or Emergency Substitute Permit
- CPR card for Infant, Child, and Adult (must be valid at time of credential application) (multiple/single subject candidates only)
- 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.

Additional Requirements for Professional Level Multiple or Single Subject Teaching Credential

It is the candidates' responsibility to familiarize themselves with the renewal requirements listed on their credential and enroll in the appropriate program.

■ PRELIMINARY MULTIPLE SUBJECT TEACHING CREDENTIAL PROGRAM WITH BCLAD OPTION

(780-363/365)

Faculty Advisor: Alberto Sanchez (858) 642-8376 asanchez@nu.edu

(15 courses, 66 quarter units TED)

(16 courses, 70.5 quarter units BCLAD)

A preliminary multiple subject credential is valid for a maximum of five years. During this five-year period, students must complete the induction requirements for a clear credential. The multiple subject credential enables the candidate to teach in a self-contained classroom, typically at the elementary level. Students should see "Admission to Credential Programs" for specific admission information.

Admission Requirements

Candidates requesting to be admitted for Teacher Education must follow the steps listed under Graduate Admission in addition to the following credential specific requirements.

- Attendance at the Faculty/Credential Advisement (NU1) Orientation is mandatory to be admitted to the Teacher Education Credential Program; this must be done within 30 days of enrollment in the first teacher education course or prerequisite.
- At the NU1 Orientation students will complete a candidate statement which must be completed, reviewed, and signed by the faculty advisor for formal admission into SOE.
- At the NU1, students will receive a Credential Packet which must be completed and returned to the Credential Advisor within 30 days.

Note: Students must have access to Microsoft Office on either a PC or Mac platform. Since NU and the CCTC regularly use email to communicate with students, it is highly recommended that students do not use AOL, Earthlink or school district email addresses since our emails are regularly blocked from these accounts. We recommend an active yahoo or hotmail account instead.

Highly Recommended Before Admission

- A passing score on CBEST (must be completed prior to student teaching and internships).
- Proof of having met subject matter competence requirement through a passing score on the approved state exam. Subject matter competency must be completed prior to student teaching. Multiple subject teacher candidates who enroll in a teacher preparation program on or after July 1, 2004, must demonstrate subject matter competency by passing a Commission-approved

examination, currently the California Subject Examination for Teachers: Multiple Subjects (CSET). CCTC policy, in compliance with the No Child Left Behind Act, prohibits colleges and universities from accepting subject matter equivalency letters for multiple subject teacher candidates who enroll into a credential program on or after July 1, 2004.

- With the exception of student teaching (TED 630A, TED 630B, TED 630C, TED 630D), all courses are scheduled by an admission advisor. Student teaching is scheduled by a placement specialist.
- All TED courses include a four hour field experience component that requires students to complete activities in K-12 schools. A Certificate of Clearance is necessary prior to field activities in the schools. The form to obtain a Certificate of Clearance is provided in the Credential Packet at the NU1 Orientation.

Recommended Sequence

Foundation and Methods

(7 courses, 31.5 quarter units TED)

(8 courses, 36 quarter units BCLAD)

BTE 612 History and Culture of Latinos in the U.S. (taught in the language of emphasis) (BCLAD students only)

TED 615 Foundations of Education

TED 605 The Diverse Classroom

TED 611 Educational Psychology

TED621A Language Development Methods for the Elementary School

(Prerequisite: TED 615)

BTE/TED 621B** Reading and Language Arts Methods for the Elementary School

(Prerequisites: TED 615 and TED 621A)

BTE/TED 622A Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts

(Prerequisites: TED 615 and TED 621A)

BTE/TED 622B Curriculum and Instruction II: Mathematics and Science

(Prerequisites: TED 615 and TED 621A)

All TED courses include a four hour field experience component which requires students to complete activities in K-12 schools.

Note: BTE courses are taught in the language of emphasis: Spanish.

**Students must pass Reading Instruction Competency Assessment (RICA) before being recommended to the CCTC for a Multiple Subject credential. It is recommended that candidates take this exam after completion of TED/BTE 621B.

Co-requisites

(3 courses, 13.5 quarter units)

These courses can be taken at any time in their program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom

EDT 608 Computer-Based Technology in the Classroom

Student Teaching

(5 courses, 21 quarter units)

Requirements prior to student teaching:

- Course Prerequisites: TED 615, TED 605, TED 611, TED 621A, BTE/TED 621B, BTE/TED 622A and BTE/TED 622B with a 3.0 GPA.
- Valid Certificate of Clearance or valid equivalent document.
- Grades of "D" and "F" are not accepted.

- Students must pass the CBEST.
- Students must meet Subject Matter Competence by passing the approved subject matter exam.
- Students must have a zero account balance.
- Negative TB test.

TED 629 Student Teaching Seminar*
(3.0 quarter units)

BTE/TED 630A Beginning Student Teaching

BTE/TED 630B Student Teaching

BTE/TED 630C Student Teaching

BTE/TED 630D Student Teaching

* TED 629 must be taken concurrently with TED 630A-D.

Note: TED630A,B,C and D are field experience courses receiving a Satisfactory or Unsatisfactory grade and therefore do not factor in the student GPA. Please see "Academic Information for Graduate Degrees and Credentials" for more information.

Student teaching courses are added to the student's schedule by the Credential Department. All other courses can be added by the student and/or the Admission Advisor.

Students may be eligible to apply to accelerate their credential program by taking designated courses during student teaching. Eligible candidates must meet minimum qualifications for accelerated studies and will be restricted to the provisions outlined in the Policies and Procedures section. Students must submit accelerated study requests 30 days in advance to be considered. If approved, student's registration will be limited to taking two courses concurrently while student teaching.

Exit Requirements

The following must be in student's file prior to being recommended for a credential:

- Proof of a bachelor's degree from a regionally accredited IHE with a GPA of 2.5.
- Copy of evaluation (if a non- U.S. degree) by a CCTC-approved international evaluation agency.
- Official transcripts for any transferable coursework related to credential program coursework.
- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework.
- Valid Certificate of Clearance or valid equivalent document.
- Passing grade on grammar, reading and composition qualifying exam (BCLAD only).
- Passing grade on oral interview with level 3 or above (BCLAD only).
- Successful completion of the exit process, including passing portfolio review.
- Passing score on the CBEST.
- Passing score on the appropriate subject matter exam.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)

■ PRELIMINARY SINGLE SUBJECT CREDENTIAL PROGRAM WITH BCLAD OPTION

(780-362/364)

Faculty Advisor: Alberto Sanchez (858) 642-8376 asanchez@nu.edu

(15 courses, 66 quarter units TED)

(16 courses, 70.5 quarter units BCLAD)

A preliminary single subject credential is valid for a maximum of five years. During this five-year period, students must complete the induction requirements for a clear credential. The single subject credential enables the candidate to teach in a departmentalized situation, typically at the secondary level. Students should see "Admission to Credential Programs" for specific admission information.

Admission Requirements

Candidates requesting to be admitted for Teacher Education must follow the steps listed under Graduate Admission in addition to the following credential specific requirements.

- Attendance at the Faculty/Credential Advisement (NU1) Orientation is mandatory to be admitted to the Teacher Education Credential Program; this must be done within 30 days of enrollment in the first teacher education course or prerequisite.
 - At the NU1 Orientation students will complete a candidate statement which must be completed, reviewed, and signed by the faculty advisor for formal admission into SOE.
 - At the NU1, students will receive a Credential Packet which must be completed and returned to the Credential Advisor within 30 days.
- Note: Students must have access to Microsoft Office on either a PC or Mac platform. Since NU and the CCTC regularly use email to communicate with students, it is highly recommended that students do not use AOL, Earthlink or school district email addresses since our emails are regularly blocked from these accounts. We recommend an active yahoo or hotmail account instead.*

Highly Recommended Before Admission

- A passing score on CBEST (must be completed prior to student teaching and internships).
- Proof of having met specific subject matter competence requirement through a passing score on the approved state exam, currently the CSET or obtaining a complete subject matter equivalency letter from a regionally accredited CCTC-approved program verifying completion of the appropriate subject matter program. Subject matter competence must be completed prior to student teaching.
- All TED courses include a four hour field experience component that requires students to complete activities in K-12 schools. A Certificate of Clearance is necessary prior to field activities in the schools. The form to obtain a Certificate of Clearance is provided in the Credential Packet at the NU1 Orientation.

Recommended Sequence

Foundation and Methods

(7 courses, 31.5 quarter units TED)

(8 courses, 36 quarter units BCLAD)

BTE 612 History and Culture of Latinos in the U.S. (taught in the language of emphasis) (BCLAD students only)

TED 615 Foundations of Education

TED 605 The Diverse Classroom

TED 611 Educational Psychology

TED 623 Language Development Methods for Secondary and Middle Schools

(Prerequisite: TED 615)

School of Education

BTE/TED 625A Curriculum and Development for Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623)

BTE/TED 625B Instruction and Classroom Management for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623 and TED 625A)

BTE/TED 624 Reading in the Content Areas in Secondary and Middle-Level Classrooms

(Prerequisites: TED 615 and TED 623)

All TED courses include a four hour field experience component which requires students to complete activities in K-12 schools.

Note: BTE courses are taught in the language of emphasis: Spanish.

Co-requisites

(3 courses, 13.5 quarter units) These courses can be taken at any time in their program but are recommended prior to student teaching. These courses are required prior to applying for the credential.

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom

EDT 608 Computer-Based Technology in the Classroom

Student Teaching

(5 courses, 21 quarter units)

Requirements prior to student teaching:

- Course Prerequisites: TED 615, TED 605, TED 611, TED 621A, BTE/TED 621B, BTE/TED 622A and BTE/TED 622B with a 3.0 GPA).
- Valid Certificate of Clearance or valid equivalent document.
- Grades of "D" and "F" are not accepted.
- Students must pass the CBEST
- Student must meet Subject Matter Competence by passing the approved subject matter exam or have a letter of completion from an approved California subject matter program.
- Students must have a zero account balance.
- Negative TB test.

TED 629* Student Teaching Seminar (3.0 quarter units)

BTE/TED 630A Beginning Student Teaching

BTE/TED 630B Student Teaching

BTE/TED 630C Student Teaching

BTE/TED 630D Student Teaching

*TED 629 is taken concurrently with TED 630A-D.

Note: TED630A,B,C and D are field experience courses receiving a Satisfactory or Unsatisfactory grade and therefore do not factor in the student GPA. Please see "Academic Information for Graduate Degrees and Credentials" for more information.

Student teaching courses are added to the student's schedule by the Credential Department. All other courses can be added by the student and/or the Admission Advisor.

Students may be eligible to apply to accelerate their credential program by taking designated courses during student teaching. Eligible candidates must meet minimum qualifications for accelerated studies and will be restricted to the provisions outlined in the Policies and Procedures section. Students must submit accelerated study requests 30 days in advance to be considered. If approved, student's registration will be limited to taking two courses concurrently while student teaching.

Exit Requirements

The following must be in student's file prior to being recommended for a credential:

- Proof of a bachelor's degree from a regionally accredited IHE with a GPA of 2.5.
- Copy of evaluation (if a non- U.S. degree) by a CCTC-approved

international evaluation agency.

- Official transcripts for any transferable coursework related to credential program coursework.
- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework.
- Valid Certificate of Clearance or valid equivalent document.
- Passing grade on grammar, reading and composition qualifying exam (BCLAD only).
- Passing grade on oral interview with level 3 or above (BCLAD only).
- Successful completion of the exit process, including passing portfolio review.
- Passing grade on the CBEST.
- Passing grade on the appropriate subject matter exam or equivalency letter from a regionally accredited CCTC-approved program verifying completion of the appropriate subject matter program.
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- CPR certification for Infant, Child, and Adult (must be valid when candidate applies for teaching credential)

PROFESSIONAL CLEAR CREDENTIAL FOR HOLDERS OF A RYAN CREDENTIAL WITH CLAD AND AB 1059

(751)

(4 courses, 18 quarter units)

Holders of a Ryan Credential issued after January 1, 1999 may complete one of the following options to qualify for the professional clear credential:

1) A Commission accredited SB 2042 Professional Teacher Induction program, if available, and the CPR component of the health education requirement if it was not already completed for the preliminary credential

or

2) District BTSA Program and Health, including appropriate CPR certification, Special Education, Computer Requirements (if not completed for preliminary- plus Advanced Computer Education.)

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom

EDT 608 Computer-Based Technology in the Classroom (Level I Technology Requirement)

EDT 655 Issues and Trends in Educational Technology (Level II Technology Requirement)*

or

3) Fifth Year of Study (may be completed prior to the issuance of the Preliminary MS/SS Teaching Credential)**

and

(Health, including appropriate CPR certification, Special Education, Computer Education, if not completed for preliminary plus Advanced Computer Education)

HED 602 Introductory Health Education: K-12

EXC 625 Exceptional Children in the Classroom

EDT 608 Computer-Based Technology in the Classroom (Level I Technology Requirement)

EDT 655 Issues and Trends in Educational Technology (Level II Technology Requirement)*

* Candidates who earned a Preliminary Credential prior to July 1, 2002, are not required to fulfill the Level II technology requirement.

■ PROFESSIONAL CLEAR CREDENTIAL FOR HOLDERS OF A PRELIMINARY 2042 MS/SS TEACHING CREDENTIAL

(749)

(4 courses, 18 quarter units)

Holders of an SB2042 credential issues after August 30th, 2004 must complete a commission accredited district teacher induction program. If a students district does not offer a teacher induction program they must complete a CL-855 form prior to enrolling in the following courses.

Note: If students possess a SB2042 credential that was not taken post-baccalaureate an additional 27 quarter units in a defined field of study designed to improve the teachers competence and skills is required for completion of the fifth year of study.

HED 620 Comprehensive School Health Programs
EXC 604 Exceptionality and Diversity in the Classroom
EDT 655 Issues and Trends in Educational Technology
*MAT 650 Teaching English Language Learners

■ PROFESSIONAL CLEAR CREDENTIAL FOR HOLDERS OF AN OUT OF STATE TEACHING CREDENTIAL

(748)

Under three years of experience - see information for Ryan Credential holders

- Three to four years of experience - BTSA OR approved SB 2042 Professional Teacher Induction program
- Five years or more of teaching experience - 150 clock hours aligned with the CSTP
- Plus any additional requirements listed on their document including but not limited to U.S. Constitution, teaching of reading, subject-matter competence, and CBEST

** Fifth Year of Study: Master's degree or coursework consisting of 45 quarter units beyond the baccalaureate degree completed at a regionally accredited IHE in a defined field of study designed to improve the teacher's competence and skills. (may be completed prior to the issuance of the Preliminary MS/SS Teaching Credential) This fifth year course of study must be accredited by a California teacher preparation institution and may be used for one or more of the following purposes:

- Additional subject-matter preparation, including, but not limited to, pursuit of a master's or higher degree
- Completion of an accredited program for an advanced or specialized credential
- In-service training for which college or university credit is given
- Study undertaken to complete an accredited program of professional preparation
- All courses must be completed with a grade of "C" or better.
- Students must maintain a cumulative GPA of 3.0.

■ INTERN CREDENTIAL PROGRAM FOR MULTIPLE SUBJECT/SINGLE SUBJECT TEACHING

(781)

This credential option has different prerequisites than those for the Preliminary Teaching Credential. The Intern program is on a contract basis between an individual school district, the local teachers' union and National University. Intern programs may not begin, nor may students be enrolled in the program, without prior approval of lead faculty.

Interns are salaried credentialed employees of the districts or have an offer of employment from a school district.

Intern programs provide opportunities for students to assume the responsibilities of full-time teachers while they pursue their professional studies on an Intern Credential that is valid for two years at the site of hire.

Qualifications for applicants for admission to an Internship:

- Possess a baccalaureate degree from a regionally accredited college or university
- Proof of subject matter competence .
- Proof of passing with a grade " C " or better coursework or an examination covering the U.S. Constitution.
- Provide proof of possession of a CCTC document verifying fingerprint clearance.
- Offer of employment as a full time intern teacher.
- Signed and valid internship contract between National University and the employing district.
- Passage of the CBEST
- Prior to assuming intern responsibilities, intern candidates must complete pre-service coursework. Interns complete the same coursework required of non-interns but the sequence is re-ordered to assist the intern in his/her teaching role.

Intern Program Sequence

Pre-service Requirements Coursework

TED 605 The Diverse Classroom (MS/SS)
TED 621A Language Development
or
TED623 Methods for Elementary School

Suggested First Semester of Intern Teaching Coursework

TED 610 Introduction to the Intern Teaching Experience (MS/SS)
TED 629I Intern Teaching Seminar (MS/SS)
EDT 608 Computer-Based Technology in the Classroom (MS/SS)
TED 615 Educational Foundations (MS/SS)
TED 611 Educational Psychology (MS/SS)

Students must attend and participate in school district's regular workshops and hold collaborative monthly meeting with intern, support supervisors (site and university)

Suggested Second Semester of Intern Teaching Coursework

TED 629I Intern Teaching Seminar continued (MS/SS) (continued)
TED 621B Reading & Language Arts Methods for the Elementary School
or
TED 624 Reading in the Content and Middle Schools
and
TED 622A Curriculum and Instruction I: History, Social Science, PE, Visual and Performing Arts (MS)
or
TED 625A Curriculum and Development for Secondary and Middle Schools (SS)
and
TED 622B Curriculum and Instruction: Math and Science (MS)
or
TED 625B Instruction and Classroom Management for Secondary and Middle Schools (SS)

Students must attend and participate in School District's Regular Workshops and Collaborative Monthly Meetings with Intern, Support Supervisors (Site and University)

School of Education

Suggested Third and Fourth Semester Intern Teaching Coursework

HED 602 Introductory Health Education: K-12 (MS/SS)
EXC 625 Exceptional Children in the Classroom (MS/SS)

Interns that are not funded by Alt. Cert. grant, will register for TED 628 A-D, the full year of field experience required for interns.

- Application for the preliminary credential.
- Intern Credential students meet the requirements of NCLB.

Early Completion Option (ECO)

The Early Completion Internship Option is intended to provide individuals who have 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 Commission-approved internship program.

Requirements for the Early Completion Internship Option:

Applicants must satisfy all of the following:

- Bachelor's degree or higher from a regionally accredited college or university.
- Passage of the CBEST.
- Verify passage of the Teaching Foundations Examination (TFE)
- Meet the US Constitution requirement
- Proof of subject matter competence.
- Submission of a completed application (form 41-4) and Certificate of Clearance application with LiveScan forms.
- Student must have an offer of employment and be enrolled in NU's University Internship Program and meet with a faculty advisor prior to approval of this option.
- This option requires that the student satisfactorily completes the Teacher Performance Expectations portfolio assessment and passes HED 602, EDT 608, and EXC 625. Multiple subject candidates must also pass the RICA and it is recommended that they take TED 621B prior to taking the exam.

The ECO meets the Fully Qualified Requirements of No Child Left Behind.

■ PRELIMINARY TIER I ADMINISTRATIVE SERVICES CERTIFICATE/CREDENTIAL

(780-000-752)
(10 courses, 45 quarter units)

This program is designed for students who are committed to improving education and who want to advance their careers by becoming public school administrators.

Scheduling

All courses, with the exception of field experience EDA 620B, are scheduled by an advisor. (The field experience coursework, EDA 620B, is scheduled by a placement specialist once students submit a completed credential packet and after approval by a designated full-time or associate faculty member.) Students must submit a completed credential packet within 30 days of attending a credential orientation meeting.

Admission Requirements

- Formal application to the University and to the Credentials Department. See "Admission to Credential Programs."
- A bachelor's degree from a regionally accredited institution or a complete evaluation from a CCTC-approved international evaluation agency

- Possession of a valid preliminary, professional clear, life, general, or service credential. An emergency teaching permit does not qualify as an accepted credential for admission.
- Meet all requirements for admission to credential program, including attendance at mandatory Faculty/Credential (NU3) Advisement orientation.
- Complete a candidate statement to be reviewed and signed by faculty advisor for admission to the School of Education.
- Appointment with credential advisor within 30 days of admission to return packet and to be cleared for EDA 620B. EDA 620B is administered by local faculty members and must be completed in residence.
- An overall grade point average of 2.5 in previous graduate work.
- Passing of CBEST verified or proof of CBEST to be taken at next available date
- In order to avoid matriculation or scheduling errors, students must meet with a credential advisor within 30 days of enrollment.

Completion Requirements

Three years of experience while in possession of a valid California emergency permit and/or teaching credential issued under the law, rules and regulations in effect on or before December 31, 1971, requiring the possession of a baccalaureate degree. Two years experience may be accepted with an emergency teaching permit. One year experience must be verified while holding a valid credential. Substitute teaching does not qualify for full-time experience.

or

- Three years of experience appropriate to the possession of a services credential with a specialization, while holding the appropriate credential for the entire three years
- An approved program of professional education
- A passing score on the CBEST. Highly recommended prior to admission.
- A minimum grade point average of 3.0. Grades of "D" and "F" are not accepted.
- Verification of meeting the requirement of EXC 625 or equivalent course of study.
- Completion of a minimum 27 quarter units in residence
- Field experience, EDA 620B must be completed in residence
- Successful completion of final exit exam and exit process. (See "Final Recommendation for the Credential.")
- Zero account balance

Tier I Learning Outcome/Program Goals, Modified

Upon completion of the program, students will:

- Possess the necessary skills to become successful practicing school administrators
- Demonstrate their knowledge of practice related to curriculum standards and accountability leading to the improvement of teaching and learning
- Possess the technological background for making data driven decisions leading to instructional improvement
- Have developed an ethical framework for effective educational leadership
- Demonstrated through practice a sensitivity to and an understanding of cultural diversity and its significance in building effective school communities
- Possess the legal, financial, and human resources knowledge necessary for leading and managing schools

Program Prerequisite

(1 course, 4.5 quarter units)

EXC 625 Exceptional Children in the Classroom*

School of Education

**Note: EXC 625 may be met with experience working with students with disabilities in a less-restricted environment. Waiver requires faculty review and approval of experience.*

Core Requirements

(9 courses, 40.5 quarter units)

Students must complete all coursework with a GPA of 3.0 within seven years. Grades of "D" and "F" are not accepted.

EDA 623	Curriculum Alignment , Assessment, and Accountability
EDA 624	Supervision and Evaluation of Instruction
EDA 625	Technology and Data Analysis for Effective Instruction
EDA 614	Educational leadership in Schools Today
EDA 626	Human Resources in Diverse School Communities
EDA 618	Legal and Ethical Foundations of Education
EDA 619	Financial Leadership and Management
EDA 620B	Field Experience in Educational Administration*
EDA 628	Seminar in Educational Leadership and Management**

* (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 the course being scheduled. Students must complete three courses in the credential sequence-EDA 623, EDA624, EDA625, EDA614, EDA626, EDA618, EDA619- before taking this course. The course must be completed in residence.)

** (At least two other credential courses, not including EDA 620B must be completed before taking the course)

Students can earn the preliminary administrative services certificate as part of the Master of Science in Educational Administration.

Exit Requirements

- Verification of passing CBEST and mainstreaming requirements
- Verification of three years of experience as a credentialed person in schools
- Copy of valid teaching or services credential with at least 12 months remaining before expiration
- Exit interview with credential advisor to obtain and submit necessary application and CCTC fee
- Exit exam
- Zero account balance

Certificate/Credential

Students are issued a Certificate of Eligibility upon completion of the program. The certificate is required for entry-level administrative positions and before the student is eligible to pursue the professional administrative services credential unless student 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.

■ INTERNSHIP - PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL - TIER I

(781-000-752)

The preliminary administrative services intern credential program allows students who meet the admissions requirements to begin service as an administrator in their sponsoring district while completing their formal coursework preparation. Students who qualify for admission may begin the program upon starting an administrative position, either at the beginning of their program or while currently enrolled in the regular preliminary administrative services credential program. Intern students participate in the standard coursework with intern addenda and complete an

alternative field work experience directly related to their administrative responsibilities.

State of California Requirements

- Passage of the CBEST
- Possession of a bachelor's degree from a regionally accredited college or university
- Possession of a valid preliminary, professional clear, life, general, or service credential. An emergency permit does not qualify as an accepted credential for admission.
- 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 years experience may be accepted with an emergency teaching permit.
- One year experience must be verified while holding a valid credential. Substitute teaching does not qualify for full-time experience.

or

- Three years of experience appropriate to the possession of a services credential with a specialization, while holding the appropriate credential for the entire three years.
- Verification of support from the intern candidate's sponsoring district, including verification of a willingness to enter into an intern partnership with National University and a signed Memorandum of Agreement between the sponsoring district and the University that assures that the intern will be provided the services of a site mentor and that relevant stipulations of Education Code and California Commission on Teacher Credentialing regulations are followed.

Admissions Requirements

- All candidates for the intern program must have a GPA of 2.5 in their previous graduate work.
- All candidates must furnish three letters of recommendation from their district discussing their prospects for success in the program. One of the letters must be from their superintendent or the superintendent's designee pledging district support of the candidate.
- The candidate must submit a letter of application stating his or her qualifications for admission to the intern program, why he or she wants to enter the intern program, and his or her philosophy of education.
- The candidate must participate in an in-depth interview assessing his or her prospects for success in meeting his or her administrative responsibilities. The interviewers will be a University faculty member and a representative of the candidate's site or district.
- The University will secure an intern administrative credential authorizing service permitted by the preliminary administrative services credential once the student has been formally admitted to the intern program.

Required Coursework

(10 courses, 45 quarter units)

Students must complete all coursework with a GPA of 3.0 within seven years. Grades of "D" and "F" are not accepted. Any break in enrollment extending for longer than 1 year requires students to participate in the re-admission process including any new program requirements. The intern credential, however, is valid for a maximum of two years and all work leading to a regular preliminary administrative services credential must be completed within that time for the student to be able to retain a position requiring a preliminary administrative services credential.

School of Education

Tier I Learning Outcome/Program Goals, Modified

Upon completion of the program, students will:

- Possess the necessary skills to become successful practicing school administrators
- Demonstrate their knowledge of practice related to curriculum standards and accountability leading to the improvement of teaching and learning
- Possess the technological background for making data driven decisions leading to instructional improvement
- Have developed an ethical framework for effective educational leadership
- Demonstrated through practice a sensitivity to and an understanding of cultural diversity and its significance in building effective school communities
- Possess the legal, financial, and human resources knowledge necessary for leading and managing schools

Program Prerequisite

(1 course, 4.5 quarter units)

EXC 625 Exceptional Children in the Classroom*

**Note: EXC 625 may be met with experience working with students with disabilities in a less-restricted environment. Waiver requires faculty review and approval of experience.*

Core Requirements

(9 courses, 40.5 quarter units)

EDA 623	Curriculum Alignment , Assessment, and Accountability
EDA 624	Supervision and Evaluation of Instruction
EDA 625	Technology and Data Analysis for Effective Instruction
EDA 614	Educational leadership in Schools Today
EDA 626	Human Resources in Diverse School Communities
EDA 618	Legal and Ethical Foundations of Education
EDA 619	Financial Leadership and Management
EDA 620I	Field Experience in Educational Administration*
EDA 628	Seminar in Educational Leadership and Management**

*This course is taken in place of EDA 620B, the practicum/field work required in the regular preliminary administrative services credential program. Interns register once for this course, at the beginning of their work in the intern program, and meet monthly with the instructor over the duration of their intern program which must last for one full year.

**At least two other credential courses, not including EDA 620I, must be completed before taking the course.

Interns may elect to take some courses online. They must, however, participate in EDA 620I on site in accordance with the schedule of the University.

Completion Requirements

Completion of a minimum of 31.5 quarter hours in residence. units from the regular National University preliminary administrative services credential program, successfully completed within the past seven years, are acceptable.

- EDA 620I, the Intern Induction Seminar, must be taken in residence onsite.
- All interns complete an extensive comprehensive written examination addressing major competencies of the program. The examination will be completed over the duration of the intern program and presented as a research based essay during the intern's final month of participation in EDA 620I.
- All interns will be required to participate in an oral exit examination. The oral examiners will represent both National University and the sponsoring site/district. The examination will be conducted the last month the intern is in the program.

- Verification of meeting the requirement of EXC 625 or equivalent course of study or in lieu of experience.
- Exit interview with credential advisor
- Zero account balance

■ PROFESSIONAL (TIER II) ADMINISTRATIVE SERVICES CREDENTIAL

(780-000-753)

(3 courses, 13.5 quarter units)

Professional Administrative Tier II Program

The Professional Administrative Services (Tier II) program provides a field-based preparation for administrators, seeking a successor Credential for administrators to replace their expiring Tier I Preliminary Administrative Services Credential. It consists of three courses or 13.5 hours: Induction Seminar, Professional Development Seminar, and Assessment Seminar, and may be completed in only three months.

Tier II Learning Outcomes/Program Goals

Upon completion of the program, the student will:

- Design an individualized school-or district-based plan for a field-based project appropriate to current position from a professional induction plan, supervised by a mentor in collaboration with the University that builds a working relationship.
- Apply knowledge attained in the Preliminary Administrative Service Credential program to practical and current job-related duties.
- Identify supplementary areas of study to enhance their learning within their administrative domains, and demonstrate an understanding of the domains of knowledge and expertise required in the pursuit of an administrative services credential.
- Understand instructional leadership, including management strategies designed to achieve goals and objectives, human relations and the dynamics of groups.
- Evaluation, including conditions that result in low or high level pupil learning outcomes, program and/or curriculum effectiveness, teaching effectiveness including teacher ability to address the educational need of students of diversity, and staff performance and pupil achievement.
- Understand political, legal and governing aspects, including exploring the legal aspects of educational policy at the federal, state, and local levels.
- Awareness of the national, state and local political aspects of school governance at the state levels, governance structure of public education, awareness of a variety of legal codes which affect education, and understanding the judicial system at the state and federal level and how the courts contribute to the formation of public policy.
- Understand cultural, language and socio-economic diversity, including general ethnic, racial and religious composition of the local community, meeting the instructional needs of limited English proficient students, and addressing principles and procedures for involving all parents and community.
- Analyze and assign human and material resources, including effective staff utilization patterns which combine the needs and abilities of staff, organizational constraints and available resources, development and implementation of effective personnel policies.
- Understand professional and staff development, including collective planning with other administrators and participants for instructional strategies for adult learners, integrating organizational goals with specific programs of adult learning including adults of diversity, and funding sources to carry out staff development.

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- Understand fiscal management, including school district-level funding and budgeting, financial effects of personnel and other contractual obligations, current problems affecting school financing on state and local levels, the organization and functioning of school district business services departments.
- Model a personal code of ethics and develop professional leadership capacity.

Admission Requirements

- Formal application to the University and to the Credentials Department. See “Admission to Credential Programs”
- Appointment with credential advisor within 30 days of admission in order to obtain necessary credential information documents and to avoid matriculation or scheduling errors
- Possession of a bachelor’s degree with a GPA of 2.5 or a complete evaluation from a CCTC-approved international evaluation agency.
- Possession of a valid preliminary administrative services credential

Scheduling

All courses are scheduled by an advisor.

Completion Requirements

- A minimum of two years of successful, full-time school administrative experience in the public schools, or private schools of equivalent status. Students must work under contract while holding a valid preliminary administrative services credential for the entire two years.
- Completion of a commission-approved program for the professional administrative services credential
- Grades are “S” (Satisfactory) or “U” (Unsatisfactory). All grades must be “S”.
- Zero account balance

Program Requirements

(3 courses, 13.5 quarter units)

Students must complete all coursework with a grade of “S” within the time allowed by CCTC for the granting of the Tier II credential.

EDA 607 Induction Seminar
EDA 608 Professional Development Seminar
EDA 609 Assessment Seminar

Courses must be completed in the above sequence.

Exit Requirements

- Copy of valid Preliminary Level I Administrative Services credential
- Verification of two years of experience in an educational administrative position
- Exit interview with credentials advisor to obtain and submit application and current CCTC fee
- Exit interview with full-time faculty
- Zero account balance

■ PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL COUNSELING (PPSC)

(780-000-758)

(20 courses, 88.5 quarter units)

This credential authorizes the holder to serve as an educational counselor in a school setting at any grade level K-12. This credential is valid for a maximum of five years, student should see “Admissions to Credential Programs” for specific admission information.

Students who have completed an appropriate master’s degree in counseling or psychology 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, students 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.

Students must maintain a 3.0 GPA. Grades of “D” and “F” are not accepted. Course equivalence cannot be granted for life experience. Students who received a grade less than B- in CED 610, CED 611, CED 603 and CED 601 must repeat the course. Any grades of “C” in two or more classes must be repeated. Students who are absent for a period of 12 months or more must re-enroll and re-matriculate under a new catalog. GPA of lower than 3.0 may be evaluated by the faculty and may be required to repeat the course at their own expense before being allowed to continue in the program.

Admission Requirements

Students seeking a Pupil Personnel Services Credential in School Counseling (PPSC) must:

- Possess an appropriate master’s degree in Educational Counseling, Psychology, or Social Work if entering the credential ONLY program. All students need to have previous coursework evaluated by the PPS lead faculty advisor.
- Attend CED 604, Orientation and Field Experience in School Counseling. Students may take prerequisites only while taking CED 604.
- Students will receive a credential packet, and complete a “candidate statement” that is reviewed and signed by the faculty advisor for admission into the program.
- Students must return their credential packet to the credential advisor by the end of the course otherwise students will receive an “I” for CED 604.

Program Advisement

All PPSC students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor upon admission to the program upon completion of the program and throughout the program as needed.

Program Prerequisites

(3 course, 13.5 quarter units)

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school-age children, preferably in a school or other institutional setting.

Before being admitted to this program, students must complete the following coursework (or equivalent):

MTH 210 Introduction to Probability and Statistics
PSY 301 Child and Adolescent Development
PSY 100 Introduction to Psychology/Counseling

Students will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 604 and prerequisites can be taken prior to admission.

Required Coursework

(13 courses, 58.5 quarter units)

CED 604 Orientation and Field Experience in School Counseling
TED 611 Educational Psychology
CED 600 Advanced Child and Adolescent Development

School of Education

CED 602 Contemporary Issues in School Counseling
CED 606 Development and Evaluation of School Counseling Programs and Services

Advancement to Candidacy

CED 610 Advanced Counseling Theories and Techniques
(Prerequisite: CED 600)

CED 611 Group Counseling
(Prerequisite: CED 610)

CED 603 Multicultural Counseling
(Prerequisite: CED 610)

CED 601 Consultation in the Schools

CED 612 Career and Academic Counseling

CED 613 Psycho-Educational Assessment

CED 614 Legal and Ethical Practices for School Counselors

PED 676 Introduction to Applied Behavior Analysis

Practicum (100 hours)

Students are required to complete 100 hours of practicum prior to starting internship. These hours will be completed throughout CED coursework.

- Proof of Certificate of Clearance or Teaching Credential
- Provide verification of TB clearance
- Complete all prerequisite coursework
- CED 604 plus 10 CED courses including CED 610, CED 611, CED 603 and CED 601)
- Complete 100 hours of approved logged practicum
- Submit an Internship Application to the Internship Coordinator/Lead Faculty and be assigned a University Supervisor.
- Internship is then scheduled by lead faculty or internship coordinator.
- Proof of CBEST

Students should refer to the current *PPS Graduate Handbook for School Counseling* for specific information about the practicum and internship requirements.

Internship

(4 courses, 16.5 quarter units)

(Must be completed in residence/600 hours)

Each 4.5 units of fieldwork requires 200 direct service hours. A minimum of 600 clock hours is required. The student will draft a plan with the Site Supervisor and University Supervisor, meet weekly with the Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to the University Supervisor. The internship consists of the following:

- No more than two sites at one time with no more than two Site Supervisors at one time

Includes two levels

- Students must attend CED 620 sessions concurrently with internship.
- Students will complete (13.5 quarter units) from the following courses (Elementary and Secondary):

CED 620 Best Practices Seminar in School Counseling
(3 quarter units) (taken concurrently with internship)

CED 616 School Counseling Internship Part I (200 hours)

CED 617 School Counseling Internship Part II (200 hours)

CED 618 School Counseling Internship Part III (200 hours)

Exit Requirements

In order to receive a PPSC credential, students must complete courses within seven years and do the following:

- Successful completion of coursework, portfolio, practicum, internship and the exit process.
- Schedule and pass an exit interview with faculty advisor and

University Supervisor

- Pass ETS National Praxis examination-School Counseling (passage score is 570)
- Complete online program Evaluation Form-School Counseling
- Submit written evaluations of performance in Internship experiences by Site Supervisor to University Supervisor
- Schedule and attend exit appointment with credential advisor to receive final clearance and credential documents
- Have a zero account balance

Credential Application Information

Upon successful completion of the coursework and internship, students must meet with a credential advisor to receive, complete and submit the Commission on Teacher Credentialing application form for the PPSC School Counseling credential.

■ PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL PSYCHOLOGY (PPSP)

(780-000-760)

(24 courses, 97.5 quarter units)

This credential authorizes the holder to serve as a school psychologist in a school setting at any grade level K-12. This credential is valid for a maximum of five years. Students should see "Admissions to Credential Programs" for specific admission information.

Students who have completed an appropriate master's degree in counseling, social work or psychology from this or another regionally-accredited institution can work toward a Pupil Personnel Services Credential with a School Psychology Specialization (i.e. without receiving another master's degree). To meet state-required competencies for the credential, students must complete either the entire Master of Science in School Psychology or the prerequisites and requirements for the MS in School Psychology not already met in graduate coursework.

Students must maintain a 3.0 GPA. Students who receive a grade of a "C" in two or more courses will be evaluated by the faculty and will be required to repeat the coursework at their own expense before being allowed to continue in the program. A grade less than B- is not accepted in CED 600, PED 665, PED 680 and PED 667

Admission Requirements

Students seeking a Pupil Personnel Services Credential in School Psychology (PPSP) must:

- Possess an appropriate master's degree in Educational Counseling or Psychology if entering the credential ONLY program.
- Attend PED 604, Orientation and Field Experience in School Psychology. Students may take prerequisites only while taking PED 604.
- Students will receive a credential packet, and complete a "candidate statement" that is reviewed and signed by the faculty advisor for admission into the program.
- Students must return their credential packet to the credential advisor by the end of the course otherwise students will receive an "I" for PED 604.

Program Advisement

All PPSP students will be assigned a faculty advisor. All students are expected to meet with their assigned faculty advisor upon admission into the program and throughout the program, before starting their internship and after completion of coursework and internship hours.

Program Prerequisites

(4 courses, 18 quarter units)

It is strongly recommended that applicants have one year of related professional experience working with school-age children, preferably in a school or other institutional setting. Before being admitted to this program, students must complete the following coursework (or equivalent).

MTH 210	Introduction to Probability and Statistics
PSY 301	Child Development
PSY 430	Abnormal Psychology/Psychopathology
EXC 625	Exceptional Children in the Classroom

Students will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only PED 604 and prerequisites can be taken concurrently prior to admission

Required Coursework

(19 courses, 82.5 quarter units)

PED 604	Orientation and Field Experience in School Psychology (1.5 quarter units)
CED 600	Advanced Child/Adolescent Development
PED 680	Roles, Issues and Ethics in School Psychology
PED 665	Tests and Measurements
PED 667	Graduate Seminar in Child/Adolescent Psychopathology
Advancement to Candidacy	
CED 610	Advanced Counseling Theories and Techniques (Prerequisite: CED 600)
PED 666	Graduate Seminar in Human Neuropsychology
CED 601	Consultation in the Schools
PED 683	Program Evaluation
PSY 652	Psychopharmacology
PED 670	Graduate Seminar in Social Psychology
PED 671	Assessment of Cognitive Abilities (Prerequisites: PED 665, PED 680)
PED 672	Advanced Psycho-educational Assessment (Prerequisite: PED 671)
PED 673	Emotional/ Behavior Assessment of Children and Adolescents (Prerequisite: PED 672)
PED 674	Preschool/Low Incidence Assessment (Prerequisite: PED 673)
PED 675	Alternative Assessment for Multicultural Populations (Prerequisite: PED 674)
PED 676	Introduction to Applied Behavior Analysis (Prerequisite: all assessment courses)
PED 677	Graduate Seminar in Curriculum Assessment and Interventions
PED 678	Practicum in School Psychology (can be taken concurrently with PED 675)

Students are required to complete 450 hours of practicum prior to starting their internship. Students must complete the practicum experience under the supervision of a credentialed (two years) school psychologist. National University school psychology students will complete all practicum experiences in the school setting .

In PED 678 (Practicum in School Psychology) students will do their practicum hours and experiences through self-analysis, feedback, group activities and video critiques only in school based settings. Student performance will be evaluated by program faculty and a school site psychologist through completion of course requirements.

Internship Prerequisites

Before beginning internship, students must:

- Provide Proof of Certificate of Clearance or a Teaching Credential

- Provide verification of TB clearance
- Complete prerequisite coursework and all PED courses (except PED 685)
- Complete 450 hours of approved, logged practicum
- Submit a Internship Application to the Internship Coordinator/Lead Faculty and be assigned a University Supervisor.
- Internship is then scheduled by Placement Specialist
- Pass CBEST

Students should refer to the current *PPS Graduate Handbook for School Psychology* for specific information about the practicum and internship requirements.

Internship

(5 courses, 21 quarter units)

(Must be completed in residence/1200 hours)

Each 4.5 units of internship 300 direct service hours. A minimum of 1200 clock hours is required. The student will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 300 hours of internship, submit logs to University Supervisor. The internship consists of the following:

- No more than two sites at one time with no more than two Site Supervisors at one time
- Includes two levels (Elementary and Secondary)

PED 685	Best Practices Seminar in School Psychology (Taken concurrently with internship) (3 quarter units)
PED 687	School Psychology Internship Part I (300 hours)
PED 688	School Psychology Internship Part II (300 hours)
PED 689	School Psychology Internship Part III (300 hours)
PED 690	School Psychology Internship Part IV (300 hours)

Exit Requirements

In order to receive a PPSP credential, students must complete courses within seven years and do the following requirements:

- Successful completion of coursework, portfolio, practicum, internship and the exit process.
- Schedule and pass an exit interview with faculty advisor and University Supervisor
- Pass ETS National Praxis examination-School Psychology (passage score is 590)
- Complete online program Evaluation Form-School Psychology
- Submit written evaluations of performance in Internship experiences by Site Supervisor to University Supervisor
- Schedule and attend exit appointment with credential advisor to receive final clearance and credential documents
- Schedule and attend exit appointment with credential advisor to receive final clearance and credential documents
- Have a zero account balance

Credential Application Information

Candidates are supposed to complete their internship within 18 months. Upon successful completion of the coursework and internship, students must meet with a credential advisor to complete and submit the Commission on Teacher Credentialing application form for the PPSP School Psychology credential.

School of Education

PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIALS:

Mild/Moderate Disabilities or Moderate/Severe Disabilities with CLAD Certificate or concurrent Multiple or Single subject credential

In California, Preliminary Level I Education Specialist Credentials in Mild/Moderate Disabilities and Moderate/Severe Disabilities authorize the provision of services to individuals in grades K through 12, including adults. The Mild/Moderate Disabilities credential authorizes the teaching of individuals with specific learning disabilities, mental retardation, other health impairments and emotional disturbance. The Moderate/Severe Disabilities credential authorizes the teaching of individuals with autism, mental retardation, deaf-blindness, emotional disturbance and multiple disabilities.

For students enrolled in the Level I Education Specialist credential with a CLAD certificate, please note that classes have been approved as a set by the CCTC. No coursework is accepted in transfer from another university for this program and no substitutions are allowed. All coursework for the CLAD certificate must be taken at National University for us to provide a recommendation to the CCTC.

Although many of the courses in this credential program are offered online, certain testing courses and fieldwork in the Advanced Specialization program must be taken on-site.

Admission Requirements

Before being accepted to the credential program, students must possess a bachelor's degree from a regionally-accredited college or university and be enrolled in the University. Students with a non-U.S. degree must receive an evaluation from a CCTC-approved international evaluation agency prior to admission and starting the first course. Students are admitted to the credential program when they attend the credential orientation meeting (EXC 602A or a separate NU orientation) and return the completed credential packet. (See Admission to Credential Programs in the previous section.)

National University recognizes its responsibility to exercise judgment in recommending persons for California teaching credentials. Students must submit a completed credentials packet and be interviewed by a credential advisor and a School of Education faculty member. The credentials packet is available from a credential advisor at the credential orientation (EXC 602A or a separate NU orientation) meeting and must be completed and submitted before the end of course EXC 602A, within the first 30 days of enrollment. Course equivalence is not granted for life experience.

Recommendation for Preliminary Level I Education Specialist Credential

In order to be recommended for a California Preliminary Level I Education Specialist credential in Mild/Moderate or Moderate/Severe Disabilities, students must show:

- Successful completion of the admission process
- Successful completion of the field experience activities, including Student Teaching
- Successful completion of the program within seven years
- Proof of passing with a grade of "C" or better coursework or an examination on the U.S. Constitution
- Official transcripts of all colleges/universities attended on file at National University
- Proof of passing CBEST. Highly recommended taking before admission to program.
- Proof of meeting the appropriate subject matter competence
- Completion of 31.5 quarter units in residence
- Valid CPR certification for Infant, Child and Adult

- Maintenance of a GPA of 3.0 in credential program coursework; "D" and "F" grades are not accepted.
- Receipt of a Certificate of Clearance before student teaching
- Successful completion of the generic core and advanced specialization requirements
- Proof of passing the Reading Instruction Competence Assessment (RICA) (Required for initial Multiple Subject, and Education Specialist teacher candidates.)
- Verification of passing scores (BCLAD only) on the oral and written language proficiency examinations.

Scheduling

All generic courses are scheduled by an advisor. A member of the credential department will schedule the advanced specialization courses and student teaching when students complete generic core exam and submit a completed credential packet during EXC 602A.

Admission to Field Experiences

Before beginning any part of the Student Teaching, students must:

- Return the completed credentials packet within 30 days of admission and orientation
- Provide proof of passing the CBEST*
- Demonstrate subject-matter competency*
- Provide proof of possession of a Certificate of Clearance
- Provide verification of a negative tuberculin examination within four years of student teaching
- Interview with a School of Education faculty member
- Complete all other coursework in the Education Specialist program
- Complete the prerequisite coursework with a 3.0 GPA. "D" and "F" grades are not accepted.

* Highly recommended prior to admission and at the first available test date after enrollment. Must be passed prior to advanced specialization classes.

Note: Detailed requirements for field experiences are listed in the Student Teaching Handbook and in the Credential Packet.

See a Credential Advisor for specific information regarding any of these requirements.

■ PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL:

Mild/Moderate Disabilities with CLAD Certificate (780-356)

(22 courses, 84 quarter units)

Program Prerequisites

These courses are required prior to student teaching.
(2 courses, 9 quarter units)

HED 602 Introductory Health Education: K-12
EDT 608 Computer-Based Technology in the Classroom

Core Requirements

(10 courses, 42 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

EXC 602A Field Experience: Special Education
(3 quarter units)
EXC 602B Field Experience: Inclusive Settings
(3 quarter units)
EXC 604 Exceptionality and Diversity in the Classroom
TED 615 Foundations of Education
TED 611 Educational Psychology
EXC 620 Positive Behavior Support

- EXC 630 Assessment and Instructional Planning for Special Needs Students
(Meets one night per week over two months)
- TED 621A Language Development Methods for the Elementary School
(Prerequisite: TED 615)
- or
- TED 623 Language Development Methods for Secondary and Middle Schools
(Prerequisite: TED 615)
- TED 621B Reading and Language Arts for the Elementary School
(Prerequisites: TED 615 and TED 621A)
- EXC 650 Consultation and Collaboration for Special Education

Generic Core Exam

Verify passage of CBEST and Subject Matter Competency
Note: must be passed prior to enrollment in Advanced Specialization Courses.

Advanced Specialization Requirements

(10 courses, 33 quarter units)

- EXC 644 Reading and Language Arts Methods for Special Education (one night per week over two months)
- EXC 644A Field Study: Reading and Language Arts Methods for Special Education
(1.5 quarter units)
- EXC 660 Instruction of Learners with Mild/Moderate Disabilities
- EXC 660A Field Study: Instruction of Learners with Mild/Moderate Disabilities
(1.5 quarter units)
- EXC 615 Technology for Persons with Disabilities
- EXC 615A Field Study: Technology for Persons with Disabilities
(1.5 quarter units)

and

- EXC 603A Student Teaching Seminar
(Note: Must be taken concurrently with Student Teaching) (1.5 quarter units)
- EXC 685A Student Teaching: Mild/Moderate Disabilities - I
- EXC 685B Student Teaching: Mild/Moderate Disabilities - II
- Exit Portfolio

Exit Exam Apply for Mild/Moderate Level Credential
Must obtain Clearance to take CLAD 627 to apply for CLAD Certificate.

- CLD 627 Methods for Cross-Cultural Instruction
(taken after completion of student teaching)

Apply for CLAD Certificate.

CLAD certificate classes have been approved as a set by the CCTC. No coursework is accepted in transfer from another university for this program and no substitutions are allowed. Students must hold a valid credential to be granted a certificate.

The following must be in student's file prior to filing for a credential:

- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework
- Certificate of Clearance
- Successful completion of the exit process, including passing the Exit Exam.
- Passing grade on the CBEST.
- Verification of subject matter competency.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- Attend exit appointment with credential advisor to receive final clearance and credential documents

PRELIMINARY LEVEL I EDUCATION

SPECIALIST CREDENTIAL:

Moderate/Severe Disabilities with CLAD Certificate
(780-357)
(22 courses, 84 quarter units)

Program Prerequisites

These courses are required prior to student teaching.
(2 courses, 9 quarter units)

- HED 602 Introductory Health Education: K-12
- EDT 608 Computer-Based Technology in the Classroom

Core Requirements

(10 courses, 42 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

- EXC 602A Field Experience: Special Education (3 quarter units)
- EXC 602B Field Experience: Inclusive Settings (3 quarter units)
- EXC 604 Exceptionality and Diversity in the Classroom
- TED 615 Foundations of Education
- TED 611 Educational Psychology
- EXC 620 Positive Behavior Support
- EXC 630 Assessment and Instructional Planning for Special Needs Students (One night per week over two months)
- TED 621A Language Development Methods for the Elementary School
(Prerequisite: TED 615)

or

- TED 623 Language Development Methods for Secondary and Middle Schools
- TED 621B Reading and Language Arts Methods for the Elementary School
(Prerequisites: TED 615 and TED 621A)
- EXC 650 Consultation and Collaboration for Special Education
- Generic Core Exam

Note: The subject matter examination and CBEST must be taken and passed before the candidate can register for the Advanced Specialization courses.

Advanced Specialization Requirements

(10 courses, 33 quarter units)

- EXC 644 Reading and Language Arts Methods for Special Education (one night per week over two months)
- EXC 644A Field Study: Reading and Language Arts Methods for Special Education (1.5 quarter units)
- EXC 665 Instruction of Learners with Moderate/Severe Disabilities
- EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5 quarter units)
- EXC 615 Technology for Persons with Disabilities
- EXC 615A Field Study: Technology for Persons with Disabilities (1.5 quarter units)

and

- EXC 603A Student Teaching Seminar
(Must be taken concurrently with student teaching)(1.5 quarter units)
- EXC 690A Student Teaching: Moderate/Severe Disabilities - I
- EXC 690B Student Teaching: Moderate/Severe Disabilities - II
- Exit Exam Apply for Moderate/Severe Level Credential
Must obtain Clearance to take CLD 627 to apply for CLAD Certificate.
- CLD 627 Methods for Cross-Cultural Instruction
(taken after completion of student teaching)

Apply for CLAD Certificate

The following must be in student's file prior to filing for a credential:

- Proof of passing the U.S. Constitution exam or transcript

School of Education

- verifying completed U.S. Constitution coursework
- Certificate of Clearance
- Successful completion of the exit process, including passing the Exit Exam.
- Passing grade on the CBEST.
- Verification of subject matter competency.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- Attend exit appointment with credential advisor to receive final clearance and credential documents

■ PRELIMINARY LEVEL I EDUCATION

SPECIALIST:

Mild/Moderate Disabilities with Multiple or Single Subject Credential Concurrent with BCLAD option

(26 courses, 100.5 quarter units TED)
(780-356) (-362 Single) (-363 Multiple)
(27 courses, 105 quarter units BCLAD)
(780-356) (-364 B Single) (-365 B Multiple)

Program Prerequisites

These courses are required prior to student teaching.
(2 courses, 9 quarter units)

HED 602 Introductory Health Education: K-12
EDT 608 Computer-Based Technology in the Classroom

BCLAD students must pass the oral language, grammar, reading and writing proficiency examinations prior to methods courses.

Core Requirements

(TED 10 courses, 42 quarter units)
(BCLAD 11 courses, 46.5 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

EXC 602A Field Experience: Special Education (3 quarter units)
EXC 602B Field Experience: Inclusive Settings (3 quarter units)
EXC 604 Exceptionality and Diversity in the Classroom
BTE 612 History and Culture of Latinos in the United States (BCLAD only, taught in language of emphasis)
TED 615 Foundations of Education
TED 611 Educational Psychology
EXC 620 Positive Behavior Support
EXC 630 Assessment and Instructional Planning for Special Needs Students
TED 621A Language Development Methods for the Elementary School
(Prerequisite: TED 615)
or
TED 623 Language Development Methods for Secondary and Middle Schools
(Prerequisite: TED 615)
TED or BTE 621B Reading and Language Arts Methods for the Elementary School
(Prerequisites: TED 615 and TED 621A)
EXC 650 Consultation and Collaboration for Special Education
Generic Core Exam

Multiple Subject

(2 courses, 9 quarter units)

TED 622A Curriculum and Instruction I: History, Social Science,

PE., Visual and Performing Arts
(Prerequisites: TED 615 and TED 621A)

and

TED 622B Curriculum and Instruction II: Math and Science
(Prerequisites: TED 615 and TED 621A)

or

BTE 622A Curriculum and Instruction I: History, Social Science, PE., Visual and Performing Arts (taught in language of emphasis)
(Prerequisites: TED 615 and TED 621A)

and

BTE 622B Curriculum and Instruction II: Math and Science (taught in language of emphasis)
(Prerequisites: TED 615 and TED 621A)

or

Single Subject

(2 courses, 9 quarter units)

TED 625A Curriculum and Development for Secondary and Middle Schools
(Prerequisites: TED 615 and TED 623)

and

TED 625B Instruction and Classroom Management for Secondary and Middle Schools
(Prerequisites: TED 615, TED 623 and TED 625A)

or

BTE 625A Curriculum and Development for Secondary and Middle Schools (taught in language of emphasis)
(Prerequisites: TED 615 and TED 623)

and

BTE 625B Instruction and Classroom Management for Secondary and Middle Schools (taught in language of emphasis)
(Prerequisites: TED 615, TED 623 and BTE 625A)

Note: Proof of subject matter competence and CBEST are required before the candidate can register for the Advanced Specialization courses.

Advanced Specialization Requirements

(12 courses, 40.5 quarter units)

EXC 644 Reading and Language Arts Methods for Special Education (one night per week over two months)
EXC 644A Field Study: Reading and Language Arts Methods for Special Education
(1.5 quarter units)
EXC 660 Instruction of Learners with Mild/Moderate Disabilities
EXC 660A Field Study: Instruction of Learners with Mild/Moderate Disabilities (1.5 quarter units)
EXC 615 Technology for Persons with Disabilities
EXC 615A Field Study: Technology for Persons with Disabilities (1.5 quarter units)
TED 629 Student Teaching Seminar (3 quarter units)
TED or BTE 630A Beginning Student Teaching
TED or BTE 630B Student Teaching (General Education)
EXC 685A Student Teaching: Mild/Moderate Disabilities - I
and
EXC 603A Student Teaching Seminar
(Must be taken concurrently with student teaching)(1.5 quarter units)
EXC 685B Student Teaching: Mild/Moderate Disabilities - II
Exit Portfolio - Multiple or Single Subject Credential, Special Education
Exit Exam - Mild/Moderate Level I Credential

The following must be in student's file prior to filing for a credential:

- Proof of a bachelor's degree from a regionally accredited IHE with a GPA of 2.5.
- Copy of evaluation (if a non- U.S. degree) by a CCTC-approved international evaluation agency.

- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework
- Certificate of Clearance
- Successful completion of the exit process, including passing the Exit Exam.
- Passing grade on the CBEST.
- Verification of subject matter competency.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- Attend exit appointment with credential advisor to receive final clearance and credential documents

■ PRELIMINARY LEVEL I EDUCATION

SPECIALIST:

Moderate/Severe Disabilities with Multiple or Single

Subject Concurrent Credential with BCLAD option

(26 courses, 100.5 quarter units TED)

(780-357) (-362 Single) (-363 Multiple)

(27 courses, 105 quarter units BCLAD)

(780-357) (-364 B Single) (-365 B Multiple)

Program Prerequisites

These courses are required prior to student teaching.
(2 courses, 9 quarter units)

HED 602 Introductory Health Education: K-12

EDT 608 Computer-Based Technology in the Classroom

BCLAD students must pass the oral language, grammar, reading and writing proficiency examinations prior to methods courses.

Core Requirements

(TED 10 courses, 42 quarter units)

(BCLAD 11 courses, 46.5 quarter units)

Field experience courses must be taken at the beginning of the program and may be taken concurrently with other courses.

EXC 602A Field Experience: Special Education (3 quarter units)

EXC 602B Field Experience: Inclusive Settings (3 quarter units)

EXC 604 Exceptionality and Diversity in the Classroom

BTE 612 History and Culture of Latinos in the United States (BCLAD only) (taught in language of emphasis)

TED 615 Foundations of Education

TED 611 Educational Psychology

EXC 620 Positive Behavior Support

EXC 630 Assessment and Instructional Planning for Special Needs Students

TED 621A Language Development Methods for the Elementary School

(Prerequisite: TED 615)

or

TED 623 Language Development Methods for Secondary and Middle Schools

(Prerequisite: TED 615)

TED or BTE 621B

Reading and Language Arts Methods for the Elementary School

(Prerequisites: TED 615 and TED 621A)

EXC 650 Consultation and Collaboration for Special Education Generic Core Exam

Multiple Subject

(2 courses, 9 quarter units)

TED 622A Curriculum and Instruction I: History, Social Science, P.E., Visual and Performing Arts
(Prerequisites: TED 615 and TED 621A)

and

TED 622B Curriculum and Instruction II: Math and Science
(Prerequisites: TED 615 and TED 621A)

or

BTE 622A Curriculum and Instruction I: History, Social Science, P.E., Visual and Performing Arts (taught in language of emphasis)
(Prerequisites: TED 615 and TED 621A)

and

BTE 622B Curriculum and Instruction II: Mathematics and Science (taught in language of emphasis)
(Prerequisites: TED 615 and TED 621A)

or

Single Subject

(2 courses, 9 quarter units)

TED 625A Curriculum and Development for Secondary and Middle Schools
(Prerequisites: TED 615 and TED 623)

and

TED 625B Instruction and Classroom Management for Secondary and Middle Schools
(Prerequisites: TED 615, TED 623 and TED 625A)

or

BTE 625A Curriculum and Development for Secondary and Middle Schools (taught in language of emphasis)
(Prerequisites: TED 615 and TED 623)

and

BTE 625B Instruction and Classroom Management for Secondary and Middle Schools (taught in language of emphasis)
(Prerequisites: TED 615, TED 623 and BTE 625A)

Note: Proof of subject matter competence and CBEST are required before the candidate can register for the Advanced Specialization courses.

Advanced Specialization Requirements

(12 courses, 40.5 quarter units)

EXC 644 Reading and Language Arts Methods for Special Education (one night per week over two months)

EXC 644A Field Study: Reading and Language Arts Methods for Special Education (1.5 quarter units)

EXC 665 Instruction of Learners with Moderate/Severe Disabilities

EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5 quarter units)

EXC 615 Technology for Persons with Disabilities

EXC 615A Field Study: Technology for Persons with Disabilities (1.5 quarter units)

TED 629 Student Teaching Seminar (3 quarter units)

TED or BTE 630A Beginning Student Teaching

and

EXC 603A Student Teaching Seminar (1.5 quarter units)

TED or BTE 630B Student Teaching (General Education)

EXC 690A Student Teaching: Moderate/Severe Disabilities - I

EXC 690B Student Teaching: Moderate/Severe Disabilities - II

Exit Portfolio - Multiple or Single Subject Credential

Exit Exam - Moderate/Severe Level I Credential

The following must be in student's file prior to filing for a credential:

- Proof of passing the U.S. Constitution exam or transcript verifying completed U.S. Constitution coursework

School of Education

- Certificate of Clearance
- Successful completion of the exit process, including passing the Exit Exam.
- Passing grade on the CBEST.
- Verification of subject matter competency.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance prior to student teaching and completion.
- Completion of a minimum of 31.5 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- Attend exit appointment with credential advisor to receive final clearance and credential documents

■ PRELIMINARY LEVEL I:

EDUCATION SPECIALIST CREDENTIAL: DEAF AND HARD-OF-HEARING DISABILITIES WITH CLAD CERTIFICATE

(780-372)

(25 courses, 109.5 quarter units)

Admission to the Program

- Bachelor of Arts degree from an accredited college or university
- Personal goals essay not to exceed two pages, double spaced
- 2.5 GPA or better
- Intermediate proficiency or better in American Sign Language competence as assessed by Proficiency Interview
- Passing score on the CBEST
- Passing score on the CSET is encouraged at the point of admission to the program. It is required prior to student teaching.
- A minimum of forty documented hours of observation/participation in general education settings and a minimum of forty documented hours of observation/participation in classes and programs for learners who are deaf or hard of hearing.

Prerequisite Courses

(9 courses, 39 quarter units)

PSY 100	Introduction to Psychology
PSY 301	Child and Adolescent Development
PSY 427	Biological Psychology
PSY 431	Theories and Techniques of Psychological Testing
HED 602	Introductory Health Education: K-12
EDT 608	Computer based Technology in the Classroom
EXC 603	Typical and Atypical Development in Young Children
EXC 604	Exceptionality and Diversity in the Classroom
EXC 602B	Field Experience: Inclusive Settings (3 quarter units)

United State Constitution Requirement: pass test or submit course transcript

Interdisciplinary Core Courses

(5 courses, 22.5 quarter units)

TED 605	The Diverse Classroom
TED 615	The Foundations of Education
EXC 620	Supporting Positive Behavior
TED 621A	Language Development Methods in Elementary School
CLD 627	Methodology for Cross-Cultural Instruction

Core Courses for the Education Specialist: Deaf and Hard-of-Hearing Credential

(11 courses, 48 quarter units)

DHH 600	Introduction to Education of Learners who are Deaf or Hard-of-Hearing: Theory and Practice
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DHH 601	Signed and Spoken Language Acquisition and Development I
DHH 602	Signed and Spoken Language Acquisition and Development II
DHH 603	Assessment of Learners who are Deaf or Hard-of-Hearing
DHH 604	Development of Literacy with Learners who are Deaf or Hard-of-Hearing
DHH 605	Teaching Deaf Learners with Additional Special Needs
DHH 606	Curriculum and Instruction in Programs for Deaf and Hard-of-Hearing Learners
DHH 607	Bilingual – Multicultural Education of Deaf and Hard-of-Hearing Learners
DHH 608A	Student Teaching I
DHH 608B	Student Teaching II
DHH 609	Student Teaching Seminar (3 quarter units)

Exit Requirements

- Pass all required coursework with a B average. No grades of D or F are accepted.
- Pass the RICA
- CPR certification
- Certificate of clearance (including fingerprint clearance)
- Letter of recommendation from Master Teacher
- Comprehensive Examination
- Apply for credential and CLAD certificate.

SPECIAL EDUCATION INTERNSHIPS

(781)

A limited number of special education internships are available through partnerships with public school districts and approved non-public agencies. The internship program is intense and students must be selected to participate. Contact your regional special education lead faculty for inquiries about available internships.

Special Education Internship

The National University Special Education Internship credential program is designed to prepare candidates with the knowledge and skills to implement a variety of research-validated methods and strategies focused on instructional programs for a diverse population of K-12 students with disabilities. Internship agreements are developed with local school districts and non public agencies that serve students with disabilities

Program participants serve as special education teachers on contract under the State of California's University Internship credential while completing their Level I Education Specialist preparation program. Interns receive support from mentor teachers, throughout the time they are participating in the credential program. Support is provided directly in the classroom on a monthly basis. The credential program offered through National University extends over approximately eighteen months of course and field work.

Students interested in the Special Education internship need to make an appointment to meet with a Credential Advisor to determine if the following requirements for acceptance into the Special Education Internship program have been met:
Possession of a baccalaureate degree.

- Subject matter competence verified by exam (MSAT or SSAT or CSET).
- Completion of a U.S. Constitution course or exam.
- Passage of CBEST.
- Completion of pre-service coursework EXC 602A and EXC 604
- Negative TB test
- Certificate of Clearance (or possess a 30-day substitute permit)
- Completion of an Admissions Application

School of Education

- Interview with the Intern Faculty Advisor
- Offer of employment as a full time intern teacher in a school district or approved Non-public agency affiliated as a partner with the National University Intern Credential program.

The University Intern is contracted with a local school K-12 district or a non-public agency during the time they are enrolled in the university internship program. As such, they serve as employees of the district/agency and as Interns with the university. Interns will receive support from a local site Intern Support Provider and from a National University Supervisor. Interns should receive a minimum of 4 months of support prior applying for the supervised teaching experience at the end of the credential program.

■ INTERNSHIP - PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL: Mild/Moderate or Moderate/Severe Disabilities with CLAD Certificate

(21 courses, 78 quarter units)

Pre-service Coursework

(2 courses, 7.5 quarter units)

- EXC 602A Field Experience: Special Education (3)
EXC 604 Exceptionality and Diversity in the Classroom (4.5)

Internship Coursework Generic Core

(12 courses, 51 credits)

- CLD 627 Methodology for Cross-Cultural Instruction (4.5)
(This course is a required course for the CLAD certificate and fulfills internship requirements)
- EXC 602B Field Experience: Inclusive Settings (3)
EXC 655I Professional Induction Seminar (3)
TED 615 Foundations of Education (4.5)
TED 611 Educational Psychology (4.5)
HED 602 Introductory Health Education: K-12 (4.5)
EDT 608 Computer Based Technology in the Classroom (4.5)
EXC 620 Positive Behavior Support (4.5)
EXC 630 Assessment and Instructional Planning for Special Needs Students (4.5)
TED 621A Language Development Methods for the Elementary School (4.5)

or

- TED623 Language Development Methods for secondary and Middle Schools (4.5)
TED621B Reading and language Arts Methods for the Elementary School (4.5)
EXC 650 Consultation and Collaboration for Special Education (4.5)

**At this point the generic core exam must be successfully completed for advancement in the program.*

Advanced Specialization Requirements

(7 courses: 19.5 quarter units)

- EXC 644 Reading and language Arts Methods for Special Education (4.5)
EXC 644A Field Study: Reading and Language Arts Methods for Special Education (1.5)
EXC 660 Instruction of Learners with Mild/Moderate Disabilities (4.5)
EXC 660A Field Study: Instruction of Learners with Mild/Moderate Disabilities (1.5)

or

- EXC 665 Instruction of Learners with Moderate/Severe Disabilities (4.5)

- EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities (1.5)
EXC 615 Technology for Persons with Disabilities (4.5)
EXC 615A Field Study: Technology for Persons with Disabilities (1.5)
EXC 603A Student Teaching Seminar (1.5) To be taken during the "supervised teaching" experience at the end of the program (see below).

During the final courses in the Intern's program they must also complete 45 days of supervised teaching during which a University designated supervisor along with a district designated supervisor complete a series of observations and evaluations to assess the Intern's teaching competencies. Interns must successfully complete the Exit exam and the RICA exam.

Following this, candidates may apply for the Preliminary Education Specialist Credential.

Post-Internship Requirements

The CLAD Certificate may be filed if candidates have completed CLD 627 Methodology for Cross-Cultural Instruction and filed the Preliminary Education Specialist Credential.

■ INTERNSHIP - PRELIMINARY LEVEL I EDUCATION SPECIALIST CREDENTIAL Mild/Moderate or Moderate/Severe Disabilities with concurrent Multiple or Single Subject Credential with BCLAD option

(TED 25 courses, 94.5 quarter units)
(BCLAD 26 courses, 99 quarter units)

BCLAD students must pass the oral language, grammar, reading and writing proficiency examinations prior to methods courses.

Pre-service Coursework

(3 courses, 10.5 quarter units)

- EXC 602A Field Experience: Special Education (3 quarter units)
EXC 602B Field Experience: Inclusive Settings (3 quarter units)
EXC 604 Exceptionality and Diversity in the Classroom

Core Requirements

(11 courses, 48 quarter units)

- TED 621B Reading and Language Arts Methods for the Elementary School
(Prerequisites: TED 615 and TED 621A)
HED 602 Introductory Health Education: K-12
EXC 655I Professional Induction Seminar (3 quarter units)
EDT 608 Computer-Based Technology in the Classroom
TED 611 Educational Psychology
EXC 620 Positive Behavior Support
EXC 630 Assessment and Instructional Planning for Special Needs Students
TED 621A Language Development Methods for the Elementary School
(Prerequisite: TED 615)

or

- TED 623 Language Development Methods for Secondary and Middle Schools
(Prerequisite: TED 615)
TED or BTE 622B Curriculum and Instruction II: Mathematics and Science (MS)
(Prerequisites: TED 615 and TED 621A)

or

School of Education

TED or BTE 625A Curriculum and Development for Secondary and Middle Schools (SS)

(Prerequisites: TED 615 and TED 623)

TED or BTE 622A Curriculum and Instruction I: History, Social Science, PE, Visual and Performing Arts (MS)

(Prerequisites: TED 615 and TED 621A)

or

TED or BTE 625B Instruction and Classroom Management for Secondary and Middle Schools (SS)

(Prerequisites: TED 615, TED 623 and TED 625A)

EXC 650 Consultation and Collaboration for Special Education

*At this point the generic core exam must be successfully completed for advancement in the program.

Advanced Specialization Requirements

(7 courses, 19.5 quarter units)

EXC 644 Reading and Language Arts Methods for Special Education (one night per week over two months)

EXC 644A Field Study-Reading and Language Arts Methods for Special Education (1.5 quarter units)

EXC 660 Instruction of Learners with Mild/Moderate Disabilities

EXC 660A Field Study: Instruction of Learners with Mild/Moderate Disabilities (1.5 quarter units)

or

EXC 665 Instruction of Learners with Moderate/Severe Disabilities

EXC 665A Field Study: Instruction of Learners with Moderate/Severe Disabilities

EXC 615 Technology for Persons with Disabilities

EXC 615A Field Study: Technology for Persons with Disabilities (1.5 quarter units)

EXC 603A Student Teaching Seminar

*At this point students must successfully complete the special education exit exam. The special education intern teaching experience and the RICA exam.

Post-Internship Coursework

(TED 4 courses, 16.5 quarter units)

(BCLAD 5 courses, 21 quarter units)

BTE 612 History and Culture of Latinos in the United States (BCLAD students only)

TED 615 Educational Foundations

TED 629 Student Teaching Seminar

TED or BTE 630A Beginning Student Teaching

TED or BTE 630B Student Teaching (General Education)

*At this point the student must successfully pass the multiple or single subject exit portfolio. An application can be filed for the multiple or single subject credential and the Preliminary Education Specialist Credential.

The following must be in student's file prior to filing for a credential:

- Successful completion of the exit process, including passing the Exit Exam.
- Proof of passing the Reading Instruction Competence Assessment (RICA).
- Zero account balance
- Completion of a minimum of 31 quarter units in residence.
- Completion of credential program within seven years.
- Grades "D" and "F" are not accepted.
- Attend exit appointment with credential advisor to receive final clearance and credential documents.

■ PRELIMINARY LEVEL I:

EDUCATION SPECIALIST CREDENTIAL:

DEAF AND HARD-OF-HEARING DISABILITIES INTERNSHIP WITH CLAD CERTIFICATE

(781-373)

(23 courses, 100.5 quarter units)

Admission to the Program

- Bachelor of Arts degree from an accredited college or university
- Personal goals essay not to exceed two pages, double spaced
- 2.5 GPA or better
- Intermediate proficiency or better in American Sign Language competence as assessed by Proficiency Interview
- Passing score on the CBEST
- Passing score on the CSET is encouraged at the point of admission to the program. It is required prior to student teaching.
- A minimum of forty documented hours of observation/participation in general education settings and a minimum of forty documented hours of observation/participation in classes and programs for learners who are deaf or hard of hearing.

Prerequisite Courses

(9 courses, 39 quarter units)

PSY 100 Introduction to Psychology

PSY 301 Child and Adolescent Development

PSY 427 Biological Psychology

PSY 431 Theories and Techniques of Psychological Testing

HED 602 Introductory Health Education: K-12

EDT 608 Computer based Technology in the Classroom

EXC 603 Typical and Atypical Development in Young Children

EXC 604 Exceptionality and Diversity in the Classroom

EXC 602B Field Experience: Inclusive Settings (3 quarter units)

United State Constitution Requirement: pass test or submit course transcript

Interdisciplinary Core Courses

(6 courses, 25.5 quarter units)

TED 605 The Diverse Classroom

TED 615 The Foundations of Education

EXC 620 Supporting Positive Behavior

TED 621A Language Development Methods in Elementary School

CLD 627 Methodology for Cross-Cultural Instruction

EXC 655I Professional Induction Seminar for the Internship Program (3 quarter units)

Core Courses for the Education Specialist: Deaf and Hard-of-Hearing Credential

(8 courses, 36 quarter units)

DHH 600 Introduction to Education of Learners who are Deaf or Hard-of-Hearing: Theory and Practice

DHH 601 Signed and Spoken Language Acquisition and Development I

DHH 602 Signed and Spoken Language Acquisition and Development II

DHH 603 Assessment of Learners who are Deaf or Hard-of-Hearing

DHH 604 Development of Literacy with Learners who are Deaf or Hard-of-Hearing

DHH 605 Teaching Deaf Learners with Additional Special Needs

DHH 606 Curriculum and Instruction in Programs for Deaf and Hard-of-Hearing Learners

DHH 607 Bilingual – Multicultural Education of Deaf and Hard-of-Hearing Learners

Exit Requirements

- Pass all required coursework with a B average. No grades of D or F are accepted.
- Pass the RICA
- CPR certification
- Certificate of clearance (including fingerprint clearance)
- Letter of recommendation from Master Teacher
- Comprehensive Examination
- Apply for credential and CLAD certificate.

PROFESSIONAL LEVEL II EDUCATION SPECIALIST CREDENTIALS

In California's credential structure, Professional Level II preparation is intended to enable new teachers to apply their Preliminary Level I preparation to the demands of professional positions while also fostering advanced skills and knowledge. The emphasis of the professional preparation program is to move special educators beyond the functional aspects of teaching to more advanced knowledge and reflective thinking about their roles in providing effective instruction and an environment for student success.

Admission Requirements

All applicants for admission must provide National University with the following documents:

- Formal application to the University
- Valid Preliminary Level I Education Specialist Credential
- CTC form CL777.1 from the applicant's employer verifying that the applicant is employed in a full-time special education position
- Verification from the applicant's employer that the current position has a probable duration of two years
- Verification that the student has maintained a minimum of a 2.5 grade point average on a 4.0 scale for graduate work
- All students must complete a credentials packet and be interviewed by a credential advisor within the first 30 days of enrollment.
- All students must enroll in electronic portfolio.

Recommendation for Professional Level II Education Specialist Credentials

In order to be recommended for a California Professional Level II Education Specialist Credential in Mild/Moderate or Moderate/Severe Disabilities, student must show:

- A minimum of two years of successful, full-time teaching experience in the public schools or private schools of equivalent status, as verified by the applicant's employer
- Successful completion of the program (coursework and approved non-University activities) for the Professional Level II credential within five years. Students must maintain a 3.0 grade point average
- Successful completion of the exit process with assigned University supervisor, including examination of electronic portfolio and passing grade on exit exam.
- Submission of any required applications and fees.
- Completion of any needed credential clearing courses. All Professional Level II Education Specialist credential candidates are required to have successfully completed coursework in Level I Educational Technology and Health Education, including valid CPR Certification for Infant, Child and Adult. Candidates will be matriculated for these courses. If these classes have been completed in a Level I program or at another university, the student should meet with an Admissions or Credential Advisor to submit an online equivalency request.

Scheduling

All courses are scheduled by an advisor. EXC 656 can be waived only with the approval of a full-time faculty member. EXC 655A must be the first course taken in the program without exception.

PROFESSIONAL LEVEL II EDUCATION SPECIALIST:

Mild/Moderate Disabilities

(780-358)

(5 courses, 18 quarter units)

EXC 655A Professional Induction Seminar (3 quarter units)

EXC 656 Best Practices for Special Needs Students

(Students may substitute approved non-University activities for this class. Only full-time faculty members may approve course equivalence.)

EXC 657 Community Resources and Transition

EXC 658 Advanced Specialization in Mild/Moderate Disabilities

EXC 655B Exit Seminar (Portfolio required)

(1.5 quarter units)

Exit Process - Exam

Apply for Mild/Moderate Level II Credential with Credential Advisor

PROFESSIONAL LEVEL II EDUCATION SPECIALIST:

Moderate/Severe Disabilities

(780-359)

(5 courses, 18 quarter units)

EXC 655A Professional Induction Seminar Plan (3 quarter units)

EXC 656 Best Practices for Special Needs Students

(Students may substitute approved non-University activities for this class. Only full-time faculty members may approve the course equivalence.)

EXC 657 Community Resources and Transition

EXC 659 Advanced Specialization in Moderate/Severe Disabilities

EXC 655B Exit Seminar (Portfolio required)

(1.5 quarter units)

Exit Process - Exam

Apply for Moderate/Severe Level II Credential with Credential Advisor

PROFESSIONAL EDUCATION SPECIALIST LEVEL II- DEAF AND HARD OF HEARING

(780-370)

The prerequisite for the program is the possession of a valid Level I Education Specialist's credential and employment as a deaf education teacher. The learning outcomes are the following:

- Understand current laws regarding DHH programs.
- Understand education of deaf and hard of hearing learners from a family centered perspective.
- Interact with deaf infants, toddlers and their families.
- Understand community resources for deaf and hard of hearing learners.
- Design lessons for children with cochlear implants.
- Understand medical and educational needs of children with cochlear implants.
- Collaborate with health care professionals.
- Prepare a professional portfolio.

School of Education

Program Requirements

(5 courses, 18 quarter units)

- EXC 655A Professional Induction Seminar (3 quarter units)
EXC 656 Best Practices for Special Needs Students
(Students may substitute approved non-University activities for this class. Only full-time faculty members may approve the course equivalence)
EXC 657 Community Resources and Transition
IHD 1203X Facilitating Outcomes: language, Learning, Speech and Listening
- EXC 655B Exit Seminar (Portfolio Required)
(1.5 quarter units)
Exit Process- Exam
Apply for Level II credential with Credential Advisor.

- Understand medical and educational needs of children with cochlear implants.
- Collaborate with health care professionals.
- Prepare a professional portfolio.

Certificate Programs

(770)

● Early Childhood Special Education Certificate

(770-000-788)

Faculty Advisor: Lucinda Kramer (714)429-3132 lkramer@nu.edu

This certificate is designed for individuals who have completed Level II coursework in special education and hold a Professional Specialist Credential, Mild/Moderate or Moderate/Severe disabilities. Completion of the certificate extends teaching authorization from birth through 22. Although designed for those with credentials in Mild/Moderate or Moderate/Severe disabilities, it can also be added to credentials in Deaf and Hard-of-Hearing, Physical and Health Impairments, and Visual Impairments for professional growth. In addition, person with Learning,

Handicapped or Severely Handicapped credentials may add this certificate.

Professionals in other fields, such as social work, nursing, and child development can also complete the coursework for professional growth units or an NU certificate.

Prerequisites

Completion of Level II coursework in either Mild/Moderate, Moderate/Severe Education Specialist credential, Learning, Handicapped or Severely Handicapped credentials and experience in early childhood development with a concentration in infants, toddlers, and preschoolers. Professionals in other fields should schedule an appointment with lead regional faculty in special education for admission.

Program Requirements

(6 courses, 27 quarter units)

- EXC 603 Typical and Atypical Development in Young Children
EXC 605 Assessment in Young Children
EXC 606 Family Systems & Partnership
EXC 607 IFSP Process: Collaboration & Consultation
EXC 608 Interventions for Young Children with Disabilities
EXC 609 Field Experience

Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to complete and submit to the Commission on Teacher Credentialing application form for the certificate.

● CLAD Certificate

(767) (768)

(770-000-767 or 768)

Lead Faculty Advisor: Kenneth Fawson • kfawson@natuniv.edu

Previously credentialed teachers who want to become authorized to teach English Language Development and Specially-Designed Academic Instruction delivered in English can earn a CLAD certificate by meeting the state of California requirements.

CLAD certificate classes have been approved as a set by the CCTC. No coursework is accepted in transfer from another university for this program and no substitutions are allowed. National University cannot recommend a candidate for a CLAD credential unless all four courses are taken in residence. Students must hold a valid credential to be granted a certificate.

Requirements for the Certificate

(4 courses, 18 quarter units)

To receive a CLAD certificate, students must complete at least 18 quarter units at National University. They must also:

- Possess an appropriate prerequisite credential
- Complete the four courses listed below

Required Courses

(4 courses, 18 quarter units)

To receive a CLAD certificate, students must complete all coursework within seven years with a 3.0 GPA. Grades of "D" and "F" are not accepted.

TED 615 Foundations of Education

TED 605 The Diverse Classroom

TED 621A Language Development Methods for the Elementary School

(Prerequisite: TED 615)

or

TED 623 Language Development Methods for Secondary and Middle Schools

(Prerequisite: TED 615)

CLD 627 Methods for Cross-Cultural Instruction *

(Prerequisites: TED 615; TED 621A or TED 623)

* Applicable only for CLAD certificate.

Additional Requirements for the Certificate and Application Information

After completing their coursework successfully, students must meet with a credential advisor to complete and submit the Commission on Teacher Credentialing application form for the multiple/single subject certificate.

In order to avoid matriculation or scheduling errors, students must meet with a credential advisor within 30 days of enrollment.

● Educational Technology Certificate

(778)
(770-000-778)
(5 courses, 22.5 quarter units)

These courses can be applied to the MS in Educational Technology and include credential clearing courses (EDT 608 and 655).

EDT 608	Computer-Based Technology in the Classroom
EDT 610	Teaching Online
EDT 655	Issues and Trends in Educational Technology
EDT 660	Multimedia and Interactive Technologies
EDT 612	Creating Meaningful Learning with Technology

● CA Reading Certificate

(770-740)
(770-000-740)
Lead Faculty: Marilyn Moore • (858)642-8301 • mmoore@nu.edu

The CA Reading Certificate 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

- Hold a bachelor's or master's degree from a regionally accredited college or university with 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.
- Possession of a valid teaching credential.
- Meet with Admission Advisor to enroll in the CA Reading Certificate program.
- Meet with Credential Advisor within 30 days of enrollment to obtain reading certification application procedures
- Complete the required coursework at National University.

Required Courses

(4 courses, 18 quarter units)

MAT 645	Developing Fluency in Reading
MAT 646	Comprehension Strategies and Procedures
MAT 647A	Language Arts Assessment and Instruction I
MAT 647B	Field Study: Language Arts Assessment and Instruction II

(Candidates must maintain a 3.0 GPA. "D" and "F" grades are not accepted.)

Additional Requirements for the Certificate

- After completing the required coursework successfully, candidates apply for the certificate through a Credential Advisor.
- Candidates must have all necessary verification forms completed and pay the current CCTC fee with a non-expiring money order.
- 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 credential permit.) This experience may also be gained outside of California.
- Also provide a copy of a teaching credential valid for a minimum of 12 months and have a non-delinquent student account balance.

- A letter of completion is issued from San Diego following receipt of all documents in San Diego.

● Certificate in Behavioral Analysis

(891)
(770-000-891)
(5 courses, 22.5 quarter units)

The five course sequence in applied behavior analysis is designed to prepare students for the national certification examination sponsored by the Behavior Analyst Certification Board. Applicants for the Certification as a Behavior Analyst will have to meet additional requirements to qualify. All five ABA courses must be taken from National University in order to earn this Certificate.

Note: Upon successful completion of National University's five course sequence, the student will receive a Certificate of Completion from National University. This is NOT professional certification by the Behavior Analyst Certification Board, Inc. (BACB) and does NOT entitle the student to claim that they are certified behavior analysts or Board Certified Behavior Analysts. Students must take the national certification exam and apply for the professional certificate.

Students who are pursuing a Master's degree or a PPS credential in Educational Counseling or School Psychology may qualify for the Certificate in Behavioral Analysis provided that the student requests the certificate prior to the completion of their degree program. 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.

Students who already possess a master's degree may also take the listed coursework to obtain the Certificate in Behavioral Analysis. This certificate provides students with an overview of some of the most important concepts in behavioral analysis.

Before taking any of the courses for the Certificate in Behavioral Analysis students are strongly advised to contact a full time faculty person.

Certificate Requirements

(5 courses, 22.5 quarter units)

PED 668A	Behavioral Research: Design and Analysis
PED 668B	Basic Behavioral Analytic Principles (Prerequisite: PED 668A)
PED 669A	Advanced Applied Behavior Analysis: Application of Behavioral Principles in Classroom Settings (Prerequisite: PED 668A, PED 668B)
PED 669B	Advanced Applied Behavior Analysis: Application of Behavioral Principles in the Technology of Teaching (Prerequisites: PED 668A, PED 668B, PED 669A)
PED 673	Emotional/Behavioral Assessment for Children and Adolescents

● National Board Certified Teacher Leadership Certificate

(770-897)
Lead Faculty Advisor: Rae Adams • (858)642-8352 • radams@nu.edu

The five course sequence is designed to meet the needs of two groups of teachers:

- For those who want to improve their teaching and prepare themselves to achieve National Board Certification sometime during their career
- For those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to submission deadlines

Required Courses

(5 courses, 22.5 quarter units)

School of Education

- NBC 680 Measuring and Informing Quality Teaching, Learning and Leadership
- NBC 681 Membership in Learning Communities
- NBC 682 Evidence of Student Learning — Based on Videotapes
- NBC 683 Evidence of Student Learning — Student Work Samples
- NBC 639 Capstone Project: The Accomplished Teacher-Leadership Portfolio

● Early Childhood Education Certificate

(770-741)

Lead Faculty Advisor: John Cartafalsa • (714) 429-5135 • jcartafa@nu.edu
(4 courses, 18 quarter units)

- TED 650 Physical Development
- TED 651 Psycho-social Development
- TED 652 Early Childhood Cognitive Development
- TED 653 Teaching the Young Child

● Teaching in Diverse Learning Settings Certificate

(670-500)

Lead Faculty Advisor: Sidney Castle • (858)642-8351 • scastle@nu.edu

This certificate is designed to prepare persons who have had little or no prior teacher education preparation to teach adult learners in diverse learning settings. Completion of a high school degree, or GED, is required for entry into the certificate program. The five course sequence is designed to provide the student with an understanding of the adult learner and the strategies that may be employed to design, implement and teach specialized courses in diverse learning settings. Because this certificate program is designed for persons who have little or no prior teacher education coursework, it is required that students complete in sequential order TAL 200, TAL 201 and TAL 202 before enrolling in either TAL 203 or TAL 204.

Program Requirements

(5 courses, 22.5 quarter units)

- TAL 200 Understanding the Adult Learner
- TAL 201 New Course Development
- TAL 202 Learning Environments
- TAL 203 Technical Reading Skills
- TAL 204 Principles of Science and Math

School of Engineering and Technology

Dean, **Howard E. Evans**
Ph.D., Chemical Engineering Science
California Institute of Technology

186	Degrees Offered
187	Faculty
188	Undergraduate Degree Programs
195	Graduate Degree Programs
207	Certificate Programs

The University of Values



Degree Programs Offered

Degrees Offered

Undergraduate Degrees

Bachelor of Science

with Majors in:

- Computer Science [Ⓢ]
- Construction Engineering Technology [Ⓢ]
- Construction Management [Ⓢ]
- Design Engineering Technology [Ⓢ]
- Information Systems [Ⓢ]
- Information Technology Management [Ⓢ]
- Software Engineering

Minors

- Computer Science [Ⓢ]
- Information Technology Management [Ⓢ]
- Technology [Ⓢ]

Graduate Degrees

Master of Science

with Fields of Study in:

- Computer Science [Ⓢ]
- Database Administration
- Engineering Management [Ⓢ]
 - with Areas of Specialization in:*
 - Enterprise Architecture
 - Industrial Engineering [Ⓢ]
 - Project Management [Ⓢ]
 - Safety and Security Engineering [Ⓢ]
 - Supply Chain Management & eLogistics [Ⓢ]
- Environmental Engineering
- Homeland Security and Safety Engineering [Ⓢ]
- Information Systems [Ⓢ]
- Software Engineering [Ⓢ]
- Systems Engineering [Ⓢ]
 - with Areas of Specialization in:*
 - Industrial Engineering
 - Engineering Management
 - Supply Chain Management and eLogistics
 - Environmental Engineering
 - Software Engineering
 - Enterprise Architecture
 - Technology Management [Ⓢ]
 - Wireless Communications

[Ⓢ] denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

Certificate Programs

- Industrial Engineering [Ⓢ]
- Information Technology Management [Ⓢ]
- Project Management [Ⓢ]
- Security and Safety Engineering [Ⓢ]
- Supply Chain Management and eLogistics [Ⓢ]

FOR FURTHER INFORMATION

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School of Engineering and Technology

Undergraduate Degree

■ BACHELOR OF SCIENCE

(620)

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following seven areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement. Students enrolled in a degree program under the School of Engineering and Technology can elect to take general education electives to fulfill this requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

◆ Major in Computer Science

(620-201)

Faculty Advisor: Alireza Farahani • (858) 642-8408 • 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. 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.

Program Learning Outcomes

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, and social responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues.
- Recognition of the need for, and an ability to engage in, continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- An ability to apply design and development principles in the construction of software systems of varying complexities.

Requirements for the Major

To receive a Bachelor of Science in Computer Science, students must complete at least 180 quarter units. 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.

General Education Recommendations

ENG 334A Technical Writing
(Prerequisite: ENG 100/101)

Prerequisites for the Major (12 quarter units, 48 quarter units)

Select two courses along with corresponding science labs

SCI 100	Survey of Bioscience*
SCI 100A	Survey of Bioscience Laboratory (1.5 quarter units)*
SCI 101	General Chemistry*
SCI 101A	General Chemistry Laboratory (1.5 quarter units) *
SCI 104	General Physics *
SCI 104A	General Physics Laboratory (1.5 quarter units)*

School of Engineering and Technology

and

- MTH 215 College Algebra and Trigonometry*
CSC 200 Orientation to Computer Science
CSC 208 Calculus for Computer Science I
(Prerequisite: MTH 215)
CSC 209 Calculus for Computer Science II
(Prerequisite: CSC 208)
CSC 220 Applied Probability and Statistics
(Prerequisite: MTH 215)
CSC 242 Introduction to Programming Concepts and Methods
(Prerequisites: CSC 200, CSC 208)
CSC 252 Programming in C++
(Prerequisite: CSC 242)
CSC 262 Programming in Java
(Prerequisite: MTH 215)

*May be used to satisfy a general education requirement

Requirements for the Major

(17 courses, 73.5 quarter units)

- CSC 300 Object Oriented Design and Analysis
(Prerequisite: CSC 252)
CSC 310 Linear Algebra and Matrix Computation
(Prerequisite: CSC 208)
CSC 331 Discrete Structures and Logic
(Prerequisites: CSC 252, CSC 310)
CSC 335 Data Structures and Algorithms
(Prerequisites: CSC 300 & CSC 331)
CSC 338 Algorithm Design
(Prerequisite: CSC 335)
CSC 340 Digital Logic Design
(Prerequisites: CSC 200, CSC 208)
CSC 340L Digital Logic Design Lab (1.5 quarter units)
(Prerequisite: CSC 340)
CSC 342 Computer Architecture
(Prerequisites: CSC 340 & CSC 340L)
CSC 350 Computer Ethics
CSC 400 Operating System Theory and Design
(Prerequisite: CSC 335)
CSC 422 Database Design
(Prerequisite: CSC 300)
CSC 430 Programming Languages
(Prerequisite: CSC 300)
CSC 436 Computer Communication Networks
(Prerequisite: CSC 335)

Select any two from the following list of electives.

- CSC 421 Compiler Design
(Prerequisite: CSC 335)
CSC 440 Advanced Programming in Java
(Prerequisite: CSC 262)
CSC 445 Wireless Technologies and Application Development
(Prerequisite: CSC 242 or CSC 262)
CSC 450 Artificial Intelligence
(Prerequisite: CSC 335)
CSC 451 Artificial Intelligence Programming
(Prerequisite: CSC 335)
CSC 452 Human Computer Interaction
(Prerequisite: CSC 300)
CSC 454 Computer Graphics
(Prerequisite: CSC 310, CSC 335)
CSC 455 Game Programming
(Prerequisite: CSC 454)
CSC 456 Advanced Game Programming
(Prerequisite: CSC 455)
Capstone project
CSC 480A Computer Science project I
(Prerequisite: Completion of major course)
CSC 480B Computer Science project II
(Prerequisite: CSC 480A)

◆ Major in Construction Engineering Technology

(620-441)

Faculty Advisor: Dr. Thomas Gatton • (858) 642-8484 • tgatton@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, CAD drafter and quality and safety controller. Additionally, graduates of the construction engineering technology 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

Students who have successfully completed this program 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.
- Understand the structural applications and analysis of construction systems and materials.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools to analyze and solve 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 to meet safety standards.
- Understand and apply the principles of project management and control.
- Work effectively in a team environment.

Requirements for the Degree

To receive a Bachelor of Science in construction engineering technology, 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. 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

(8 courses, 30 quarter units)

- SCI 101 General Chemistry
SCI 101A General Chemistry Laboratory
(1.5 quarter units)
MTH 210 Introduction to Probability and Statistics
SCI 104 General Physics
SCI 104A General Physics Laboratory
(1.5 quarter units)
CSC 208 Calculus for Computer Science
(Prerequisite: MTH 215)
EGR 301 Engineering Mathematics (Cross-listed with CSC 310)
(Prerequisite: CSC 208)
EGR 304 Statics and Strength of Materials
(Prerequisite: EGR 301)

School of Engineering and Technology

Requirements for the Major

(13 courses, 58.5 quarter units)

EGR 307	Introduction to Software, Engineering and Ethics
EGR 310	Engineering Economics (Prerequisite: MTH 210)
EGR 313	Electrical Circuits and Systems (Prerequisites: SCI 104 and SCI 104A)
EGR 316	Legal Aspects of Engineering
EGR 319	Introduction to Engineering Graphics and Auto CAD (Prerequisite: MTH 215)
DEN 408	Computer Aided Engineering (AutoCAD II)
CEN 320	Surveying, Metrics and GIS (Prerequisite: EGR 319)
CEN 323	Structural Analysis (Prerequisites: EGR 301 and EGR 304)
CEN 410	Construction Materials and Methods (Prerequisite: MTH 215)
CEN 413	Plans and Specifications (Prerequisite: EGR 319)
CEN 416	Mechanical and Electrical Systems (Prerequisite: EGR 313)
CEN 419	Estimating, Scheduling and Control (Prerequisites: CEN 410, CEN 416 and CEN 413)
CEN 420	Estimating, Scheduling and Control II (Prerequisite: CEN 419)
CEN 422	Field Inspection and Safety (Prerequisite: CEN 410)
EGR 440	Project Management Fundamentals (Prerequisite: MTH 210)

Engineering Senior Project

(2 courses, 9 quarter units)

EGR 486A	Engineering Senior Project I (Prerequisite: Completion of 12 BSCE or 14 BSDE core courses)
EGR 486B	Engineering Senior Project II (Prerequisite: EGR 486A)

◆ Major in Construction Management

(620-446)

Faculty Advisor: Thomas M. Gatton • (858) 642-8484 • tgatton@nu.edu

Description of Program and Potential Career Paths

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 construction management program is to provide students with a well rounded general education in written and verbal communication, mathematics, business, law, humanities, fine arts, and social, behavioral and natural sciences in preparation for a concentration in coursework 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, assistant project manager, project engineer/coordinator, field engineer, planning/scheduling engineer, cost engineer, cost estimator, quality and safety controller, construction superintendent, CAD drafter, and facilities engineer. Additionally, graduates of the construction management program, 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

those respective subcontracting companies. These companies include trades such as carpentry, excavation, concrete work, plumbing, structural steel, cabinetry, roofing, insulation, drywall, electrical, HVAC, and landscaping.

Program Learning Outcomes

The program specific outcomes for the Bachelor of Science in construction management are based on industry standards and related degree programs. Upon completion of this program graduates 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.
- Understand the structural applications and analysis of construction systems and materials.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools to analyze and solve 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 to meet safety standards.
- Understand and apply the principles of project management and control.
- Apply construction accounting principles and analyze financial reports.
- Understand the legal aspects of construction contracting.
- Assess conflict and identify resolution strategies.
- Work effectively in a team environment.

Application Requirements

To be considered for admission, applicants must meet the University undergraduate admission requirements listed in the general information for undergraduate degrees.

Students are expected to possess or have access to a computer and Internet connection including an email account outside of National University for course projects and assignments.

Degree Requirements

To receive a Bachelor of Science in construction management, students must complete at least 183 units as articulated 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. 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. Refer to the section on undergraduate admission requirements for specific information regarding application and matriculation.

Preparation for the Major

(11 courses, 46.5 quarter units)

COM 200	Effective Communication*
MTH 210	Introduction to Probability and Statistics*
MTH 215	College Algebra and Trigonometry*
ILR 260	Information Literacy and Report Writing*
ECO 204	Principles of Microeconomics*
ECO 203	Principles of Macroeconomics*
PSY 100	Introduction to Psychology*
SCI 104/104A	General Physics & Lab*
ACC 201	Financial Accounting Fundamentals*

School of Engineering and Technology

CIS 425 Programming for Information Technology Environment*

*May be used to satisfy a general education requirement

Required Courses

(24 courses, 108 quarter units)

COM 422	Technical Writing and Presentation
HUB 401	Conflict Resolution
MGT 409C	Principles of Management and Organization
EGR 301	Engineering Mathematics
EGR 304	Statics and Strength of Materials (Prerequisite: EGR 301)
EGR 307	Introduction to Software, Engineering, and Ethics
EGR 310	Engineering Economics (Prerequisite: MTH 210)
EGR 313	Electrical Circuits and Systems (Prerequisites: SCI 104 and SCI 104A)
EGR 316	Legal Aspects of Engineering
EGR 319	Introduction to Engineering Graphics and AutoCAD
DEN 408	Computer Aided Engineering (AutoCAD II) (Prerequisite: EGR 319)
CEN 320	Surveying, Metrics, and GS (Prerequisite: EGR 319)
CEN 323	Structural Analysis (Prerequisites: EGR 301 and EGR 304)
CEN 410	Construction Materials and Methods
CEN 413	Plans and Specifications (Prerequisite: EGR 319)
CEN 416	Mechanical and Electrical Systems
CEN 419	Estimating, Scheduling, and Control (Prerequisites: CEN 410, CEN 416 and CEN 413)
CEN 420	Estimating, Scheduling, and Control II
CEN 421	Construction Accounting and Financial Management
CEN 422	Field Inspection and Safety (Prerequisite: CEN 419)
EGR 440	Project Management Fundamentals (Prerequisite: MTH 210)
CEN 425	Overall Construction Process

Students must complete at least 16 of the 22 required program courses before enrollment in the project courses.

Engineering Senior Project

(2 courses, 9 quarter units)

EGR 486A	Engineering Senior Project I (Prerequisite: Completion of 12 BSCE or 14 BSDE core courses)
EGR 486B	Engineering Senior Project II (Prerequisite: EGR 486A)

◆ Major in Design Engineering Technology

(620-442)

Faculty Advisor: Thomas M. Gatton • (858) 642-8484 • tgatton@nu.edu

The Bachelor of Science in design engineering technology is designed to provide students with the theoretical foundations, hands-on experience and teaming skills required for effective conceptual, logistical and developmental approach leading to interdisciplinary design of the complex engineering devices, product life cycles and engineering systems through integration of the state-of-the-art computer-aided tools, concurrent engineering standards and simulation modeling techniques.

Upon completion of this degree, students will be prepared to hold positions such as System Design Engineer, Design Supervisor for Engineering Projects, and Product Design Engineer. 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 the engineering projects that require innovative and interdisciplinary background, skills and experience.

Program Learning Outcomes

After completion of this program, graduates will be able to:

- Combine knowledge and practices needed for working on engineering projects that require innovative and interdisciplinary background, skills and experience.
- Utilize product design optimization concepts in different engineering applications.
- Integrate software and hardware components by applying the state-of-the-art computer-aided engineering tools and engineering graphics techniques and methodologies.
- Understand practical aspects of programming applications for solving diversified engineering problems.
- Apply contemporary simulation and modeling techniques for enhancement of engineering design.
- Integrate engineering project management standards for efficient and competitive design of engineering products and processes.
- Understand major concepts of design and analysis of engineering experiments.
- Study and implement the concept of reliability engineering.
- Analyze human factors, ergonomics and safety issues as part of the requirements for design of engineering systems, products and services.
- Demonstrate knowledge of computer aided engineering tools including *ProEngineer* Modeling Software, *LabVIEW* Graphical Programming, *AutoCAD 2002*, 3-D Visualization Software with *MATLAB*, and *SolidWorks* 3-D Mechanical Design Software.

Requirements for the Degree

To receive a Bachelor Science in design engineering technology, 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. 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

(8 courses, 30 quarter units)

SCI 101	General Chemistry
SCI 101A	General Chemistry Laboratory (1.5 quarter units)
MTH 210	Introduction to Probability and Statistics
SCI 104	General Physics
SCI 104A	General Physics Laboratory (1.5 quarter units)
CSC 208	Calculus for Computer Science (Prerequisite: MTH 215)
EGR 301	Engineering Mathematics (Prerequisite: CSC 208)
EGR 304	Statics and Strength of Materials (Prerequisite: EGR 301)

Requirements for the Major

(16 courses, 72 quarter units)

EGR 307	Introduction to Software, Engineering and Ethics
EGR 310	Engineering Economics (Prerequisite: MTH 210)
EGR 313	Electrical Circuits and Systems (Prerequisites: SCI 104 and SCI 104A)
EGR 316	Legal Aspects of Engineering
EGR 319	Introduction to Engineering Graphics and Auto CAD (Prerequisite: EGR 301)

School of Engineering and Technology

DEN 408	Computer Aided Engineering I: Simulation Modeling and Analysis (Prerequisite: EGR 319)
DEN 411	Computer Aided Engineering II: ProEngineer Modeling Software (Prerequisite: EGR 319)
DEN 414	Computer Aided Engineering III: LabVIEW Graphical Programming (Prerequisite: EGR 319)
DEN 417	Computer Aided Engineering IV: Graphics and GUI with MATLAB (Prerequisite: EGR 319)
DEN 420	Computer Aided Engineering V: SolidWorks 3D Mechanical Design Tools (Prerequisite: EGR 319)
DEN 423	Human Factors in Engineering and Design
DEN 426	Reliability Engineering (Prerequisite: EGR 301)
DEN 429	Product Design Optimization (Prerequisite: EGR 301)
DEN 432	Concurrent Design of Products, Manufacturing Processes and Systems (Prerequisite: DEN 408)
DEN 435	Design and Analysis of Experiments
EGR 440	Project Management Fundamentals (Prerequisite: MTH 210)

Engineering Senior Project

(2 courses, 9 quarter units)

EGR 486A	Engineering Senior Project I (Prerequisite: Completion of 12 BSCE or 14 BSDE core courses)
EGR 486B	Engineering Senior Project II (Prerequisite: EGR 486A)

◆ Major in Information Systems

(620-416)

Faculty Advisor: Albert Cruz • (858) 642-8477 • acruz@nu.edu

The School of Engineering and Technology offers an IS program that links business and technology. 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.

Requirements for the Degree

To receive a Bachelor of Science with a major in information systems, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level and 45, including the senior project courses, must be taken in residence at National University.

Note: The BSIS program is offered in a 16 course template. It is highly recommended to meet with your faculty advisor for more information regarding this string of course work to ensure maximum success.

Preparation for the Major

Students should be computer literate and have a basic understanding of computer usage.

Requirements for the Major

(8 courses, 36 quarter units)

CIS 301	Management Information Systems
CIS 443	Local Area Network Technologies
CIS 446	Data Modeling in an Information Technology Environment
CIS 425	Programming for an Information Technology Environment

CIS 302	Data Mining (Prerequisite: CIS 446)
MGT 409C	Principles of Management and Organization
CIS 420A	Information Systems and Technology Project I (Prerequisite: All preparation and core courses)
CIS 420B	Information Systems and Technology Project II (Prerequisite: CIS 420A)

Upper-Division Electives

(8 courses, 36 quarter units)

Select four (4) courses from the following list. Additionally, select four (4) more courses from this same list (recommended) or other approved upper-division courses from the School of Engineering and Technology.

CIS 404	Remote Access and Wireless Networking (Prerequisite: CIS 444)
CIS 407	Web Development – Static (Prerequisite: CIS 425)
CIS 408	Web Development – Dynamic (Prerequisite: CIS 407)
CIS 414	Data Warehousing (Prerequisite: CIS 446)
CIS 415	SQL for Database Developers (Prerequisite: CIS 446)
CIS 416	Database Administration (Prerequisite: CIS 415)
CIS 418	Database Network Administration (Prerequisite: CIS 416)
CIS 444	Wide Area Networking Concepts and Services (Prerequisite: CIS 443)

◆ Major In Information Technology Management

(620-408)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@nu.edu

The Bachelor of Science with a major in information technology management 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 provide 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.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Operate a Personal Computer with skills required to adjust easily to the future changes in hardware and software.
- Use a variety of computer applications relevant to the business/organization needs, including operating systems, word processing, databases, spreadsheets, graphics, and telecommunications.
- Apply theory of information technology management to the business/organization environment and adapt to future changes in technology.
- Recognize of a wide-range of information desktop management and their appropriate computer application as related to the business/organization needs.
- Manage and support business/organization networking environment.
- Design, develop, administer, and support a robust database management system (DBMS) for the changing business/organization needs.

School of Engineering and Technology

Requirements for the Degree

To receive a Bachelor of Science with a major in information technology management, 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 capstone project classes (ITM 490 A/B). 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

(4 courses, 18 quarter units)

Students should be computer literate and have a basic understanding of computer usage.

ITM 200	Computer Hardware, Software, Maintenance & Support
ITM 205	Office Productivity Software Applications
ITM 210	Introduction to Information Technology
ITM 230	Computer Network Technologies Overview

Requirements for the Major

(14 courses, 63 quarter units)

ITM 320	IT Management (Prerequisite: ITM 210)
ITM 340	IT Client Environment Using Windows
ITM 345	IT Server Environment Using Linux
ITM 350	Desktop Application Support and Troubleshooting (Prerequisite: ITM 205)
ITM 420	LAN Networks
ITM 430	WAN Networks
ITM 434	Wireless LAN Administration
ITM 435	Wireless LAN Security (Prerequisite: ITM 434)
ITM 440	Database Systems Concepts and Data Modeling
ITM 450	Database Processing and Administration (Prerequisite: ITM 440)
ITM 470	Information Security Management
ITM 475	Information Security Technologies (Prerequisite: ITM 470)
ITM 490A	IT Project Management (Prerequisite: 10 of the 12 ITM courses must be successfully completed)
ITM 490B	IT Capstone Project (Prerequisite: ITM 490A)

Upper-Division Electives

(2 courses, 9 quarter units)

Students can choose any approved upper-division degree related electives from SOET or SOB.M.

◆ Major in Software Engineering

(620-205)

Faculty Advisor: Alireza Farahani • (858) 642-8408 • afarahan@nu.edu

The major in software engineering gives students the opportunity to develop basic skills in the Software Engineering Body of Knowledge (SWEBOK) defined by the Software Engineering Institute of Carnegie Mellon University. Students receive core competency courses in the areas of software requirements, design, construction, project management and evolution. Foundation courses in computing fundamentals, human factors and application domains prepares the student for later courses providing skills in software ethics, processes, quality, modeling metrics, tools and development environments and documentation. The student is prepared for this major with a general education of courses in mathematics, natural sciences, social sciences and business studies.

Upon completion of this degree, students will be prepared to hold positions such as software engineer, computer programmer, software developer, internet programmer, database administrator and computer analyst. They will have the knowledge and skills to evaluate the competencies and performance of themselves and other team members and assume a leadership position in the software development organization.

Program Learning Outcomes

Students who have successfully completed this program will be able to:

- Effectively communicate through written, verbal and graphical communication.
- Describe basic computer hardware components and their functions.
- Understand the process of defining software requirements and incorporating these into an overall development strategy and plan, including effective human-computer interfacing.
- Demonstrate application of fundamental computer programming principles.
- Apply knowledge of architecture business cycles and management principles to software development processes.
- Make ethical decisions when dealing with computer software and new product development-related issues.
- Understand, contrast and apply various software development tools, processes and environments.
- Understand, create and analyze software architectures, their conversion to systems, and their reusability.
- Implement internet and other database systems, procedures and commands.
- Understand and implement the stages of the Software Development Life Cycle (SDLC) to develop prototype systems for iterative development.
- Understand the principles of software quality, and the methods and implementation of software testing.
- Demonstrate application of software engineering documentation processes.
- Work effectively in a team development process.

Degree Requirements

To receive a Bachelor of Science degree with a major in software engineering, students must complete at least 180 quarter units as shown 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. The following courses are specific Degree Requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy the total units for the degree.

The following courses must be completed in the General Education Program Requirements.

Preparation for the Major

(9 courses, 34.5 quarter units)

MTH 210	Introduction to Probability and Statistics (Prerequisite: Placement Evaluation)
SCI 101	General Chemistry
SCI 101A	General Chemistry Lab (1.5 quarter units) (Prerequisite: SCI 101)
CSC 208	Calculus for Computer Science (Prerequisite: MTH 215)
CSC 331	Discrete Structures and Logic Design (Prerequisite: CSC 310, CSC 252)
CSC 242	Introduction to Programming Concepts and Methods (Prerequisite: CSC 200, CSC 208)
CSC 262	Programming in Java (Prerequisite: MTH 215)

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SCI 104 General Physics
SCI 104A General Physics Lab
(1.5 quarter units)
(Prerequisite: SCI 104)

Requirements for the Major

(12 courses, 54 quarter units)

CSC 340 Digital Logic Design
(Prerequisites: CSC 200, CSC 208)
SEN 410 Introduction to Software, Engineering and Ethics
CSC 252 Programming in C++
(Prerequisite: CSC 242)
CSC 300 Object Oriented Design and Analysis
(Prerequisite: CSC 252)
CSC 422 Principles of Database Design
(Prerequisite: CSC 300)
SEN 420 Software Processes and Management
SEN 421 Introduction to the Unified Process and Modeling
Language (UML)
(Prerequisite: CSC 242)
SEN 425 Software Architecture and Development
(Prerequisite: CSC 300)
SEN 445 Database and Applications Development
(Prerequisite: CSC 422)
SEN 450 Human-Computer Interface Engineering
(Prerequisite: CSC 262)
SEN 460 Software Quality and Testing
(Prerequisite: CSC 300)
SEN 465 Introduction to UNIX/LINUX

Project

(2 courses, 9 quarter units)

SEN 486A Software Engineering Laboratory I
SEN 486B Software Engineering Laboratory II
(Prerequisite: SEN 486A)

Upper-Division Electives

(1 course, 4.5 quarter units)

To fulfill unit requirements, students may select from the upper-division electives below:

Note: It is strongly recommended that students take CSC 335 to fulfill the upper-division elective requirement.

CSC 335 Data Structures and Algorithms
(Prerequisite: CSC 300, CSC 331)
CSC 342 Computer Architecture
(Prerequisite: CSC 340, CSC 340L)
CSC 430 Programming Languages
(Prerequisite: CSC 300)
CSC 400 Operating System Theory and Design
(Prerequisite: CSC 335)
CSC 421 Compiler Design
(Prerequisite: CSC 335)
CSC 450 Artificial Intelligence
(Prerequisite: CSC 335)
CSC 440 Advanced Programming in Java
(Prerequisite: CSC 262)

● Minor in Computer Science

(460)

Requirements for the Minor

(6 courses, 27 quarter units)

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.

Program Prerequisites

(4 courses, 18 quarter units)

MTH 215 College Algebra and Trigonometry
(Prerequisite: Placement Evaluation)
CSC 208 Calculus for Computer Science
(Cross-listed with MTH 220)
(Prerequisite: MTH 215)
CSC 331 Discrete Structures and Logic
(Cross-listed with MTH 325)
(Prerequisite: CSC 300, CSC 331)
CSC 242 Introduction to Programming Concepts and Methods
(Prerequisite: CSC 200, CSC 208)

Required Courses

(6 courses, 27 quarter units)

CSC 252 Programming in C++
(Prerequisite: CSC 242)
CSC 300 Object Oriented Design and Analysis
(Prerequisite: CSC 252)
CSC 335 Data Structures and Algorithms
(Prerequisite: CSC 300, CSC 331)
CSC 340 Digital Logic Design
(Prerequisite: CSC 200, CSC 208)

In addition, students can take any two Computer Science courses provided that they have met the required prerequisites, except the project sequence CSC 425A/B/C.

● Minor in Information Technology Management

(462)

Requirements for the Minor

(6 courses, 27 quarter units)

A minor in information technology management is available to students in any bachelor's degree program other than the BS with a major 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 with a major in information technology management." Prerequisites may be required depending on courses chosen.

● Minor in Technology

(461)

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.

- Information Technology Management
- Information Systems

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Graduate Degrees

■ MASTER OF SCIENCE IN COMPUTER SCIENCE

(720-609)

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The Master of Science in Computer Science (MSCS) program will provide students with the mathematical foundations and information processing skills required for solving real world problems.

National University's MSCS program not only prepares students in the theoretical and practical aspects of solving complex computing problems but we also develop other essential communication skills. MSCS graduates are able to clearly discuss issues and answers with both technical and non-technical audiences. In addition to those communication skills, every part of our curriculum develops "people skills," ethics and standards of professionalism.

The curriculum is built upon mathematical foundations, programming techniques and problem solving skills. The unique combination of these skills enables graduates of National's MSCS program to be of immediate benefit in the computing industry. The rigorous mathematical foundations of the MSCS program have 4 primary goals: (1) to provide a clear understanding of scope and limitations of computational models, (2) to facilitate acquisition of skills in subsequent courses of the program, (3) to facilitate logical discussion of concepts underlying problem solving skills, (4) to facilitate acquisition and employment of new skills required by the introduction of new technology. National University's approach to teaching in the MSCS program allows our graduates to immediately become highly productive members of a real-world computing team.

The MSCS curriculum provides models of computation that remain appropriate over long periods of time. Our foundation courses equip students from a wide variety of backgrounds with the essential and necessary tools to be successful in the computing industry.

Skill Courses

The set of primary courses are designed for acquisition of marketable skills. These courses reflect the demands in the computer industry:

- Analysis, modeling, design, and development
- Computational tools and processes
- Operating Systems and Languages
- Data Base Systems
- Applications Systems and Graphical User Interfaces
- Artificial Intelligence
- Computational Problem Solving

Integration

The capstone project class is an integrating mechanism to provide realistic experience for the student. It is a two-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

With National's MSCS program, faculty, students, and employers will be assured that our graduates are proficient in analytical and critical thinking skills, they have a sense of professionalism, and are instilled with a strong set of values essential for success in the computer science field. This program reflects current and future

industry needs and graduates from the MSCS program are trained and prepared to assume a leadership role in the field.

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Construct a computational model for a given problem that allows examination of consequences
- Prove that the model is correct
- Describe properties of computational models.
- Describe programming principles such as abstraction, encapsulation, localization.
- Analyze a computational problem and produce a requirements analysis specification of the problem
- Given a problem, develop a use-case analysis of the problem
- Apply computational principles such as abstraction, encapsulation, localization to real world problems
- Apply programming models such as Object Oriented Programming, Structured Programming to develop a programming solution
- Apply design tools for designing a computational system
- Apply CASE tools to develop a computational solution to a problem
- Develop a software system based on a given design and requirements

Admission Requirements

It is assumed that candidates seeking admission to the program possess a baccalaureate degree in Computer Science (CS) 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 in order to satisfy the program prerequisites.

Degree Requirements

(20 courses, 90 quarter units)

Curriculum Requirements for MSCS Degree Program

The MSCS 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. 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

(8 courses, 36 quarter units)

Students with non-computer baccalaureate degrees can qualify for admission to the program by choosing one or a combination of the following options:

Complete the following prerequisite courses:

MTH 215	College Algebra and Trigonometry (Prerequisite: Placement Evaluation)
CSC 208	Calculus for Computer Science (Prerequisite: MTH 215)
CSC 331	Discrete Structures and Logic (Prerequisite: CSC 252, CSC 310)
CSC 242	Introduction to Programming Concepts and Methods (Prerequisite: MTH 215)
CSC 252	Programming in C++ (Prerequisite: CSC 242)
CSC 300	Object Oriented Design and Analysis (Prerequisite: CSC 252)

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- CSC 335 Data Structures and Algorithms
(Prerequisite: CSC 300, CSC 331)
- CSC 422 Principles of Data Base Design
(Prerequisite: CSC 300)

or

Gain permission of the lead faculty of the MSCS program based on equivalent coursework supported by verifiable documented proof.

Core Requirements

(12 courses, 54 quarter units)

Students are encouraged to take the following 12 courses in the order of presentation.

- CSC 610 Mathematical Foundations
- SEN 620 Principles of Software Engineering
- SEN 621 Software Tools and Processes
- SEN 625 Basic Software Architecture
- CSC 630 Operating Systems
- CSC 640 Database Systems
- CSC 650 Programming Languages
(Prerequisite: CSC 610)
- CSC 655 Compilers and Interpreters
(Prerequisite: CSC 610)
- CSC 660 Artificial Intelligence
(Prerequisite: CSC 610)
- CSC 670 User Interface Engineering
(Prerequisites: CSC 630, SEN 620)
- CSC 686 Computer Science Project I
(Prerequisites: All core requirements)
- CSC 687 Computer Science Project II
(Prerequisite: CSC 686)

■ MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

(720-810-893, 894, 895)

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The Master of Science in Engineering Management program (M.S.) is designed to bring the benefits of modern technology and high quality graduate-level education 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;
- Security and Safety Engineering in the effective direction of planning and implementation of security and safety;
- Industrial Engineering so as to develop their management skills in the operations environment;
- Enterprise Architecture so as to prepare technically qualified individuals for a responsible management role in the management of enterprise architecture;
- Supply Chain Management and eLogistics, so as to become experts in warehousing, transport, materials planning, inventory control, order cycle management, purchasing, and customer service and enterprise architecture to become experts in computer architecture security, and enterprise architecture specialist in managing the design and implementation of comprehensive enterprise architecture.

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, safety/security engineering, industrial engineering, enterprise architecture, and supply chain management and eLogistics. These five curricula provide a broad perspective of engineering management careers that are of current interest and need.

Degree Requirements

(17 courses, 72 quarter units)

To receive a Master of Science in Engineering Management, students must complete 54 quarter units involving twelve courses. 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.

Since this program is defined for various areas of specialization, there are specific requirements for the type of courses to be taken as defined in this catalog.

Program Prerequisites

(3 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 appropriate program prerequisites:

- MGT 409C Principles of Management and Organization
- MNS 205 Introduction to Quantitative Methods and Statistics
- BUS 500C Macro and Microeconomics

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better.

Core Requirements

(6 courses, 27 quarter units)

Students enrolled in this program are advised to take the courses in the order specified below.

- ENM 600 Introduction to Engineering Management
- ENM 601 Engineering Project Management
- ENM 602 Management of Risk, Contracts, and Legal Issues
- ENM 603 Managing Projects in Operations Management
(Prerequisite: ENM 600)
- ENM 607A Engineering Management Capstone Course
(Prerequisite: ENM 600, ENM 601, ENM 602, ENM 603 and all pertinent Specialization courses)
- ENM 607B Engineering Management Capstone Course
(Prerequisite: ENM 607A)

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Program Electives

(2 courses, 9 quarter units)

Students must select two of the following 600 level courses.

ENM 604	Quality Management
ENM 605	Infrastructure Management
TMG 655	Management of R & D and Innovation Processes
QMT 601	Statistics and Business Research Methodology
IEM 605	Engineering Applications of Operations Research (Prerequisite: QMT 601)

Requirements for the Areas of Specialization

(4 courses, 18 quarter units)

Students must select one of the following Areas of Specialization:

▲ Area of Specialization in Enterprise Architecture

(897)

(4 courses, 18 quarter units)

The specialization courses as listed below are offered in conjunction with the FEAC Institute at National University. Successful completion of all four courses is required as part of the Enterprise Architecture (EA) specialization in the engineering management program.

Upon completion of the MS program, graduates from Enterprise Architecture will be able to:

- Apply quantitative analytical skills and techniques to manage Projects.
- Apply a multidisciplinary approach involving the integration of enterprise architecture, management, and quality, and DODAF Framework.
- Integrate state-of-the-art technological advances to the practice of project management engineering, including the use of information technology, and supporting software applications.
- Design and implement comprehensive architecture enterprise in accordance with DODAF architecture process.
- Describe the Federal Enterprise Architecture Vision and Principles as per CIO Council's "FEAF" V 1.1 and the GAO's (Government Accounting Office) view of Enterprise Architecture, OMB's (Office of Management and Budget).
- Establish principles for managing Enterprise Architecture Contractors.
- Develop Strategic Planning relates to Enterprise Architecture.
- Develop an integrated Infrastructure Architecture and relating it to the FEA PMO.
- Assess the impact of Enterprise Architecture projects in the finance of corporations and businesses and develop appropriate action plans through project management engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful completion of Enterprise Architecture projects.

The courses include:

DODAF [DEPARTMENT OF DEFENSE ARCHITECTURE FRAMEWORK] CERTIFICATION PROGRAM COURSES

DAF 601	Architecture Framework Basics
DAF 602	Core and Supporting Products
DAF 603	Enterprise Architecture Planning
DAF 604	Advanced Architecture Modeling and Analysis

or

FEA(F) [FEDERAL ENTERPRISE ARCHITECTURE (FRAMEWORK)] CERTIFICATION PROGRAM COURSES

EEA 601	Enterprise Architecture Concepts and Theory
EEA 602	Enterprise Architecture Planning
EEA 603	Enterprise Architecture Implementation
EEA 604	Enterprise Architecture Integration

▲ Area of Specialization in Industrial Engineering

(895)

(4 courses, 18 quarter units)

More sophisticated and demanding consumers, along with an emerging global economy, are causing organizations of all types to improve quality and productivity. To meet those goals, more and more organizations require the problem-solving expertise of industrial engineers (IE's). Industrial engineers design the systems that organizations use to produce goods and services. In addition to working in manufacturing industries, IE's are vital links to quality and productivity in places such as medical centers, communication companies, food service, education systems, government, transportation companies, banks, urban planning departments and an array of consulting firms. IE's educate and direct these groups in the implementation of Total Quality Management (TQM) principles especially in "hot areas" such as manufacturing, health care, occupational safety, and environmental management.

Upon completion of the MS program, graduates from industrial engineering will be able to:

- Design ergonomically sound tools and workstations to reduce worker injuries and health problems.
- Develop tools to dramatically improve your ability to optimize manufacturing systems and office automation to increase productivity and reduce stress.
- Develop mathematical models that enable researchers to analyze diverse scenarios and recommend workable solutions to complex problems.
- Establish new theories for enhancing quality and productivity in manufacturing, service industries and government.

IEM 601	Engineering Economics
IEM 602	Managing Production Planning and Control
IEM 603	Managing Facilities and Planning Layout
IEM 604	Ergonomics and Occupational Safety

▲ Area of Specialization in Project Management

(893)

(4 courses, 18 quarter units)

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 don't 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. This program is designed in such a way that anyone successfully completing this program would be academically trained to appear for Project Management Professional (PMP) certification administered by Project Management Institute.

Upon completion of the MS program, graduates from project management will be able to:

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- Apply quantitative analytical skills and techniques to manage Projects
- Apply a multidisciplinary approach involving the integration of engineering, management, quality, and cultural analysis to the conduct of project management engineering.
- Integrate state-of-the-art technological advances to the practice of project management engineering, including the use of information technology, and supporting software applications.
- Apply a global mindset and a detailed knowledge of business environments to the practice of project management engineering.
- Assess the impact of projects in the finance of corporations and businesses and develop appropriate action plans through project management engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful completion of projects.

Required Courses

PME 601	Planning, Performing and Controlling Projects (Prerequisite: ENM 600, ENM 601, ENM 602, and ENM 603)
PME 602	Managing Engineering Competencies and Skills (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 and Associated Financial Management (Prerequisite: ENM 600, ENM 601, ENM 602, and ENM 603)

▲ Area of Specialization in Safety and Security Engineering

(894)
(6 courses, 27 quarter units)

The 9/11 events and increased business transactions through the world wide web have highlighted the national and international need for highly educated and experienced professionals in the area of security and safety engineering. Security and safety engineering is about assessment and building systems to remain dependable in the face of malice, error, or mischance. As a discipline, it focuses on the tools, processes and methods needed to design, implement and test complete systems, and to adapt existing systems as their environment evolves. This academic program combines the engineering management area with the field of security and safety. This curriculum identifies the common fundamentals and practices that define the theory and effective practice of asset and people protection, and communicates these principles by relying on a sound academic forum. The highlight of the program includes problem identification, assessment, risk reduction, and control engineering.

Upon completion of the MS program, graduates from safety and security engineering will be able to:

- Apply quantitative and quantitative analytical skills and techniques to safety and security of assets.
- Apply a multidisciplinary approach involving the integration of engineering, management, quality, and risk analysis to the safety/security of assets.
- Integrate state-of-the-art technological advances to the practice of modern safety/security engineering program, including the use of information technology, and supporting software applications.
- Apply a global mindset to safety/security issues related to assets.
- Assess the impact of safety/security issues for the operation of corporations and businesses and develop appropriate action plans through detailed engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful implementation of safety and security plans.

Specialization Prerequisites (2 courses, 9 quarter units)

SCI 101	General Chemistry
SCI 335	Environmental Science

Required Courses

(4 courses, 9 quarter units)

SSE 601	Introduction to Safety Engineering (Prerequisites: ENM 600, ENM 601, ENM 602, and ENM 603)
SSE 602	Design and Evaluation of a Modern Safety Program (Prerequisite: SSE 601)
SSE 603	Introduction to Security Engineering (Prerequisites: ENM 601, ENM 602, and ENM 603)
SSE 604	Security Engineering - Planning and Design (Prerequisite: SSE 603)

▲ Area of Specialization in Supply Chain Management and eLogistics

(892)
(4 courses, 18 quarter units)

From small companies to giant global institutions, the concept of integration within business and between businesses has gained increased validity. There has been a growing recognition that supply chain management and eLogistics help achieve the twin goals of cost reduction and service enhancement. Supply chain management and eLogistics have in turn been impacted and driven by e-business strategies and technologies. This program is designed to provide comprehensive academic training on supply chain management and eLogistics.

Program Learning Outcomes

Students successfully completing this degree will:

- Learn the key elements and flows of contemporary supply chain management and eLogistics, such as technology requirements, warehousing, transport, materials planning, inventory control, order cycle management, purchasing, and customer service.
- Understand major challenges with in the implementation of an integrated supply chain management and eLogistics strategies including technology selection, internet security, accessibility and quality control.
- Understand the application of Agile and Lean supply chains concepts and methods
- Develop the cost effective eLogistics strategies in creating efficient and effective supply chain networks

Required Courses

SCL 601	Supply Chain Management Fundamentals
SCL 602	Supply Chain Management - Strategies, Design and Implementation
SCL 603	Logistics Management Fundamentals
SCL 604	Advanced Supply Chain Logistics Management

Program Electives Courses

(2 courses, 9 quarter units)

For electives, students should select two of the following 600 level courses. Some of these courses are more relevant to a given discipline than others and hence students are asked to consult the lead faculty regarding the courses.

ENM 604	Quality Management
ENM 605	Infrastructure Management
TMG 655	Management of R & D and Innovation Processes

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SSE 606	Managing Information Security
SSE 608	Science of Explosives and Biological Threat Materials
SSE 609	Planning and Response for Terrorism
MNS 601	Statistics for Business
IEM 605	Engineering Applications of Operations Research (Prerequisite: MNS 601)
SCL 605	Technology and Infrastructure Requirements for Supply Chain Management and eLogistics
CIS 607	System Integration and Client Server Computing

■ MASTER OF SCIENCE (M.S.) IN ENVIRONMENTAL ENGINEERING

(720-813)

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The Master of Science in Environmental Engineering (MSENE) program is designed to provide participants 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 projects. Environmental engineers are responsible for safe drinking water, treating and properly disposing of wastes, maintaining air quality, controlling water pollution, and remediating sites contaminated due to spills or improper disposal of hazardous substances. Environmental Engineers monitor the quality of the air, water, and land as well as develop new and improved means to protect the environment. This discipline involves traditional engineering components such as mathematics, physics, chemistry, and engineering design. Environmental engineering education and practice also includes a range of other disciplines, such as biology, microbiology, ecology, public health, geology, meteorology, economics, political science, and computer science. To address the spectrum of issues facing the environment, environmental engineers are broadly educated, as well as technically trained.

Program Description

Environmental Engineering today addresses problems in the water, air and soil environments. The following subjects are now considered essential in the background of an environmental engineer: ecology, microbiology, ground water, solid waste, farm waste, noise pollution, environmental impact assessment, environmental legislation and environmental modeling and remediation of site contamination with spills or improper disposal of hazardous materials.

Environmental engineers are needed in both the private and public sectors. They 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, and universities that conduct environmental research, international agencies that transfer knowledge to developing countries, and public-interest groups that advocate environmental protection.

After completion of the master's degree in Environmental Engineering, graduates will be able to:

- Assess and analyze the principles of water chemistry.
- Analyze water, air, and land resources as well as threats and engineering solutions to each.
- Solve numerical practical environmental problems as illustrated to clarify key concepts and process engineering facility design.
- Describe the role of water in our environment: water quality, source, and prevention of water pollution.
- Analyze the principles involved in treatment and processing of water from different sources.

- Describe how wastewater is collected and treated; identify biological and chemical toxin pollutants from wastewater.
- Explain the concept of risk as applied to environmental project planning.
- Describe air quality management; analyze the causes and effects of air pollution.
- Provide a methodology to determine the hazardous air pollutants from industrial/commercial sources.
- Analyze the economical, social, legal, and political aspects of waste management.
- Identify the identification, transportation, monitoring, storage, minimization, treatment, and disposal of hazardous waste material/waste.

Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree in good academic standing from a regionally accredited institution. The non-engineering student will find the technical focus of many courses challenging but essential for an increasing number of functional technical positions in environmental engineering organizations. 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.

Degree Requirements

(15 courses, 64.5 quarter units)

Curriculum Requirements

The Master of Science in Environmental Engineering requires completion of 54 quarter units of graduate course 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 matriculation.

Students are expected to possess or to have access to a computer outside of National University to work on projects both on and off campus. Given the nature of instructional technology, the following courses are not required, but highly recommended for students who need basic skills in computer technology and electronic research:

CIS 301 Management Information Systems

Program Prerequisites

(5 courses, 19.5 quarter units)

Applicants with a Bachelor of Arts or Bachelor of Science degree from non-engineering curriculum should make up the deficiencies. Students will be required to take prerequisite courses based on undergraduate major and deficiencies from the following list:

SCI 101	General Chemistry
SCI 101A	General Chemistry Laboratory
MNS 205	Introduction to Quantitative Methods For Business
CSC 208	Calculus for Computer Science (Prerequisite: MTH 215)
SCI 335	Environmental Science
or	
SCI 330	Ecology

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better, or if applicants have successfully passed a challenge exam. Students who have a Bachelor of Science in Engineering or related field are exempt from the prerequisite courses.

School of Engineering and Technology

Core Requirements

(10 courses, 45 quarter units)

ENE 601	Environmental Engineering Laboratory (Prerequisite: SCI 101 or SCI 101A)
ENE 602	Environmental Microbiology and Biological Treatment (Prerequisite: SCI 330 or SCI 335)
ENE 603	Unit Processes of Environmental Engineering (Prerequisite: MNS 205 or CSC 208)
ENE 604	Engineering Aspects of Environmental Engineering Quality Control
ENE 605	Foundation of Air Pollution Engineering and Equipment Design
ENE 606	Principles of Water and Wastewater Engineering and Treatment (Prerequisite: MNS 205 or CSC 208)
ENE 607	Toxic and Hazardous Waste Remediation Analysis and Solid Waste Recovery (Prerequisite: SCI 101 or SCI 101A)
ENE 608	Site Assessment and Environmental Remediation Methodologies
ENE 609A	Master's Research Project I (Prerequisites: All core requirements)
ENE 609B	Master's Research Project II (Prerequisite: ENE 609A)

Program Electives

(2 courses, 9 quarter units)

The following courses are suggested electives, taken in consultation with lead faculty and department chair.

ENM 600	Introduction to Engineering Management
ENM 601	Engineering Project Management
ENM 602	Management of Risk, Contracts, and Legal Issues
ENM 603	Managing Projects in Operations Management (Prerequisite: ENM 600)

■ MASTER OF SCIENCE IN HOMELAND SECURITY AND SAFETY ENGINEERING

(720-818)

Faculty Advisor: Shekar Viswanathan • (858) 642-8416 • sviswana@nu.edu

The 9/11 events have highlighted the national (and to some extent international) need for highly educated and experienced professionals in the area of homeland security and safety engineering. This program, due to its special nature, represents an interdisciplinary area of research and application that brings together all fields of engineering, and science 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 Safety Engineering degree.

There are two well known external certifications related to security and safety professionals. The 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.

The Homeland Security and Safety Engineering program is designed in such a way that anyone successfully completing this program would be academically trained to appear for Certified Safety Professional (CSP) certification administered by the Board of Certified Safety Professionals and for the American Society of Industrial Security (ASIS) Certified Protection Professional (CPP) exam.

Upon completion of the MS program, graduates from safety/security engineering will be able to:

- Understand and appreciate the complex issues related to safety and security
- Understand the engineering/technology behind safety and security solutions
- Apply quantitative and qualitative analytical skills and techniques to safety and security of assets.
- Apply a multidisciplinary approach involving the integration of quality, and risk analysis to the safety/security of assets.
- Integrate state-of-the-art technological advances to the practice of modern safety/security engineering program, including the use of information technology, and supporting software applications.
- Apply a global mindset to safety/security issues related to assets.
- Assess the impact of safety/security issues for the operation of corporations and businesses and develop appropriate action plans through detailed engineering.
- Integrate tools and techniques, resources, organizational systems, and decision making processes for the successful implementation of safety and security plans.
- Possess the knowledge necessary to become certified as a safety (CSP) and security professional (CPP).

Degree Requirements

To receive a Master of Science in Homeland Security and Safety Engineering, students must complete 54 quarter units involving twelve courses. 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

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:

SCI 101	General Chemistry
SCI 335	Environmental Science
MS 205	Introduction to Quantitative Methods and Statistics

These courses may be waived if their equivalents have been completed at the undergraduate level with a grade of "C" or better.

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Program Requirements (12 courses, 54 quarter units)

Students enrolled this program are advised to take the courses in the order specified below.

SSE 602	Design and Evaluation of a Modern Safety Program (Prerequisites: SSE 600 and SSE 601)
SSE 603	Introduction to Security Engineering
SSE 604	Security Engineering - Planning and Design (Prerequisite: SSE 603)
SSE 605	Chemical Process Safety Engineering (Prerequisite: SSE 602)
SSE 606	Managing Information Security
SSE 607	Fire and Explosion Engineering
SSE 608	Science of explosives and biological threat materials (Prerequisite: SSE 603)
SSE 609	Planning and Response for Terrorism
SSE 611	Emergency Management
SSE 612	Disaster Management and Preparedness
SSE 610 A	Safety and Security Engineering Capstone Course (Prerequisites: SSE 600 through SSE 609)
SSE 610 B	Safety and Security Engineering Capstone Course (Prerequisite: SSE 610A)

■ MASTER OF SCIENCE IN INFORMATION SYSTEMS

(720-812)

Faculty Advisor: Rell Snyder • (714) 429-5282 • rsnyder@nu.edu

The Master of Science in Information Systems (MSIS) program is designed to provide participants with the requisite management, business, strategic and technical skills needed to help their companies apply information systems technology more efficiently and effectively. Although the higher education system produces large numbers of highly educated people in both information systems (CIS) and computer science (CSC), skilled information systems people are in short supply in industry. Even scarcer are talented people with advanced knowledge for managing information systems. It is the objective of the MSIS program to fill this gap by providing the needed education. Essential career development skills including oral, written and presentation skills; people and business skills; and ethics and professionalism are integrated throughout the curriculum and its individual courses. The curriculum is designed as a set of interrelated building blocks consisting of foundations, core, integration and career tracks.

MS in Information Systems Transition Programs

BSIS/MSIS Transition Program

The BSIS/MSIS Transition Program allows currently enrolled BSIS students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSIS courses as electives for their BSIS degree. Students can select CIS 601 and one of the following two courses: CIS 602 or CIS 603. The number of courses required to earn an MSIS degree for Transition Program students is reduced from 12 to 10 courses. To be eligible for the Transition Program, students must apply for the MSIS and begin their program of study within six months after completing their final BSIS course. Students must complete the 10-course MSIS program within four years with no break exceeding 12 months.

Students must complete graduate-level course work taken as part of the BSIS degree with a grade of B or better. This 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. Grades

earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

BSITM/MSIS Transition Program

The BSITM/MSIS Transition Program allows currently enrolled BSITM students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSIS courses as electives for their BSITM degree. Students can select CIS 601 and one of the following two courses: CIS 602 or CIS 603. The number of courses required to earn an MSIS degree for Transition Program students is reduced from 12 to 10 courses. To be eligible for the Transition Program, students must apply for the MSIS and begin their program of study within six months after completing their final BSIS course. Students must complete the 10-course MSIS program within four years with no break exceeding 12 months.

Students must complete graduate-level course work taken as part of the BSITM degree with a grade of B or better. This 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. Grades earned in graduate level courses will be calculated as part of the student's undergraduate Grade Point Average.

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, software engineering or approval of the lead faculty and have some background in business and technology.

Degree Requirements

(15 courses, 67.5 quarter units)

The MSIS 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 regionally accredited institution may be transferred to meet stated requirements in the program. The degree program consists of ten courses plus the two-part MSIS 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.

Program Core Requirements

(12 courses, 54 quarter units)

CIS 601	Information Systems Strategies, Policies and Ethics
CIS 602	Network Services and Protocols (Prerequisite: CIS 601 or approval of lead faculty)
CIS 603	Database Management for Decision Support Systems (Prerequisite: CIS 601 or approval of lead faculty)
CIS 604	Organizational Management and Information Security (Prerequisite: CIS 601 or approval of lead faculty)
CIS 606	End User Information Systems (Prerequisite: CIS 601 or approval of lead faculty)
CIS 607	Systems Integration and Client/Server Computing (Prerequisite: CIS 601 or approval of lead faculty)
CIS 608	Knowledge Management-Knowledge-Based Systems
CIS 609	Automated Knowledge Management Systems (Prerequisite: CIS 608)
TMG 625	Systems Analysis and Design
TMG 655	Management of R&D and Innovation Processes
CIS 620A	Master's Research Project I (Prerequisites: All core requirements or approval of lead faculty)
CIS 620B	Master's Research Project II (Prerequisite: CIS 620A)

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■ MASTER OF SCIENCE IN SOFTWARE ENGINEERING

(720-603)

Faculty Advisor: John Watson • (858) 642-8458 • jwatson@nu.edu

Software Engineering is a discipline that offers tools, processes, methods, and techniques to develop and maintain quality software. Software engineering can very well be considered the practical application of computer systems knowledge in the design and development of software, and the required associated documentation, operation, and maintenance. The computer industry is in desperate need of technically qualified people in software engineering. The Master of Science in Software Engineering is designed to prepare graduates to be pioneers and leaders in software engineering. They are trained to be practitioners in the essential areas of software architecture, computer system engineering, computer-based media, common object-oriented engineering, database design, and software development and project management.

The Master of Science in Software Engineering program provides professional education in both system and software development using state-of-the-art design and development methods in compliance with standards set by IEEE, Department of Defense, and the Software Engineering Institute at Carnegie Mellon University. This program is designed to provide students with the management and technology skills in the discipline of software engineering. Graduates are prepared for positions in software project management, software development, database management systems (DBMS), and software quality assurance.

Program Learning Outcomes

- Students shall demonstrate an understanding of a software project's concept of operation
- Students shall demonstrate the knowledge and practice of the methodologies for managing software products
- Students shall understand and demonstrate the principles of requirements management and analysis modeling
- Students shall understand the principles of database design, analysis, and the development of database management systems
- Students shall demonstrate an understanding of the principles of software architecture design
- Students shall demonstrate the ability to utilize the methodologies of hardware, software integration, and networking for project management.
- Students shall properly apply hardware and software enhancements in a Web-based environment.
- Students shall design and demonstrate a prototype database system using object-oriented design and modeling techniques.
- Students shall demonstrate the principles of software development life cycle.

Degree Requirements

(17 courses, 76.5 quarter units)

To receive a Master of Science in Software Engineering, 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

(5 courses, 22.5 quarter units)

Candidates for the program must possess a Bachelor of Science with a major in computer science. Students holding non-computer

baccalaureate degrees can qualify for admission to the program by choosing any one or a combination of the following options.

Gain permission of the lead faculty of the MSSE program based on an interview and supported by verifiable documented proof of proficiency in each specific area of the prerequisite courses. The five prerequisite courses prepare students in the areas of programming, database design, and operating systems.

or

Complete all prerequisite courses

CSC 242	Introduction to Programming Concepts and Methods (Prerequisite: CSC 200, CSC 208)
CSC 252	Programming in C++ (Prerequisite: CSC 242)
CSC 300	Object Oriented Design and Analysis (Prerequisite: CSC 252)
CSC 335	Data Structures and Algorithms (Prerequisite: CSC 300, CSC 331)
CSC 422	Principles of Database Design (Prerequisite: CSC 300)

Program Requirements

(12 courses, 54 quarter units)

Students enrolled or seeking admission to the program can start any course with the exception of SEN 660, SEN 686A, and SEN 686B; however, it is recommended that they take the courses in the order specified below.

SEN 620	Principles of Software Engineering
SEN 621	Software Tools and Processes
SEN 625	Basic Software Architecture
SEN 630	Applied Software Architecture
SEN 650	Human Computer Interface
SEN 651	User Interfaces and Software Engineering
SEN 645	Designing Database Applications
SEN 655	Application Software Development
SEN 635	Software Testing Strategies and Metrics
SEN 660	Software Quality Engineering
SEN 686A	Software Engineering Project I (Prerequisite: SEN 660)
SEN 686B	Software Engineering Project II (Prerequisite: SEN 686A)

■ MASTER OF SCIENCE IN TECHNOLOGY MANAGEMENT

(720-806)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@nu.edu

The Master of Science in Technology Management (MSTM) degree is designed to provide the knowledge and skills required to manage successfully in today's complex, technology-oriented organizations. The MSTM is unique in emphasizing the technology tools for management and maintenance of enterprise business environment, and provides the organizational and analytical skills required for managing change in technological arenas. This degree provides a broad intellectual base upon which a modern manager can continue to build competencies over the long-term of a career and through the continuing rapid progress in technologies relevant to business and public organizations coupled with a rich foundation of academic research.

The Master of Science in Technology Management addresses the needs and interests of individuals already employed in technical areas who wish to pursue or enhance a management career and those who wish to begin a career in a technology-oriented organization as well as those in other fields wishing to develop a firmer grounding in the managerial and leadership issues facing

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today's complex organizations, thereby creating an ideal opportunity to develop practical inter-discipline leadership and managerial skills.

MS in Technology Management Transition Programs

BBA/MSTM Transition Program

The BBA/MSTM Transition Program allows currently enrolled BBA students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSTM courses as electives for their BBA degree. Students can select any two of the following three courses: TMG 620, TMG 603, or TMG 604. The number of courses required to earn an MSTM degree for Transition Program students is reduced from 12 to 10 courses. To be eligible for the Transition Program, students must apply for the MSTM and begin their program of study within six months after completing their final BBA course.

Students must complete graduate-level coursework taken as part of the BBA degree with a grade of B or better. This coursework 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.

BSITM/MSTM Transition Program

The BSITM/MSTM Transition Program allows currently enrolled BSITM students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSTM courses as electives for their BSITM degree. Students can select any two of the following three courses: TMG 620, TMG 601, or TMG 604. The number of courses required to earn an MSTM degree for Transition Program students is reduced from 12 to 10 courses. To be eligible for the Transition Program, students must apply for the MSTM and begin their program of study within six months after completing their final BSITM course.

Students must complete graduate-level coursework as part of the BSITM degree with a grade of B or better. This coursework 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.

BSIS/MSTM Transition Program

The BSIS/MSTM Transition Program allows currently enrolled BSIS students with a grade point average of at least 3.0 who are within completing their last six courses to register for two MSTM courses as electives for their BSIS degree. Students can select any two of the following three courses: TMG 620, TMG 601, or CIS 601. The number of courses required to earn an MSTM degree for Transition Program students is reduced from 12 to 10 courses. To be eligible for the Transition Program, students must apply for the MSTM and begin their program of study within six months after completing their final BSIS course.

Students must complete graduate-level coursework taken as part of the BSIS degree with a grade of B or better. This coursework 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.

Program Learning Outcomes

- Students will be able to demonstrate both understanding and

implementation of the computing technologies in a corporate environment

- Students will be able to demonstrate skills necessary to anticipate and assess the potential commercial impact of specific technologies
- Students will be able to explore, develop and implement systems design, planning, and integration of technology in the competitive environment
- Students will be able to plan and design corporate communications and networking infrastructure.
- Students will be able to identify and improve strategic corporate information technology management procedures and policies.

Degree Requirements

(12 courses, 54 quarter units)

To receive a Master of Science in Technology Management, 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 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 matriculation.

Program Requirements

(11 courses, 49.5 quarter units)

CIS 601	Information Systems, Strategies, Policies and Ethics
TMG 601	Data-Mining Tools: Managing Technology for Competitive Advantage
TMG 603	Information Security Risk Analysis
TMG 604	Competitive Intelligence Techniques and Methodologies
TMG 620	Principles of Technology Management
TMG 625	Systems Analysis and Design
TMG 635	Strategic Management of Technology and Innovation
TMG 655	Management of R&D and Innovation Processes
TMG 640	Managing Technological Change
MNS 601	Statistics for Business
TMG 650	Master's Research Project* (Prerequisite: MNS 601 and 27 quarter units of core requirements)

Elective

(1 course, 4.5 quarter units)

One 600-level course taken from TMG, ELB, CIS, HRM, MGT, FIN, ACC, LED, or MKT

*This is a two-month, one meeting per week course with a significant research component. Grading is by "H" (for Honors, "B" or better work), "S" (for marginal, "C" level work), or "U" (unsatisfactory, "D" or below). Students are required to complete MNS 601 in addition to at least 27-quarter units of the program required courses before beginning TMG 650.

■ MASTER OF SCIENCE IN WIRELESS COMMUNICATIONS

(720-816)

Faculty Advisor: Ronald Uhlig • (858) 642-8412 • ruhlig@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

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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.

Program Outcomes

After completion of the master's degree in Wireless Communications (MSWC), graduates will be able to:

- Construct a statistical model for signal analysis in communication systems.
- Develop and design wireless communication systems.
- Evaluate and apply wireless networking, protocols, architectures and standards.
- Identify different kinds of coding and decoding schemes applied to the current wireless standards.
- Contrast the ethical aspects and related issues in the telecommunication industries.
- Analyze and plan CDMA systems.
- Integrate and implement different types of the Third Generation (3G) wireless networks.
- Utilize engineering software for wireless system development including planning of broadband networks.
- Apply the signal and system representations, filter models, noise generation, Monte Carlo simulation, and post-processing using MATLAB and its communication tools.
- Categorize the trends and concepts for the next-generation of wireless infrastructures and standards.
- Develop the ability of critical thinking and innovative ideas for current and future research in the area of Wireless Communications.

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

It is assumed that candidates seeking admission to the program possess a baccalaureate degree in engineering, engineering technology, or physical/computational science from an accredited university.

Degree Requirements

(18 courses, 81 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. The degree program consists of ten courses plus the two-part MSWC Master's Research Project.

Program Prerequisites

(6 courses, 27 quarter units)

Students without a baccalaureate degree in Electrical Engineering or in a closely related area must complete the following courses:

MTH 215	College Algebra and Trigonometry
CSC 208	Calculus for Computer Science (Prerequisite: MTH 215) (Cross listed with MTH 220)
MTH 221	Calculus II (Prerequisite: CSC 208 or MTH 220)
SCI 104	General Physics
WCM 301	Linear Systems and Signals (Prerequisites: MTH 221 & SCI 104)
WCM 302	Probability and Random Processes in Engineering (Prerequisites: MTH 221 & SCI 104)

or

Gain permission from the lead faculty of the MSWC program based on equivalent coursework supported by verifiable documented proof.

Program Core Requirements

(12 courses, 54 quarter units)

Students are encouraged to take the following 12 courses (54 quarter units) in the order of presentation. Courses WCM 601 and WCM 602 are foundation courses that must be completed before taking any other courses and the project courses.

WCM 601	Analog and Digital Communications Fundamentals
WCM 602	Wireless Communications: Principles and Practice (Prerequisite: WCM 601)
WCM 603	Wireless Networking: Architectures, Protocols and Standards (Prerequisite: WCM 602)
WCM 604	Coding and Modulation for Wireless Communications (Prerequisite: WCM 602)
WCM 605	Information, Privacy, and Security in Wireless Systems (Prerequisite: WCM 602)
WCM 606	CDMA Wireless Standards and Applications (Prerequisite: WCM 602)
WCM 607	Third-Generation (3G) Wireless Networks (Prerequisite: WCM 602)
WCM 608	Engineering Software for Wireless System Development (Prerequisite: WCM 602)
WCM 609	Communication Systems Modeling with Wireless Applications (Prerequisite: WCM 602)
WCM 610	Next-Generation Wireless Infrastructures and Standards (Prerequisite: WCM 602)
WCM 611A	Master's Research Project I (Prerequisites: All core requirements)
WCM 611B	Master's Research Project II (Prerequisite: WCM 611A)

■ MASTER OF SCIENCE (M.S.) IN SYSTEMS ENGINEERING

(720-830)

Faculty Advisor: Jack Elson • (310) 662-2158 • jelson@nu.edu

During the last quarter of the 20th century the concept of systems and general systems theory has become increasingly more relevant to scientists, engineers, industry, and society in general. As the 21st century begins, technology has become an intertwined part of every day life. It becomes more so with every year and continues to be ever more dynamically complex with advances in applied science, such as mobile communications, global positioning systems, and bioengineering, to name a few. This current and future environment calls for an understanding of how these technologies can and will

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affect our society so that the design and implementation of these technologies provide efficient, effective, and quality outcomes with no unintended consequences.

The systems engineering program focuses on complex technology systems that have a far reaching affect 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 technologies of these systems as well as the human elements that are imbedded within or connected from without are both equally important in the curriculum and therefore the science of both the physical and managerial are studied. The systems engineering program provides knowledge in the activities related to the life cycle of systems including definition, development, deployment, and decommission. Issues of ethics and diversity will be considered throughout the program to instill these concepts and values as part of the social systems that are intertwined with technological systems and their design.

Degree Requirements (16 courses, 72 quarter units)

To receive a Master of Science in Systems Engineering, students must complete 54 quarter units involving twelve courses. Students must select one of the areas of specializations to fulfill overall degree requirements. 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.

Since this program is defined for various areas of specialization, there are specific requirements for the type of courses to be taken as defined in this catalog.

Program Prerequisites (4 courses, 18 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:

MNS 205	Introduction to Quantitative Methods for Business
EGR 301	Engineering Mathematics
EGR 307	Introduction to Software, Engineering and Ethics
EGR 310	Engineering Economics

Program Requirements (8 courses, 36 quarter units)

SYE 600	Introduction to Systems and the Design Process
SYE 601	Systems Analysis and Design Evaluation (Prerequisite: SYE 600)
SYE 602	Advanced Systems Design (Prerequisite: SYE 601)
SYE 603	System Dynamics (Prerequisite: SYE 602)
ENM 600	Introduction to Engineering Management
SEN 620	Principles of Software Engineering
ENM 607A	Engineering Management Capstone Course

(Prerequisite: SYE 600, SYE 601, SYE 602, SYE 603, ENM 600, SEN 620.)

ENM 607B Engineering Management Capstone Course
(Prerequisite: ENM 607A)

Requirements for the Areas of Specialization (4 courses, 18 quarter units)

Students must select one of the following Areas of Specialization:

▲ Area of Specialization in Industrial Engineering

(895)
(4 courses, 18 quarter units)

IEM 601	Engineering Economy
IEM 602	Managing Production Planning & control
IEM 603	Managing Facilities Planning Layout
IEM 604	Ergonomics and Occupational Safety

▲ Area of Specialization in Engineering Management

(900)
(4 courses, 18 quarter units)

Students must select four courses from the following

ENM 601	Engineering Project Management
ENM 602	Management of Risk, Contracts, and Legal Issues
ENM 603	Managing Projects in Operations Management
ENM 604	Quality Management

▲ Area of Specialization in Supply Chain Management and eLogistics

(892)
(4 courses, 18 quarter units)

SCL 601	Supply Chain Management Fundamentals
SCL 602	Strategies, Design and Implementation
SCL 603	eLogistics Management Fundamentals
SCL 604	Advanced Supply Chain Logistics Management

▲ Area of Specialization in Environmental Engineering

(901)
(4 courses, 18 quarter units)

ENE 603	Processes of Environment Engineering
ENE 604	Engineering Aspects of Environmental Engineering
ENE 605	Foundation of Air Pollution Engineering and Equipment Design
ENE 606	Principles of Water and Wastewater Engineering and Treatment

▲ Area of Specialization in Software Engineering

(902)
(4 courses, 18 quarter units)

Students must select four courses from the following

SEN 621	Software Tools and Processes
SEN 625	Basic Software Architecture
SEN 630	Applied Software Architecture
SEN 650	Human Computer Interface
SEN 651	User Interfaces and Software Engineering
SEN 645	Designing Database Applications
SEN 655	Application Software Development
SEN 635	Software Testing Strategies and Metrics

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▲ Area of Specialization in Enterprise Architecture

(897)

The specialization courses as listed below will be offered in conjunction with the FEAC Institute at National University. Successful completion of all four courses in either certification program is required as part of the Enterprise Architecture specialization Program. The student will choose either DoDAF or FEA(F):

DoDAF [DEPARTMENT OF DEFENSE ARCHITECTURE FRAMEWORK] CERTIFICATION PROGRAM COURSES

DAF 601	Architecture Framework Basics
DAF 602	Core and Supporting Products
DAF 603	Enterprise Architecture Planning
DAF 604	Advanced Architecture Modeling and Analysis

FEA(F) [FEDERAL ENTERPRISE ARCHITECTURE (FRAMEWORK)] CERTIFICATION PROGRAM COURSES

EEA 601	Enterprise Architecture Concepts and Theory
EEA 602	Enterprise Architecture Planning
EEA 603	Enterprise Architecture Implementation
EEA 604	Enterprise Architecture Integration

■ MASTER OF SCIENCE IN DATABASE ADMINISTRATION DEGREE

(720-831)

National University's Master of Science in Database Management program provides students with a solid foundation in the fundamental skills of database theory, modeling, implementation, administration and management, exposing them to best practice methodologies using a variety of tools that includes abstract thought, strategic managerial planning, and practical database administration skills.

This Master of Science in Database Administration Degree (MSDBA) is a specialized professional degree designed for Chief Information Officers (CIO), Database Administrators, Software Engineers, Web Application Developers and other business and technology professionals seeking skills in creating and managing critically important enterprise data and information. MSDBA graduates will possess the skills to formulate the database technologies and innovations for an organization's success in achieving its mission.

Employment of database specialists is expected to grow much faster than the average for all occupations as organizations continue to adopt and integrate increasingly sophisticated technologies. Job increases will be driven by very rapid growth in computer system design and related application services, which is projected to be one of the fastest-growing industries in the U.S. economy. In addition, many job openings will arise annually from the need to replace workers who move into managerial positions or other occupations or who leave the labor force.

Program Learning Outcomes

Master of Science in Database Administration graduates at National University will be able to perform as professionals with solid database skills who possess the ability to strategically manage an organization's enterprise databases, analyze fundamental problems and formulate effective solutions. MSDBA graduates will:

- Be able to analyze business user database requirements, business rules, and policies
- Understand physical, logical and application database architectures.

- Exhibit the capacity to translate database modeling theory into sound database design and implementation.
- Demonstrate proficiency in essential database skills, including SQL database programming.
- Be able to critically examine the cause of database problems, design and develop appropriate database solutions and policies.
- Demonstrate ethical professional database administration, management and leadership skills, and privacy law and policy at the local, state and national levels.
- Be able to apply fundamental concepts of database security, backup and recovery, and business continuity.
- Understand and apply emerging trends and standards for database best practices, including an understanding of organizational database value and familiarity with strategic enterprise data integration.
- Demonstrate essential communication and interpersonal skills necessary to succeed in today's complex business environment, including the ability to document core business processes.
- Recognize database ethical issues and apply professional standards in database requirements analysis, design and implementation.

Admission Requirements

Candidates seeking admission to the MSDBA Program must possess a baccalaureate degree in Computer Science, Information Systems, Information Technology, Software Engineering. Candidates who have baccalaureate degrees in other related areas must be approved by the lead faculty or department chair before enrolling into the program.

Degree Requirements

(14 courses, 63 quarter units)

The MSDBA 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 regionally accredited institution may be transferred to meet stated requirements in the program. The degree program consists of ten courses plus the two-part MSDBA graduate project (two courses, 4.5 quarter units each) that cannot be taken until all other core courses have been completed. Prior to beginning any graduate level course, students who do not possess a baccalaureate degree in Computer Science, Information Systems, Information Technology, Software Engineering must successfully complete the two Program Prerequisites courses.

Program Prerequisites

(2 courses, 9 quarter units)

Students enrolling in the MSDBA program should have an accredited Bachelor's degree, preferably in a technology related field. Undergraduate courses in business, mathematics, computer science, and/or technology will prepare students to successfully complete the program.

Prerequisites

ITM 440 Database Systems Concepts and Data Modeling

ITM 450 Database Processing and Administration

Students who possess the requisite knowledge, but have not taken the prerequisite courses, may demonstrate comparable knowledge through challenge exams.

Program Requirements

(12 courses, 54 quarter units)

DAT 600 Database Theory, Modeling & Design

DAT 610 Database Implementation and Maintenance
(Prerequisite: DAT 600)

DAT 620 Structured Query Language

DAT 630 Database Programming
(Prerequisite: DAT 620)

School of Engineering and Technology

DAT 640	Database Administration & Security
DAT 650	Database Disaster Recovery (Prerequisite: DAT 640)
DAT 660	Enterprise Database Management
DAT 670	Enterprise Business Intelligence (Prerequisite: DAT 660)
DAT 680	Database Web Technologies
DAT 690	Emerging Database Technologies (Prerequisite: DAT 680)
DAT 691	Database Research Project I
DAT 692	Database Research Project II (Prerequisite: DAT 691)

Certificate Programs

● Certificate in Industrial Engineering

(770-000-895)

(5 courses, 22.5 quarter units)

The industrial engineering certificate program prepares engineering graduates for positions in several areas that require problem-solving expertise to improve manufacturing processes, quality, productivity, and customer service. Students completing 22.5 quarter units of the following courses earn an Industrial Engineering certificate and the specialty is recorded on the students' permanent university transcript. This specialty would be administered through the office of the Dean of Engineering and Technology. The lead faculty would review each student's course work prior to permitting a student in to this certification program; based on the student's performance, both the coordinator and the dean would determine if the student ought to be awarded with a certificate of achievement.

IEM 602	Managing Production Planning and Control
IEM 603	Managing Facilities and Planning Layout
IEM 604	Ergonomics and Occupational Safety
MNS 601	Statistics for Business
IEM 605	Engineering Applications of Operations Research (Prerequisite: MNS 601)

● Certificate in Information Technology Management

(670-000-465)

Faculty Advisor: John Bugado • (858) 642-8407 • jbugado@mu.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)

CIS 301	Management Information Systems
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Certificate Requirements

(5 courses, 22.5 quarter units)

ITM 310	Introduction to Information Technology (Prerequisite: CIS 301)
ITM 410	Computer Network Technologies Overview
ITM 420	Network Management Principles and Practices
ITM 440	Database Systems Concepts and Data Modeling

Elective

(1 course, 4.5 quarter units)

Choose one of the following:

ITM 320	Information Technology Management (Prerequisite: ITM 310)
ITM 330	Desktop Applications and Information Processing
ITM 450	Database Processing and Administration (Prerequisite: ITM 440)

● Certificate in Project Management

(770-000-893)

(5 courses, 22.5 quarter units)

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 don't happen spontaneously; they require preparation, planning, and organization. This certificate program is designed to provide systematic training to those would like to pursue 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.

ENM 601	Engineering Project Management
ENM 602	Management of Risk, Contracts, and Legal Issues
PME 601	Planning, Performing and Controlling Projects (Prerequisites: ENM 601, and ENM 602)
PME 602	Managing Engineering Competencies and Skills (Prerequisites: ENM 601, and ENM 602)
PME 604	Project Financing and Associated Financial Management (Prerequisites: ENM 601, and ENM 602)

● Certificate in Security and Safety Engineering

(770-000-894)

(5 courses, 22.5 quarter units)

The security and safety engineering certificate program prepares graduates for positions in several areas of Security and Safety Engineering. Students completing 22.5 quarter units of the following courses can earn a Security and Safety Engineering certificate and the specialty would be recorded on the students' permanent university transcript. This program is designed in such a way that anyone going through this program would be academically trained to appear for "Certified Safety Professional (CSP)" certification administered by the American Society of Safety Engineers' and the American Society of Industrial Security's (ASIS) Certified Protection Professional (CPP) exam. This specialty would be administered through the office of the Dean of Engineering and Technology. The lead faculty of the program would review each student's course work prior to permitting him/her into this certification program. Based on the student's performance, the coordinator and the dean would determine whether the student is eligible to receive a certificate of achievement.

SSE 601	Introduction to Safety Engineering
SSE 602	Design and Evaluation of a Modern Safety Program (Prerequisite: SSE 601)
SSE 603	Introduction to Security Engineering
SSE 604	Security Engineering - Planning and Design (Prerequisite: SSE 603)
SSE 609	Planning and Responding to Terrorism

School of Engineering and Technology

● Certificate in Supply Chain Management and eLogistics

(770-000-892)

(5 courses, 22.5 quarter units)

From small companies to giant global institutions, the concept of integration within a business and between businesses has gained increased validity. There has been a growing recognition that supply chain management and eLogistics help achieve the twin goals of cost reduction and service enhancement. Supply Chain Management and eLogistics have in turn been impacted and driven by e-business strategies and technologies. This program is designed to provide comprehensive academic training on best practices in a dynamic and increasingly global economic business environment.

- SCL 601 Supply Chain Management Fundamentals
 - SCL 602 Supply Chain Management - Strategies, Design and Implementation
(Prerequisite: SCL 601)
 - SCL 603 Logistics Management Fundamentals
 - SCL 604 Advanced Supply Chain Logistics Management
(Prerequisite: SCL 603)
 - SCL 605 Technology and Infrastructure Requirements for Supply Chain Management and eLogistics
- or*
- CIS 607 System Integration and Client Server Computing

School of Health and Human Services

Dean, Gary J. Frost
Ph.D., Education
Michigan State University

210 Degrees Offered
210 Faculty
211 Undergraduate Degree Programs
212 Nursing Programs
221 Graduate Degree Program
222 Certificate Program

The University of Values



Degree Programs Offered and Faculty

Degrees Offered

Undergraduate Degrees

Associate of Arts

with a Concentration in:
Medical Billing, Coding and Information
Technology

Associate of Science in Nursing

Licensed Vocational Nurse to Associate of Science in Nursing

Bachelor of Science in Nursing (Generic Entry)

Licensed Vocational Nurse to Bachelor of Science in Nursing

Bachelor of Science in Nursing RN Completion

Bachelor of Science in Nursing Accelerated Post-Bachelor Degree

Bachelor of Science in Allied Health

Graduate Degrees

Master of Health Care Administration

Certificate Program

LVN "30 Unit" Option Certificate

☺ denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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fax: **(858) 642-8781**

e-mail: **shhs@nu.edu**

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Department of Community Health

School of Health and Human Services

Mission Statement

The mission of the School of Health and Human Services is to provide a learning-centered environment that supports the education and preparation of health professionals in becoming innovative, caring practitioners and leaders in interdisciplinary settings. Utilizing multiple frameworks that respect and promote the integration of teaching, research, policy, and community service in multicultural settings, the School's faculty and students will enter into a partnership to maintain relevant, accessible, high-quality programs to meet community health needs.

Undergraduate Degrees

■ ASSOCIATE OF ARTS WITH A CONCENTRATION IN MEDICAL BILLING, CODING AND INFORMATION TECHNOLOGY

(600-198)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

The Associate of Arts degree with a concentration in medical billing, coding and information technology is designed to prepare students in one of the ten fastest growing career fields in the nation, according to the U.S. Department of Labor. Through this program students will be prepared for the health care workforce and to continue their educational path. Students will learn the essential skills to help prepare them for a career in this growing health care field. Students will be prepared to sit for the National Certified Insurance & Coding Specialist (NCICS) Exam and/or the American Health Information Management Association, (AHIMA) Certified Coding Associate, CCA exam.

Program Outcomes

The medical billing, coding and information technology concentration prepares the graduate to 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 health care 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 and ICD-9 coding, HCFA-1500, UB92 and the billing requirements for commercial insurance, Blue Cross/Blue Shield, TRICARE/CHAMPUS, Medi-Cal and Workers' compensation.
- Perform in ethically sensitive ways regarding regulations collecting from insurance companies.

Degree Requirements

To receive the AA degree, students must complete at least 90 quarter units, 31.5 must be taken in residence at National University. Of the 90 units required, 70.5 must fall into the areas of general education listed below. The other 19.5 quarter units can be comprised of core courses.

General Education 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 quarter units at the upper division level and 4.5 quarter units in diversity enriched course work.

AREA A: ENGLISH COMMUNICATION (15 quarter units)

CATEGORY 1 Writing

ENG 100 Effective College English I (3.0 quarter units)

ENG 101 Effective college English II (3.0 quarter units)
(Prerequisite: ENG 100)

ENG 240 Advanced Composition
(Prerequisite: ENG 100/101)

or

ENG 334A Technical Writing
(Prerequisites ENG 100/101)

CATEGORY II Speech and Communication (4.5 quarter units required)

COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (4.5 quarter units)

Choose from the following:

MTH 204 Mathematics for Business and Science
(Prerequisite: MTH 012A & MTH 012B)

MTH 209A Structures and Concepts of Mathematical Fundamentals I
(Prerequisite: Placement Evaluation)

MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)

MTH 215 College Algebra and Trigonometry
(Accelerated Course)

MTH 216A College Algebra and Trigonometry I (3 quarter units)
(Prerequisite: Placement Evaluation)

MTH 216B College Algebra and Trigonometry II (3 quarter units)
(Prerequisite: MTH 216A)

MTH 220 Calculus I
(Prerequisite: MTH 215)

MTH 301 Structure and Concepts of Mathematical Fundamentals II
(Prerequisite: MTH 209A)

CST 206B Discrete Structures and Logic Design
(Prerequisite: MTH215)

CST 208B Calculus for Computer Science
(Prerequisite: MTH 215)

MNS 205 Introduction to Quantitative Methods for Business
(Prerequisite: Placement Evaluation)

NSG 322 Introduction to Biomedical Statistics

AREA C: INFORMATION LITERACY (4.5 quarter units)

ILR 260 Information Literacy and Report Writing
(Prerequisites: ENG 100/101)

AREA D: ARTS AND HUMANITIES (13.5 quarter units)

Choose from the following:

ART 100 Introduction to Art History
(Prerequisites: ENG 100/101)

ART 200 Visual Arts

School of Health and Human Services

ART 200A	Visual Arts Laboratory (1.5 quarter units)
HIS 233	World Civilization I (Prerequisites: ENG 100/101)
HIS 234	World Civilization II (Prerequisites: ENG 100/101)
LIT 100	Introduction to Literature (Prerequisites: ENG 100/101)
LIT 345	Mythology (Prerequisites: ENG 100/101)
MUS 100	Fundamentals of Music
MUS 327	World Music (Prerequisites: ENG 100/101)
PHL 100	Introduction to Philosophy (Prerequisites: ENG 100/101)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES (13.5 quarter units)

Required

PSY 100	Introduction to Psychology
SOC 100	Principles of Sociology (Prerequisites: Eng 100/101)

Choose one of the following:

COM 380	Democracy in the Information Age [+] (Prerequisites: ENG 100/101)
ECO 203	Principles of Macroeconomics
ECO 204	Principles of Microeconomics (Prerequisite: ECO 203)
HIS 220A	History of the United States I [+] (Prerequisites: ENG 100/101)
HIS 220B	History of the United States II [+] (Prerequisites: ENG 100/101)
HIS 300	Foundations of Western Civilization (Prerequisites: ENG 100/101)
HIS 350	Cultural Diversity [+] (Prerequisites: ENG 100/101)
POL 201	American Government and Politics (Prerequisites: ENG 100/101)
SOC 260	Cultural Anthropology (Prerequisites: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES (12 quarter units)

SCI 201	Human Anatomy and Physiology I
SCI 201 A	Human Anatomy and Physiology Laboratory I
SCI 202	Human Anatomy and Physiology II
SCI 202 A	Human Anatomy and Physiology Laboratory II

AREA G: MODERN LANGUAGE (9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement)

ASL 120	American Sign Language I
ASL 220	American Sign Language II (Prerequisite: ASL 120)
ASL 320	American Sign Language III (Prerequisite: ASL 220)
LAS 100	Spanish I
LAS 200	Spanish II (Prerequisite: LAS 100)
LAS 300	Spanish III (Prerequisite: LAS 200)

Concentration in Medical Billing, Coding and Information Technology

(5 courses 22.5 units)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

MBL 200	Medical Terminology (Prerequisites: SCI 201, SCI 201A, SCI 202, SCI 202A)
MBL 210	Medical Insurance I (Prerequisites: MBL 200)
MBL 220	Medical Insurance II (Prerequisites: MBL 210)
MBL 230	Medical Insurance III (Prerequisites: MBL 220)
HSC 300	Legal and Ethical Issues and Health Professions

Recommended Electives

ITM 310	Introduction to Information Technology
ITM 320	Information Technology Management (Prerequisite: ITM 310)

Nursing Programs

Information Applicable to all Nursing Programs

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 the requirements for admission to the University as outlined in the University Catalog.

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 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, are accepted year-round and should be sent to the Department of Nursing, National University, 11255 North Torrey Pines Road, La Jolla, CA 92037. 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 minimum GPA of 2.75 is required for entry into NSG 211T.

Students are not eligible for financial aid until the matriculation is complete.

Before participating in clinical practicums, 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 practicums 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 coverage throughout the program is required. Students

School of Health and Human Services

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 health care facilities maintain current health insurance coverage and Cardio-Pulmonary Resuscitation (CPR) certificate (BLS-Basic Life Support for Health Care Providers). 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. Prior to a clinical experience in a facility, students may be required to demonstrate freedom from drug use through screening. Facilities may also demand an individual background check and fingerprinting on a student. Students are responsible to meet all requirements established by clinical facilities. Students will need to provide their own transportation to class and all clinical experiences. 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.

Program Advisement

All accepted students will be assigned a faculty advisor prior to the mandatory new student orientation. Students are expected to meet periodically with the faculty advisor and academic advisor throughout the program.

Progression Requirements

All transfer courses accepted from another college or university must be equivalent in content and credit. Students who complete course work in preparation for the nursing major at National University will be given priority for selection into nursing classes. 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. Academic acceptance is determined on an individual basis through evaluation of past academic preparation and professional experience.

Students who have not had continual enrollment in National University's nursing program (defined as not taking nursing coursework in greater than one calendar year) or who are transferring from another nursing program must demonstrate level-appropriate proficiency skills prior to readmission to the program. Likewise, these students will need to retake the medication calculation examinations successfully. Students who are unsuccessful in their first attempt at any of the nursing courses or who choose to take a voluntary break from the course sequencing for any reason will be placed in subsequent cohorts as openings in the classes are available. Students who are absent for a period of 12 months or more must re-enroll and re-matriculate under a new catalog.

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 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 the case of the challenge exam, these requirements must receive a passing grade of 80% 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 syllabi of the course being challenged. In the clinical courses, in all areas where critical or life-threatening maneuvers are required the student must perform the return demonstration with 100% 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 will be required to first present any BRN-issued documents related to course requirements to the Department of Nursing. Students will complete a two-part interview process. After completion of the interview process, successful candidates will be enrolled in classes as spaces become available.

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, 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 a 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;
- 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 ("the Board") all pertinent information pertaining to the student's 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.

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 California Board of Registered Nursing, National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry to 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 nurse in California health facilities. Every person who is an applicant for, or who now holds, any nursing license in answerable to the Board for his or her fitness-related conduct.

Learning Contracts

Learning contracts will be used by faculty to notify students of learning issues and/or a clinical performance problem. 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 office of the Department of Nursing.

Procedures Governing Problems with Progress in the Program

When a student is having a problem with the Nursing Program or a student is notified that he/she is not meeting the standards of the

School of Health and Human Services

Nursing Program in either the classroom, nursing skills laboratory, or clinical facility, the student should meet first with the Course Coordinator or (if the deficit is in clinical practice) with the Course Coordinator 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.)

If the candidate is allowed to continue in the program and receives a second unsatisfactory grade in a nursing theory or clinical course, the student will be recommended for dismissal from the program. The process for a hearing and appeal, upon recommendation for dismissal from a program, is outlined in the Academic Dismissal Procedure under the Academic Information for Undergraduate Degrees section of this catalog.

Application for Licensure

Students seeking an RN license must apply to the Board of Registered Nursing ("the BRN") 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 should submit the Application for Licensure by Examination at least four to six months 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 BRN requires applicants to take an examination containing objective multiple-choice questions 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 five hours.

■ ASSOCIATE OF SCIENCE IN NURSING (A.S.N.)

(for individuals seeking minimum preparation to take the California licensure exam for registered nursing)
(602-119)

Faculty Advisor: Nancy Saks • (858) 642-8344 • nsaks2@nu.edu

Program Outcomes

The ASN program prepares the graduate to be able to:

- Formulate accurate nursing diagnosis 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 health care 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 health care team.
- Assume professional, ethical, legal behavior upholding the standards of entry into the profession.

Departmental Admission Requirements

To be eligible for admission to the A.S.N. program at National University, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals

to the Department of Nursing

Individuals who have already completed a bachelor's degree in any field are not eligible for this program.

Requirements for the Degree

To receive an Associate of Science in Nursing (ASN), students must complete at least 106.5 quarter units as outlined below, 31.5 quarter units 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 take additional general electives to satisfy the total units required for the degree.

General Education Requirements

(12 courses, 42 quarter units)

AREA A: ENGLISH COMMUNICATION

CATEGORY 1 Writing

(6 quarter units)

- ENG 100 Effective College English I (3 quarter units)
ENG 101 Effective College English II (3 quarter units)
(Prerequisite: Eng 100)

CATEGORY 2 Speech and Communication

(4.5 quarter units)

- COM 200 Effective Communication

AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units)

- ILR 260 Information Literacy and Report Writing
(Prerequisites: Eng 100/101)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

- PSY 100 Introduction to Psychology
SOC 100 Principles of Sociology
(Prerequisites: Eng 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

- SCI 201 Human Anatomy and Physiology I
SCI 201A Human Anatomy and Physiology Laboratory I
SCI 202 Human Anatomy and Physiology II
SCI 202A Human Anatomy and Physiology Laboratory II
SCI 203 Introduction to Microbiology
SCI 203A Introduction to Microbiology Laboratory

Nursing Core Courses

(16 courses, 64.5 quarter units)

- NSG 211T Health Assessment** (3 quarter units)
(Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)
NSG 211A Health Assessment Clinical Laboratory** (1.5 quarter units)
NSG 200 Foundations of Nursing Practice**
(Prerequisite: C or better in NSG 211)
NSG 200A Foundations of Nursing Practice Clinical Laboratory**
(Prerequisite: C or better in NSG 211)
NSG 205 Nursing Process I: Medical-Surgical Nursing**
(Prerequisite: C or better in NSG 200 and Pass NSG 200A)

School of Health and Human Services

NSG 205A	Nursing Process I: Medical-Surgical Nursing Clinical Laboratory** (Prerequisite: C or better in NSG 200 and Pass NSG 200A)
NSG 314	Nursing Process II: Child-Bearing Family Nursing ** (Prerequisite: C or better in NSG 205 and Pass NSG 205A)
NSG 314A	Nursing Process II: Child-Bearing Family Nursing Clinical Laboratory** (Prerequisite: C or better in NSG 205 and Pass NSG 205A)
NSG 315	Nursing Process III: Pediatric Nursing** (Prerequisite: C or better in NSG 314 and Pass NSG 314A)
NSG 315A	Nursing Process III: Pediatric Nursing Clinical Laboratory** (Prerequisite: C or better in NSG 314 and Pass NSG 314A)
NSG 320	Nursing Process IV: Medical-Surgical Nursing II** (Prerequisite: C or better in NSG 315 and Pass NSG 315A)
NSG 320A	Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory** (Prerequisite: C or better in NSG 315 and Pass NSG 315A)
NSG 325	Nursing Process V: Psychosocial Nursing** (Prerequisite: C or better in NSG 320 and Pass NSG 320A)
NSG 325A	Nursing Process V: Psychosocial Nursing Clinical Laboratory** (Prerequisite: C or better in NSG 320 and Pass NSG 320A)
NSG 340	Nursing Leadership and Management** (Prerequisite: C or better in NSG 325 and Pass NSG 325A)
NSG 340A	Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units) (Prerequisite: C or better in NSG 325 and Pass NSG 325A)

**Content required for licensure by CA Board of Registered Nursing

■ LICENSED VOCATIONAL NURSE TO ASSOCIATE OF SCIENCE IN NURSING (L.V.N.-TO-A.S.N.)

(for Licensed Vocational Nurses seeking to advance to Registered Nurse)
(602-120)

Faculty Advisor: Nancy Saks • (858) 642-8344 • nsaks2@nu.edu

Departmental Admission Requirements:

To be eligible for admission to the LVN-ASN program at National University, 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 achieved a grade point average of 2.75 or the equivalent in the nursing portion of the LVN program
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

Individuals who have already completed a bachelor's degree in any field are not eligible for this program.

Requirements for the Degree

To receive an Associate of Science in Nursing (ASN), students must complete at least 106.5 quarter units as outlined below, 31.5 quarter units 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 take additional general electives to satisfy the total units required for the degree. Students exiting after completing the courses required for licensure by the California Board of Registered Nursing (as designated below) without completing at least 106.5 quarter units (at National

University or through credit transfer) will not be granted the A.S.N. degree.

Required General Education Preparation (12 courses, 42 quarter units)

AREA A: ENGLISH COMMUNICATION

CATEGORY 1 Writing (6 quarter units)

ENG 100	Effective College English I (3 quarter units)
ENG 101	Effective College English II (3 quarter units) (Prerequisite: Eng 100)

CATEGORY 2 Speech and Communication (4.5 quarter units)

COM 200	Effective Communication
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AREA C: INFORMATION LITERACY AND TECHNOLOGY (4.5 quarter units)

ILR 260	Information Literacy and Report Writing (Prerequisites: Eng 100/101)
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AREA E: SOCIAL AND BEHAVIORAL SCIENCES (9 quarter units)

PSY 100	Introduction to Psychology
SOC 100	Principles of Sociology (Prerequisites: Eng 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES (22.5 quarter units)

SCI 201	Human Anatomy and Physiology I
SCI 201A	Human Anatomy and Physiology Laboratory I
SCI 202	Human Anatomy and Physiology II
SCI 202A	Human Anatomy and Physiology Laboratory II
SCI 203	Introduction to Microbiology
SCI 203A	Introduction to Microbiology Laboratory

Nursing Core Courses

(9 courses, 33 quarter units)

NSG 211T	Health Assessment** (3 quarter units) (Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)
NSG 211A	Health Assessment Clinical Laboratory** (1.5 quarter units)
NSG 310	Professional Nursing Values**
NSG 320	Nursing Process IV: Medical-Surgical Nursing II**
NSG 320A	Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory**
NSG 325	Nursing Process V: Psychosocial Nursing** (Prerequisite: C or better in NSG 320 and Pass NSG 320A)
NSG 325A	Nursing Process V: Psychosocial Nursing Clinical Laboratory** (Prerequisite: C or better in NSG 320 and Pass NSG 320A)
NSG 340	Nursing Leadership and Management** (Prerequisite: C or better in NSG 325 and Pass NSG 325A)
NSG 340A	Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units) (Prerequisite: C or better in NSG 325 and Pass NSG 325A)

**Content required for licensure by CA Board of Registered Nursing

Electives or Transfer Units: 31.5 quarter units

School of Health and Human Services

■ BACHELOR OF SCIENCE IN NURSING

(B.S.N.)

(651)

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 Bachelor of Science in Nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE) through June 2011. 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 Outcomes

The BSN program prepares the graduate to be able to:

- Formulate accurate nursing diagnosis 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 health care 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 health care team.
- Assume professional, ethical, 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.)

(for students with little or no prior college credits)

(651)

Faculty Advisor: Nancy Saks • (858) 642-8344 • nsaks2@nu.edu

Departmental Admission Requirements

To be eligible for admission to the generic entry BSN program at National University, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

Requirements for the Degree

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, 45 quarter units of which must be completed in residence at National University and 76.5 quarter units must be upper-division. The following courses are specific degree requirements. In the absence of transfer credit, students may be required to take additional electives to satisfy the total units required for the degree.

Required General Education Preparation

(18 courses, 69 quarter units)

AREA A: ENGLISH COMMUNICATION

CATEGORY 1 Writing

(6 quarter units)

ENG 100 Effective College English I (3 quarter units)
ENG 101 Effective College English II (3 quarter units)
(Prerequisite: Eng 100)

CATEGORY 2 Speech and Communication

(4.5 quarter units)

COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)

OR

NSG 322 Introduction to Biomedical Statistics

AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units)

ILR 260 Information Literacy and Report Writing
(Prerequisites: Eng 100/101)

AREA D: ARTS AND HUMANITIES

(9 quarter units)

See listing of General Education courses offered in this category.

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

PSY 100 Introduction to Psychology

SOC 100 Principles of Sociology
(Prerequisites: Eng 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

SCI 201 Human Anatomy and Physiology I

SCI 201A Human Anatomy and Physiology Laboratory I

SCI 202 Human Anatomy and Physiology II

SCI 202A Human Anatomy and Physiology Laboratory II

SCI 203 Introduction to Microbiology

SCI 203A Introduction to Microbiology Laboratory

AREA G: MODERN LANGUAGE

(9 quarter units)

LAS 340A Spanish in the Professional Work Place for English Speakers*

School of Health and Human Services

LAS 341 Applications of Cross-Cultural Communication in the Work Place
(Prerequisite LAS 340A)

AREA A-G: GENERAL EDUCATION (4.5 quarter units)

SOC 500 Understanding Cultural Pluralism in American Society
(Prerequisite ENG 100/101)

or

HUB 500 Cross-Cultural Dynamics of Human Behavior
(Prerequisites ENG 100/101 and PSY 100)

Preparation for the Major (6 courses, 22.5 quarter units)

NSG 211T Health Assessment** (3 quarter units)
(Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)

NSG 211A Health Assessment Clinical Laboratory** (1.5 quarter units)

NSG 200 Foundations of Nursing Practice**
(Prerequisite: C or better in NSG 211T and Pass NSG 211A)

NSG 200A Foundations of Nursing Practice Clinical Laboratory**
(Prerequisite: C or better in NSG 211T and Pass NSG 211A)

NSG 205 Nursing Process I: Medical-Surgical Nursing**
(Prerequisite: C or better in NSG 200 and Pass NSG 200A)

NSG 205A Nursing Process I: Medical-Surgical Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 200 and Pass NSG 200A)

Nursing Core Courses

(17 courses, 73.5 quarter units)

NSG 314 Nursing Process II: Child-Bearing Family Nursing**

NSG 314A Nursing Process II: Child-Bearing Family Nursing Clinical Laboratory**

NSG 315 Nursing Process III: Pediatric Nursing**
(Prerequisite: C or better in NSG 314 and Pass NSG 314A)

NSG 315A Nursing Process III: Pediatric Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 314 and Pass NSG 314A)

NSG 320 Nursing Process IV: Medical-Surgical Nursing II**
(Prerequisite: C or better in NSG 315 and Pass NSG 315A)

NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory**
(Prerequisite: C or better in NSG 315 and Pass NSG 315A)

NSG 325 Nursing Process V: Psychosocial Nursing**
(Prerequisite: C or better in NSG 320 and Pass NSG 320A)

NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 320 and Pass NSG 320A)

NSG 340 Nursing Leadership and Management**
(Prerequisite: C or better in NSG 325 and Pass NSG 325A)

NSG 340A Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units)
(Prerequisite: C or better in NSG 325 and Pass NSG 325A)

NSG 403 Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice

NSG 404 Pharmacology for Nurses

NSG 410 Nursing in the Community: Population Focused Practice***
(Prerequisites: NSG 411)

NSG 411 Nursing in the Community: Frameworks for Practice***
(Prerequisites: NSG 412)

NSG 412 Nursing in the Community: Health Care Delivery***
(Prerequisite: Completion of all 300-level nursing courses)

NSG 422 Introduction to Nursing Research

NSG 440 Issues in Professional Nursing (capstone course)

** Content required for licensure by CA Board of Registered Nursing

***This course requires a clinical practicum of 32 hours

Electives

(15 quarter units)

■ LICENSED VOCATIONAL NURSE TO BACHELOR OF SCIENCE IN NURSING (L.V.N.-TO-B.S.N.)

(for Licensed Vocational Nurses seeking to advance to BSN-prepared Registered Nurse)
(651-120)

Faculty Advisor: Nancy Saks • (858) 642-8344 • nsaks2@nu.edu

Departmental Admission Requirements

To be eligible for admission to the LVN-BSN program at National University, 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 achieved a grade point average of 2.75 or the equivalent in the nursing portion of the LVN program
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

Requirements for the Degree

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, of which a minimum of 76.5 quarter units must be completed at the upper division level and 45 quarter units 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 take additional general electives to satisfy the total units required for the degree. 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)

AREA A: ENGLISH COMMUNICATION

CATEGORY 1 Writing

(6 quarter units)

ENG 100 Effective College English I (3 quarter units)

ENG 101 Effective College English II (3 quarter units)
(Prerequisite: Eng 100)

CATEGORY 2 Speech and Communication

(4.5 quarter units)

COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)

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or

NSG 322 Introduction to Biomedical Statistics

AREA C: INFORMATION LITERACY AND TECHNOLOGY (4.5 quarter units)

ILR 260 Information Literacy and Report Writing
(Prerequisites: Eng 100/101)

AREA D: ARTS AND HUMANITIES (9 quarter units)

See listing of General Education courses offered in this category.

AREA E: SOCIAL AND BEHAVIORAL SCIENCES (9 quarter units)

PSY 100 Introduction to Psychology
SOC 100 Principles of Sociology
(Prerequisites: Eng 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES (18 quarter units)

SCI 201 Human Anatomy and Physiology I
SCI 201A Human Anatomy and Physiology Laboratory I
SCI 202 Human Anatomy and Physiology II
SCI 202A Human Anatomy and Physiology Laboratory II
SCI 203 Introduction to Microbiology
SCI 203A Introduction to Microbiology Laboratory

AREA G: MODERN LANGUAGE (9 quarter units)

LAS 340A Spanish in the Professional Work Place for English Speakers*
LAS 341 Applications of Cross-Cultural Communication in the Work Place
(Prerequisite LAS 340A)

AREA A-G: GENERAL EDUCATION (4.5 quarter units)

SOC 500 Understanding Cultural Pluralism in American Society
(Prerequisite ENG 100/101)

or

HUB 500 Cross-Cultural Dynamics of Human Behavior
(Prerequisites ENG 100/101 and PSY 100)

Nursing Core Courses

(16 courses, 64.5 quarter units)

NSG 211T Health Assessment** (3 quarter units)
(Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)

NSG 211A Health Assessment Clinical Laboratory** (1.5 quarter units)

NSG 310 Professional Nursing Values**

NSG 320 Nursing Process IV: Medical-Surgical Nursing II**

NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory**
(Prerequisite: C or better in NSG 315 and Pass NSG 315A)

NSG 325 Nursing Process V: Psychosocial Nursing**
(Prerequisite: C or better in NSG 320 and Pass NSG 320A)

NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 320 and Pass NSG 320A)

NSG 340 Nursing Leadership and Management**
(Prerequisite: C or better in NSG 325 and Pass NSG 325A)

NSG 340A Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units)
(Prerequisite: C or better in NSG 325 and Pass NSG 325A)

NSG 403 Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice

NSG 404 Pharmacology for Nurses

NSG 410 Nursing in the Community: Population Focused Practice***
(Prerequisite: NSG 411)

NSG 411 Nursing in the Community: Frameworks for Practice***
(Prerequisites: NSG 412)

NSG 412 Nursing in the Community: Health Care Delivery***
(Prerequisite: Completion of all 300-level nursing courses)

NSG 422 Introduction to Nursing Research

NSG 440 Issues in Professional Nursing (capstone course)

** 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

(for already licensed, registered nurses seeking a Bachelor of Science in Nursing degree)
(651-121)

Faculty Advisor: Nancy Saks • (858) 642-8344 • nsaks2@nu.edu

Departmental Admission Requirements:

To be eligible for admission to the BSN program at National University, 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 registered nurse in the state/country where clinical experiences will be completed
- Have achieved a grade point average of 2.75 or the equivalent in the basic nursing program
- Be a graduate of an associate degree in nursing program or meet equivalency requirements for National University
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a statement of educational and professional goals

Equivalency Requirements

Licensed RNs who have not earned the associate degree in nursing 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 course work from other regionally accredited institutions. The basic nursing education program must have included course work in those areas required by the California Board of Registered Nursing.

Independent Duty Corpsmen (IDCs) who have successfully challenged the NCLEX must meet the equivalency requirements described above and successfully complete the IDC-RN transition courses (NSG 300 and NSG 301).

Requirements for the Degree

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, a minimum of 76.5 quarter units of which must be completed at the upper division level and 45 quarter units of which must be completed in residence at National University.

A maximum of 45 quarter units (30 semester units) of lower-division

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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.

The following courses are specific degree requirements. In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree.

Preparation for the Major

(6 courses, 27 quarter units)

MTH 210	Introduction to Probability and Statistics (Prerequisite: Placement Evaluation)
or	
NSG 322	Introduction to Biomedical Statistics
PSY 100	Introduction to Psychology
SOC 100	Principles of Sociology (Prerequisite: Eng 100/101)
or	
SOC 260	Cultural Anthropology (Prerequisite: ENG 100/101)
LAS 340A	Spanish in the Professional Work Place for English Speakers
LAS 341	Applications of Cross-Cultural Communication in the Work Place (Prerequisite: LAS 340A)
SOC 500	Understanding Cultural Pluralism in American Society (Prerequisite: ENG 100/101)
or	
HUB 500	Cross-Cultural Dynamics of Human Behavior (Prerequisites: ENG 100/101 and PSY 100)

Preparation for the Major for Independent Duty Corpsmen also includes an additional 9 units

NSG 300	Making the Transition to the Role of the Professional Nurse (for IDC-RN candidates only)
NSG 301	Practicing the Role of the Professional Nurse (for IDC-RN candidates only)

These courses must be taken prior to taking any of the 400-level nursing courses.

Nursing Core Courses

(12 courses, 46.5 quarter units)

NSG 211T	Health Assessment** (3 quarter units) (Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)
NSG 211A	Health Assessment Clinical Laboratory** (1.5 quarter units)
NSG 310	Professional Nursing Values
NSG 340	Nursing Leadership and Management** (Prerequisite: C or better in NSG 325 and Pass NSG 325A)
NSG 340A	Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units) (Prerequisite: C or better in NSG 325 and Pass NSG 325A)
NSG 403	Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice
NSG 404	Pharmacology for Nurses
NSG 410	Nursing in the Community: Population Focused Practice*** (Prerequisite: NSG 411)
NSG 411	Nursing in the Community: Frameworks for Practice*** (Prerequisite: NSG 412)
NSG 412	Nursing in the Community: Health Care Delivery*** (Prerequisite: Completion of all 300-level nursing courses)
NSG 422	Introduction to Nursing Research
NSG 440	Issues in Professional Nursing (capstone course)

**Content required for licensure by CA Board of Registered Nursing

***This course requires a clinical practicum of 32 hours

Electives or Transfer Units

(106.5 quarter units)

In the absence of upper-division transfer units, 16.5 quarter units of upper-division coursework may be needed to meet the minimum upper division requirement of 76.5 quarter units. For a bachelors degree program, no more than 135 quarter units are allowed in transfer, of which a maximum of 103.5 quarter units (69 semester units) may be lower division.

■ BACHELOR OF SCIENCE IN NURSING (B.S.N.) ACCELERATED POST-BACHELOR DEGREE

(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) (651-399)

Faculty Advisor: Nancy Saks • (858) 642-8344 • nsaks2@nu.edu

Departmental Admission Requirements

To be eligible for admission to the Accelerated post-bachelor's BSN program at National University, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process
- Hold a bachelor's degree from an accredited school
- Have an overall college GPA of 2.75 OR 3.0 GPA on last 60 hours of coursework completed
- Submit the appropriate nursing program application
- Complete the ACCUPLACER math and English tests
- Submit a written statement of professional and educational goals to the Department of Nursing

Requirements for the Degree

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as outlined below, a minimum of 76.5 quarter units of which must be completed at the upper division level and 45 quarter units 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 take additional general electives to satisfy the total units required for the degree.

Preparation for the Major

(16 courses, 58.5 quarter units)

COM 200	Effective Communication
MTH 210	Introduction to Probability and Statistics (Prerequisite: Placement Evaluation)
or	
NSG 322	Introduction to Biomedical Statistics
PSY 100	Introduction to Psychology
SOC 100	Principles of Sociology (Prerequisites: Eng 100/101)
SCI 201	Human Anatomy and Physiology I
SCI 201A	Human Anatomy and Physiology Laboratory I
SCI 202	Human Anatomy and Physiology II
SCI 202A	Human Anatomy and Physiology Laboratory II
SCI 203	Introduction to Microbiology
SCI 203A	Introduction to Microbiology Laboratory
NSG 211T	Health Assessment** (3 quarter units) (Prerequisite: admission to nursing program and completion of required general education preparation with a minimum GPA 2.75)
NSG 211A	Health Assessment Clinical Laboratory** (1.5 quarter

School of Health and Human Services

- units)
- NSG 200 Foundations of Nursing Practice**
(Prerequisite: C or better in NSG 211T and Pass NSG 211A)
- NSG 200A Foundations of Nursing Practice Clinical Laboratory**
(Prerequisite: C or better in NSG 211T and Pass NSG 211A)
- NSG 205 Nursing Process I: Medical-Surgical Nursing**
(Prerequisite: C or better in NSG 200 and Pass NSG 200A)
- NSG 205A Nursing Process I: Medical-Surgical Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 200 and Pass NSG 200A)

Nursing Core Courses

(17 courses, 73.5 quarter units)

- NSG 314 Nursing Process II: Child-Bearing Family Nursing**
(Prerequisite: C or better in NSG 205 and Pass NSG 205A)
- NSG 314A Nursing Process II: Child-Bearing Family Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 205 and Pass NSG 205A)
- NSG 315 Nursing Process III: Pediatric Nursing**
(Prerequisite: C or better in NSG 314 and Pass NSG 314A)
- NSG 315A Nursing Process III: Pediatric Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 314 and Pass NSG 314A)
- NSG 320 Nursing Process IV: Medical-Surgical Nursing II**
(Prerequisite: C or better in NSG 315 and Pass NSG 315A)
- NSG 320A Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory**
(Prerequisite: C or better in NSG 315 and Pass NSG 315A)
- NSG 325 Nursing Process V: Psychosocial Nursing**
(Prerequisite: C or better in NSG 320 and Pass NSG 320A)
- NSG 325A Nursing Process V: Psychosocial Nursing Clinical Laboratory**
(Prerequisite: C or better in NSG 320 and Pass NSG 320A)
- NSG 340 Nursing Leadership and Management**
(Prerequisite: C or better in NSG 325 and Pass NSG 325A)
- NSG 340A Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units)
(Prerequisite: C or better in NSG 325 and Pass NSG 325A)
- NSG 403 Theoretical Models and Conceptual Frameworks as a Basis for Nursing Practice
- NSG 404 Pharmacology for Nurses
- NSG 410 Nursing in the Community: Population Focused Practice***
(Prerequisite: NSG 411)
- NSG 411 Nursing in the Community: Frameworks for Practice***
(Prerequisite: NSG 412)
- NSG 412 Nursing in the Community: Health Care Delivery***
(Prerequisite: Completion of all 300-level nursing courses)
- NSG 422 Introduction to Nursing Research
- NSG 440 Issues in Professional Nursing (capstone course)

** Content required for licensure by CA Board of Registered Nursing

***This course requires a clinical practicum of 32 hours

■ BACHELOR OF SCIENCE

(620)

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 quarter units at the upper division level and 4.5 quarter units in diversity enriched course work. A plus (+) indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the

following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

■ BACHELOR OF SCIENCE IN ALLIED HEALTH

(620-459)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

Allied Health refers to occupations that support, aid and increase the efficiency of the physician, dentist or primary clinical 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, among others.

The Bachelor of Science with a Major in Allied Health post professional program provides a broad-based foundation of professional, ethical, legal, health policy, issues and trends in health care, health promotion and disease prevention, health education, research and evidence based practice and data base, case and health systems management.

Target Audience: The program is designed to articulate with allied health professional programs at Community Colleges to provide graduates the opportunity to advance in the allied health profession, meet societal and healthcare delivery demands, and assume leadership and/or supervisory positions. The BS degree will prepare graduates to work in a variety of settings with diverse patients, families and communities as well as pursue graduate education in the health care field.

School of Health and Human Services

Program Outcomes

The Allied Health major prepares the graduate to be able to:

- Demonstrate orally and in writing, an understanding of the determinants of health such as environment, socioeconomic conditions, behavioral health care, and human genetics.
- Demonstrate orally and in writing, an understanding of the value and importance of the functions of coordinated, comprehensive and continuous health care.
- Understand and use systematic observations, documentation, and other effective assessment strategies in a responsible manner in partnership with patients, families and other professionals to positively maintain and promote health behavior and prevent disease.
- Assist patients, families and communities to participate actively in decisions regarding health care.
- Use increasingly complex technologies in an appropriate and cost-effective manner.
- Demonstrate orally and in writing, an understanding of the value of operations in the health care system from a broad economic, oversight, management, political, social, legal, system, and organizational perspective.
- Manage and use large volumes of scientific, technological, and patient information in a manner that delivers effective outcomes-based clinical care in the context of community and systems needs.
- Perform in ethically sensitive ways and provide education and counseling for clients, families and communities in situations where ethical issues arise.
- Appreciate the growing diversity of the population and the need to understand health, disease prevention, and health care through different cultural values.
- Work effectively as an interdisciplinary team member in organized settings that emphasize the integration of care, promotion of health and prevention of disease.
- Apply the essential concepts, inquiry tools, collection, evaluation and dissemination of allied health practice data
- Use professional standards in health care practice and maintain a commitment to continual learning.

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 and 76.5 of which must be completed at the upperdivision 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 matriculation.

Prerequisite for the Major

To enroll in this degree program a student must hold an Associate degree in an Allied Health field completed at a regionally accredited institution. National University will also accept students who hold such a degree from certain nationally accredited institutions. Appropriate Allied Health programs may include respiratory therapist, orthopedic technician, cardiovascular technologist, dental hygienist. Transfer units will be applied as per general university catalog policies.

Requirements for the Major

Core Requirements

(10 courses, 45 quarter units)

HSC 300	Legal and Ethical Issues and Health Professions
HSC 310	Issues and Trends in Health Care

NSG 322	Introduction to Biomedical Statistics
GER 310	Healthy Aging
HSC 330	Health Education and Health Promotion
HSC 400	Management for Health Professionals
HSC 410	Informatics for Health Professionals
HSC 420	Allied Health Research (Prerequisites: NSG 322 Introduction to Biomedical Statistics)
HSC430	Case and Outcome Management
HSC 440	Allied Health Capstone Project (Prerequisites: Completion of the core requirements)

Upper-Division Electives

(minimum 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. In addition, two of the General Education courses should be at the upperdivision level. A plus (+) indicates a diversity enriched offering.

Recommended

ART 329	World Art (Prerequisites: ENG 100/101)
CHD 440	Drugs, Values and Society (Prerequisites: ENG 100/101)
CIS 301	Management Information Systems
ECD 310	Child, Family, School and Community (Prerequisites: PSY 100 and 301)
ECO 430	Economics and Philosophy
ENG 432	Report and Research Paper Writing (Prerequisites: ENG 100/101)
HIS 350	Cultural Diversity (Prerequisites: ENG 100/101)
HUB 401	Conflict Resolution (Prerequisites: ENG 100/101 and PSY 100)
LAW 400	Current Legal Issues
MGT 400	Ethics in Law, Business and Management
MGT 409C	Principles of Management and Organizations
PHL 336	Philosophy of Science (Prerequisites: ENG 100/101)
PHL 437	Ethics (Prerequisites: ENG 100/101)
PSY 301	Child and Adolescent Development
PSY 432	Social Psychology (Prerequisites: ENG 100/101 and PSY 100)
SCI 408	Introduction to Genetics and Heredity
SOC 310	Cultural Dynamics in the Workplace (Prerequisites: ENG 100/101)
SOC 445	Contemporary Social Problems (Prerequisites: ENG 100/101)

Graduate Degree

■ MASTER OF HEALTH CARE ADMINISTRATION (M.H.C.A.)

(732)

Faculty Advisor: Bart Chapman • (858) 642-8391 • bchapman@nu.edu

The field of health care administration offers students an excellent opportunity to focus their graduate business study in one of the largest industries in the United States. Major changes are occurring within the U.S. health delivery system. Population growth continues in all age groups. These demographics have increased the demand for graduates with an academic foundation in health care management. Opportunities are noted in government at all levels, public health, professional agencies at multiple levels and in the direct delivery system.

School of Health and Human Services

This unique and rewarding professional program provides students with a carefully structured range of health care administration courses and enhances students' understanding of the U.S. health delivery system. This field of study focuses on the emergence of our health care system and its various components as outlined in the Health Care Management Program Handbook. Graduates also enhance their opportunities for professional growth and job placement in this prestigious field through carefully planned residencies. Students also participate in scholastic research focusing on specific health care issues as the current delivery system undergoes reform.

Degree Requirements

(12 courses, 54 quarter units)

To receive an MHCA 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 admission requirements for specific information regarding application and matriculation.

Core Requirements

(12 courses, 54 quarter units)

It is recommended that students take the following courses in sequence:

ODV 610	Advanced Studies in Organizational Behavior in a Diverse Society
MKT 602	Marketing Management
TMG 620	Principles of Technology Management
HCA 620A	Health Care Management
HCA 636	Ambulatory Care Continuum
HCA 634	Program Planning, Strategic Planning and Evaluation
HCA 629	Health Care Finance, Budget and Managed Care
HCA 609A	Health Care Law, Policy, Politics and Ethics
HCA 640	Biostatistics and Research
HCA 641	Eldercare - Issues into Practice
HCA 691A	Internship Internship = 500 clock hours of onsite work

or

HCA 691B	Research Practicum Research Practicum = formal academic master level written work
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Students must have completed five courses in the health care sequence before taking the capstone. Students are strongly encouraged to take HCA 640, Biostatistics, before beginning any quantitative research project, regardless of the number of courses completed in the sequence.

The lead Faculty for the MHCA Program may make exceptions and allow students who have completed at least three courses in the health care sequence to take the capstone. In making this decision, the following criteria will be used:

- The student's background in health care and research methods
- Topic of the research or focus of the internship
- Any compelling reasons related to timing (for example, the desired internship opportunity will not be available at a later time)

Program Elective

(1 course, 4.5 quarter units)

For the elective, students should select a 600 level course offered in the School of Business and Management.

Note: It is recommended that students use ACC604 as the elective for the MHCA program.

Certificate Program

LVN "30 UNIT" OPTION CERTIFICATE

(670-000-184)

Licensed vocational nurses 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 at National University, 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 PRIOR to submitting the application
- Submit the appropriate nursing program application
- For advising purposes only, complete the ACCUPLACER math and English tests
- For advising purposes only, submit a written statement of professional and educational goals to the Department of Nursing

After completing the interview process, successful candidates will be enrolled in classes as spaces become available.

Requirements for the Certificate

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)

SCI 202	Human Anatomy and Physiology II
SCI 202A	Human Anatomy and Physiology Laboratory II
SCI 203	Introduction to Microbiology
SCI 203A	Introduction to Microbiology Laboratory

Nursing Core Courses

(7 courses, 28.5 quarter units)

NSG 310	Professional Nursing Values**
NSG 320	Nursing Process IV: Medical-Surgical Nursing II**
NSG 320A	Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory**
NSG 325	Nursing Process V: Psychosocial Nursing** (Prerequisite: C or better in NSG 320 and Pass NSG 320A)
NSG 325A	Nursing Process V: Psychosocial Nursing Clinical Laboratory** (Prerequisite: C or better in NSG 320 and Pass NSG 320A)
NSG 340	Nursing Leadership and Management** (Prerequisite: C or better in NSG 325 and Pass NSG 325A)
NSG 340A	Nursing Leadership and Management Clinical Laboratory** (1.5 quarter units) (Prerequisite: C or better in NSG 325 and Pass NSG 325A)

** Content required for licensure by CA Board of Registered Nursing

School of Media and Communication

Dean, **Debra Bean Schneiger**
M.F.A., Visual Arts
School of the Art Institute of Chicago

224 Degrees Offered
224 Faculty
225 Undergraduate Degree Programs
232 Minors
232 Graduate Degree Programs

The University of Values



Degree Programs Offered and Faculty

Degrees Offered

Undergraduate Degrees

Associate of Science in Video Gaming[Ⓢ]

Bachelor of Arts *with Majors in:*

Broadcast Media[Ⓢ]

with Concentrations in:

Broadcast Media Management

Broadcast Media Production

Journalism

with Concentrations in:

Online/Print News Journalism

Broadcast Journalism

Multimedia Arts[Ⓢ]

with Concentrations in:

3-D and Video Game Art

Digital Video and Audio

Print/Web Graphics

Web Development/Digital Interactivity

Minors

Multimedia Arts[Ⓢ]

Video Gaming[Ⓢ]

Graduate Degrees

Master of Fine Arts in Digital Cinema[Ⓢ]

Master of Science in Educational and Instructional Technology[Ⓢ]

with Specializations in:

K-12 and Higher-Education Classrooms

Corporate, Military, and Government Training

[Ⓢ] denotes program also offered or partially offered online.

Note: Not all online programs or courses are offered in entirety via Internet.

Note: Not all courses or programs listed in this catalog are available at every campus.

Various undergraduate minors are available in some degree programs.

FOR FURTHER INFORMATION

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School of Media and Communication

Undergraduate Degrees

ASSOCIATE OF SCIENCE IN VIDEO GAMING

(602-118)

The Associate of Science in Video Gaming consists of courses that prepare the student for a broad range of positions requiring a background in multimedia design theory, production, and project management specific to the computer gaming industry. Many of the skills developed in this program also apply to students wishing to make extensive use of instructional multimedia and gaming technology in teaching careers. Students receive hands-on training in leading software applications, while they learn and apply digital game development theory for a wide range of uses in online, arcade, and console environments. Graduates of the program are in high demand because they possess a combination of skills and knowledge vital to today's video gaming industry. Positions include game programmers, artists, designers, testers, and specialists in audio, video, and writing for games. Additionally, industries such as marketing, business, publishing, government, education and training require individuals with the knowledge and experience this program provides: How to build a game with a team of developers specializing in various aspects of the game presentation; how the business of game development and end-product sales is organized; and how game development tools from multimedia, computer science, and artificial intelligence are identified for use.

Program Learning Outcomes

Upon completing the A.S. in Video Gaming, the students will be able to design, build, and modify video games and computer simulations, demonstrating an understanding of:

- Principles and methodologies behind the rules and play of games.
- Visual and audio design fundamentals and aesthetics.
- Traditional narrative methods, as well as game-specific techniques.
- Game design and production, its interdisciplinary theoretical and practical ties to psychology, literature, cultural studies, film studies, math, computer science, and human-computer interaction (HCI).
- Basic mathematics, Newtonian physics, game-specific programming techniques, algorithm design, and game-testing strategies.
- Legal and ethical issues involved in game development or modification of an off-the-shelf product.
- The history and evolution of digital gaming.
- Diversity issues in the video game marketplace.
- Project management fundamentals, the roles and responsibilities of team members and their collaboration in all phases of design, development and implementation.

Degree Requirements

To receive the A.S. degree in Video Gaming, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University.

General Education Requirements (12 courses, 48 quarter units)

AREA A: ENGLISH COMMUNICATION (15 quarter units Required)

CATEGORY 1 Writing (10.5 quarter units required)

ENG 100 Effective College English (3 quarter units)
ENG 101 Effective College English (3 quarter units)
ENG 334A Technical Writing
(Prerequisites: ENG 100/101)

or

ENG 365 Creative Writing
(Prerequisites: ENG 100/101)

CATEGORY 2 Speech and Communications (4.5 quarter units Required)

COM 100 Introduction to Communications
or
COM 200 Effective Communication

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (4.5 quarter units Required)

MTH 210 Introduction to Probability and Statistics
(Prerequisite: Placement Evaluation)

AREA D: ARTS AND HUMANITIES (4.5 quarter units Required)

LIT 345 Mythology
(Prerequisites: ENG 100/101)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES (9 quarter units Required)

PSY 100 Introduction to Psychology
HIS 350 Cultural Diversity [+]
(Prerequisites: ENG 100/101)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES (6 quarter units Required)

SCI 104 General Physics
SCI 104A General Physics Lab (1.5 quarter units)

AREA G: MODERN LANGUAGE (9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic.)

LAS 100 Spanish I
LAS 200 Spanish II
(Prerequisite: LAS 100)
LAS 300 Spanish III
(Prerequisite: LAS 200)
LAS 101 Spanish for the Native Speaker
(Prerequisite: Native speaking ability and/or recommendation of instructor.)
LAS 201 Spanish for the Native Speaker II
(Prerequisite: LAS 101)
CST 317 Programming in C++
(Prerequisite: CST 242 or verifiable equivalence and permission of instructor)
CST 330C Object Oriented Programming in C++
(Prerequisite: CST 317)
CST 335 Data Structures and Algorithms
(Prerequisite: CST 330C)

School of Media and Communication

Required Courses for the Major

(10 courses, 42 quarter units)

MUL 330	Communication Tools (Prerequisites: ENG 100/101; COM 100 or COM 200)
MUL 331	Principles of Graphic Design (Prerequisites: ENG 100/101; COM 100 or COM 200)
MUL 350	Web Presentation (Prerequisites: ENG 100/101; COM 100 or COM 200)
MUL 380	3-D Modeling & Rendering (Prerequisites: ENG 100/101; COM 100 or COM 200)
MUL 385	Video Game Animation (Prerequisite: MUL 380)
MUL 325	Psychology of Video Games (Prerequisite: PSY 100)
MUL 310	Introduction to Video Gaming (Prerequisite: ENG 100/101)
MUL 315	Video Game Design (Prerequisites: MUL 310)
MUL 318	Video Game Production (Prerequisite: MUL 315)
MUL 318A	Video Game Production Lab (1.5 units) (Prerequisite: MUL 315)

■ BACHELOR OF ARTS

(610)

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 course work. A plus [+] indicates a diversity enriched offering. All undergraduate students working toward any associate or bachelor's degree must meet the University diversity requirement.

National University has general education requirements in the following eight areas:

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 AND HUMANITIES

(minimum 13.5 quarter units)

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: MODERN LANGUAGE

(minimum 9 quarter units)

(Students may satisfy this area by passing a competency test in any second language. They also may satisfy this requirement with 9 quarter units of computer languages, such as C, C++, Java, and Visual Basic. Students who satisfy competency by examination must still meet the overall general education unit requirement. Students enrolled in a degree program under the School of Business and Management can elect to take general education electives to fulfill this requirement.)

AREA A-G: GENERAL EDUCATION

(minimum 4.5 quarter units)

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.

◆ Major in Multimedia Arts

(610-115)

Faculty Advisor: James J. Jaurez • (858) 642-8479 • jjjaurez@nu.edu

The Bachelor of Arts in with a major in multimedia arts consists of courses that prepare the student for a broad range of positions requiring a background in computer multimedia design theory, production, and project management. Students receive hands-on training in leading software applications, while they learn and apply multimedia development theory and practice for online delivery and CD-ROM production. Graduates of the program are in high demand because they possess a combination of skills and knowledge vital to today's workplace. Positions in marketing, business, publishing, government, education and training include Web Designer/ Developer, Graphic Designer, Project Manager, and Multimedia Specialist.

Upon completion of the program students should be able to:

- Communicate effectively with clients, project managers, and media production team members in various electronic formats using oral, visual, and written methods.
- Identify the features of distribution media such as the Internet and other network systems and their application in multimedia projects.
- Describe the phases of the multimedia production cycle, from the initial planning stages to the final delivery of a professional product.
- Describe the technological constraints associated with the software and hardware used in a broad range of multimedia projects.
- Analyze multimedia production software features in selecting the appropriate products to accomplish a specified project goal.
- Explain such ethical and legal issues as copyright and the process of obtaining the use of original and licensed material in media projects
- Apply the principles of graphic design, information design and usability design in the generation of multimedia projects.
- Prepare active and interactive content with graphics, animation, sound and digital video using contemporary multimedia authoring software.
- Design interactive multimedia using multimedia authoring software and scripting language controls such as HTML, Action Script and Lingo.
- Design a professional electronic portfolio that demonstrates writing and design competency in a variety of media, including digital print documents (PDF), web, CD-ROM, digital video, 2D and 3D graphics.

Degree Requirements

To receive a Bachelor of Arts degree with a major in multimedia arts, students 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. 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 outside of National University so that they can work on projects both

School of Media and Communication

on and off campus. Given the nature of multimedia arts technology, this computer should be a 2.8 GHz processor with 512 megabytes of RAM or better. Software for multimedia program provided for onsite computer labs only. Students are responsible for software expenses associated with online and outside activities.

Preparation for the Major

(8 courses, 36 quarter units)

Introductory Courses

COM 100	Introduction to Communications
<i>or</i>	
COM 200	Effective Communication
COM 220	Media Literacy
MUL 200	Communication Tools
MUL 205	Principles of Graphic Design
MUL 245	Principles of Web Design
MUL 255	Web Presentation
MUL 265	Digital Audio and Video
MUL 275	3-D Modeling and Rendering

Requirements for the Major: General Core Courses

(11 courses, 49.5 quarter units)

MUL 300	Convergence Media <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 305	Applied Graphic Design <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 332	Electronic Design and Layout <i>(Prerequisites: ENG 100/101 and COM 100)</i>
MUL 335	Desktop Publishing <i>(Prerequisites: ENG 100/101 and COM 100)</i>
MUL 345	Applied Web Design <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 355	Applied Web Presentation <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 365	Applied Digital Audio and Video <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 370	Digital Interactivity <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 375	Applied 3-D Modeling and Rendering <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
MUL 445	Management of Web Projects <i>(Prerequisites: MUL 200 level requirements or equivalents)</i>
<i>or</i>	
MUL 495	Practicum in Multimedia Arts (Internship) <i>(Prerequisites: 9 upper-division quarter units in a media concentration or approval by intern coordinator and lead faculty)</i>

Capstone Core Course

MUL 420	Portfolio Project <i>(Prerequisites: all general core courses)</i>
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NOTE: this is a two-month long class occurring after concentration courses

Multimedia Art Concentrations

Concentrations allow students to select a specific area of study to match their personal interests and fulfill demand for specialization in the marketplace. Upon entering the concentration, the student will begin learning the specialized skills through threaded projects spanning the whole of the concentration. Each course will build upon the prior course, culminating in a final advanced project presentation. In order to fulfill concentration requirements, students take the four designated courses in the concentration and choose two courses from MUL, COM, or CST courses.

▲ Concentration in 3-D and Video Game Art

(610-115-192)
(6 courses, 27 quarter units)

MUL 381	Video Game Art <i>(Prerequisites: all general core courses)</i>
MUL 385	Video Game Animation <i>(Prerequisites: all general core courses, MUL 381)</i>
MUL 480	3-D Animation <i>(Prerequisites: all general core courses, MUL 381; MUL 385)</i>
MUL 481	Character Animation <i>(Prerequisites: all general core courses, MUL 381; MUL 385; MUL 481)</i>

Plus two Upper-Division Electives from MUL, COM, or CST courses

▲ Concentration in Digital Video and Audio

(610-115-191)
(6 courses, 27 quarter units)

MUL 460	Advanced Digital Audio and Video <i>(Prerequisites: all general core courses)</i>
MUL 461	Motion Graphics <i>(Prerequisites: all general core courses, MUL 460)</i>
MUL 462	Digital Audio Creation <i>(Prerequisites: all general core courses, MUL 460; MUL 461)</i>
MUL 463	Digital Video Production Project <i>(Prerequisites: all general core courses, MUL 460; MUL 461; MUL 462)</i>

Plus two Upper-Division Electives from MUL, COM, or CST courses

▲ Concentration in Print / Web Graphics

(610-115-189)
(6 courses, 27 quarter units)

MUL 336	2-D Graphic Imaging <i>(Prerequisites: all general core courses)</i>
MUL 430	Advanced 2-D Graphic Imaging <i>(Prerequisites: all general core courses, MUL 336)</i>
MUL 431	Advanced Page Layout / Production <i>(Prerequisites: all general core courses, MUL 336; MUL 430)</i>
MUL 432	Print / Web Graphics Project <i>(Prerequisites: all general core courses, MUL 336; MUL 430; MUL 431)</i>

Plus two Upper-Division Electives from MUL, COM, or CST courses.

▲ Concentration in Web Development / Digital Interactivity

(610-115-190)
(6 courses, 27 quarter units)

MUL 440	Multimedia Design for the Web <i>(Prerequisites: all general core courses)</i>
MUL 450	Advanced Web Presentation <i>(Prerequisites: all general core courses, MUL 440)</i>
MUL 470	Advanced Digital Interactivity <i>(Prerequisites: all general core courses, MUL 440; MUL 450)</i>
MUL 471	Advanced Digital Interactivity Project <i>(Prerequisites: all general core courses, MUL 440; MUL 450; MUL 470)</i>

Plus two Upper-Division Electives from MUL, COM, or CST courses

School of Media and Communication

◆ Major in Broadcast Media 📺

(610-494)

Faculty Advisor: Joan Van Tassel • (858) 642-8386 • jvantassel@nu.edu

The Bachelor of Arts with a major in Broadcast Media consists of courses that prepare the student for a broad range of positions in television studios, video production companies, and convergent media enterprises, as well as in the many facilities emerging as a result of the pervasive growth of digital technologies. The program covers the theory and practice of broadcast media in all of its phases, and provides students with experience in field and television studio production. After completing a series of preparatory and core courses combining theory and hands-on application in broadcast and multimedia technologies, students are required to specialize in either management or production. Graduates of the program are prepared for positions in operations, production, marketing, and advertising. Positions include producer, director, camera operator, effects specialist, project manager, and program manager.

Upon completion of the program students should be able to:

- Use broadcast television and related media production terminology in a media production setting
- Implement strategies to operate in groups that deal with a variety of cooperative and collaborative situations
- Operate video production equipment in the field and studio settings
- Develop shooting scripts for a variety of program formats using the appropriate story terminology and screenplay formatting
- Recognize the legal, ethical and regulatory concepts of the broadcast media industry
- Prepare a production budget for use in a variety of program formats and broadcast media environments
- Apply relevant media marketing strategies in the development of broadcast programming
- Apply the principles of single and multi-camera production techniques in the field and studio settings
- Develop media products for delivery over a variety of broadcast media outlets
- Apply the principles of multi-camera switching and non-linear editing of video and multi-layer sound in producing broadcast programs for a variety of media outlets
- Apply professional lighting and sound design and directing techniques in field and studio production environments

Degree Requirements

To receive a Bachelor of Arts in Broadcast Media, students 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. The following courses are specific degree requirements, including the required concentration in either management or production. 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

(6 courses, 27 quarter units)

BRO 210	History of TV (Prerequisites: ENG 100/101; COM 100 or COM 200)
COM 220	Media Literacy
PSY 100	Introduction to Psychology
MUL 205	Principles of Graphic Design
MUL 245	Principles of Web Design
MUL 265	Digital Audio and Video

Upper-Division Requirements for the Major: Core Courses (9 courses, 40.5 quarter units)

BRO 305	Media Storytelling (Prerequisites: Broadcast Media Preparation Courses or equivalents)
BRO 310	Media Facilities Operations (Prerequisites: Broadcast Media Preparation Courses or Equivalents)
MUL 300	Convergence Media (Prerequisites: MUL 200 level requirements or equivalents)
MKT 402A	Marketing Fundamentals
BRO 320	Producing I (Prerequisites: BRO305)
BRO 325	Producing II (Prerequisite: BRO 320)
BRO 330	Field Production I (Prerequisites: BRO305)
BRO 340	Studio Production I (Prerequisites: BRO305)
HUB 400	Group Structure and Dynamics (Prerequisites: ENG 100/101 and PSY 100)

Broadcast Media Concentrations

Students must select one of two concentrations to match their personal interests and fulfill demands in the industry for skilled managerial and production personnel. Each concentration course builds upon the prior course, culminating in a final group project produced in a television studio with students from the other concentration.

▲ Concentration in Broadcast Media Management

(510)

(6 courses, 27 quarter units)

BRO 410	TV/Film and Ethics (Prerequisites: All Broadcast Media Core Courses)
LED 400	Introduction to Leadership
BRO 415	Media Programming (Prerequisites: All Broadcast Media Core Courses)
BRO 420	Electronic Media Management (Prerequisites: All Broadcast Media Core Courses)
MGT 409C	Principles of Management and Organization
BRO 440	Studio Production II (Prerequisites: All Broadcast Media Core Courses)

▲ Concentration in Broadcast Media Production

(511)

(6 courses, 27 quarter units)

MUL 365	Applied Digital and Audio (Prerequisite: MUL 265 or equivalent)
MUL 460	Advanced Digital and Audio (Prerequisite: MUL 365)
MUL 461	Motion Graphics (Prerequisites: MUL 205, MUL 245, MUL 460)
MUL 462	Digital Audio Creation (Prerequisites: MUL 460, MUL 461)
BRO 430	Field Production II (Prerequisites: All Broadcast Media Core Courses)
BRO 440	Studio Production II (Prerequisites: All Broadcast Media Core Courses)

School of Media and Communication

Upper-Division Electives

(1 courses, 4.5 quarter units)

To earn the Bachelor of Arts in Broadcast Media students must complete a minimum of 1 course (4.5 quarter units) of electives. Students must choose from the following electives.

MUL 350	Web Presentation <i>(Prerequisites: ENG100/101; COM100 OR COM 200)</i>
MUL 360	Digital Audio and Video <i>(Prerequisites: ENG100/101; COM100 OR COM 200)</i>
MUL 370	Digital Interactivity <i>(Prerequisites: ENG100/101; COM100 OR COM 200)</i>
MUL 380	3-D Modeling and Rendering <i>(Prerequisites: ENG100/101; COM100 OR COM 200)</i>
MUL 445	Management of Web Projects <i>(Prerequisites: ENG100/101)</i>
LED 410	Leading in Diverse Groups and Teams
MKT 443	Introduction to Advertising
MGT 422	Team Building, Interpersonal Dynamics, and Empowerment

◆ Major in Journalism

(610-495)

Faculty Advisor: Sara-Ellen Amster • (858) 642-8452 • samster@nu.edu

Program Description

The Bachelor of Arts in Journalism is a pre-professional program that provides students with a solid foundation in traditional journalistic practices and theories as well as new forms of journalism that are emerging as a consequence of digital technologies and networks that are rapidly reinventing the field. The course of study includes the theory and methods of gathering information and writing for beat reporting, investigative and features stories. The program introduces students to the professional responsibilities faced by journalists and news organizations with in-depth studies 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, including at newspapers and magazines, broadcast outlets, convergent newsrooms and new media entities.

Program Outcomes

Upon completion of the Bachelor of Arts in Journalism, students will be able to:

- Function in a newsroom setting by reporting, writing and producing stories
- Work in groups to publish an online or print news product
- Write in a variety of story forms, including news, feature, opinion and sports
- Write for a variety of news formats, including online media outlets, print newspapers, broadcast news and documentaries
- Identify the elements of style and structure in news stories
- Apply copyediting rules and techniques for fact-checking
- Identify what constitutes news
- Write focused news stories on deadline for publication
- Gather information with accuracy and fairness
- Write stories that are eloquent and hold the interest of the audience
- Apply ethical principals of journalism during reporting

- 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 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 and 76.5 must be completed at the upper-division level. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

The following courses are the specific core courses required for the journalism major. Students are encouraged to consider their overall career plan as writers and reporters and take upper-division elective courses in liberal arts, such as politics, economics, criminal justice or education, to prepare them for careers as professional writers and communicators.

Preparation for the Major

(6 courses, 27 quarter units)

COM 100	Introduction to Communication
COM 220	Media Literacy
ENG 240	Advanced Composition
MUL 200	Communication Tools
MUL 245	Website design
BRO 210	History of Television

Requirements for the Major

(11 courses, 49.5 quarter units)

JRN 300	News Reporting and Writing Across Platforms <i>(Prerequisites: ENG100/101, ENG240)</i>
JRN 301	Copy Editing <i>(Prerequisites: ENG 100/101, ENG 240)</i>
JRN 305	The Art of the Interview <i>(Prerequisites: ENG 100/101, ENG 240)</i>
JRN 310	Convergent Journalism <i>(Prerequisites: ENG 100/101, ENG 240, COM 100 & COM 220)</i>
JRN 320	Journalism Ethics <i>(Prerequisites: ENG100/101, ENG240, COM 100 & COM 220)</i>
JRN 321	Legal Issues in Journalism <i>(Prerequisites: ENG 100/101, ENG 240, COM 100 & COM 220)</i>
JRN 330	Investigative Reporting <i>(Prerequisites: JRN 300, JRN 301, JRN 305)</i>
JRN 335	Beat Reporting <i>(Prerequisites: JRN 300, JRN 301, JR N305)</i>
JRN 340	Feature Writing <i>(Prerequisites: JRN 300, JRN 301, JRN 305)</i>
JRN 350	Youth and the News <i>(Prerequisites: JRN300; JRN310)</i>
JRN 495	Capstone Project in Journalism <i>(Prerequisites: core courses JRN310, JRN330, JRN335, JRN340 and concentration courses MUL335, or JRN430, JRN431, BRO330 BRO340)</i>

Journalism Concentration Requirements

(4 courses, 18 quarter units)

Concentrations enable students to gain expertise in a professional specialization. The BA In Journalism program offers two concentrations: online/print news and broadcast journalism. At least one of the elective courses must be in the journalism program and selected from the list below.

School of Media and Communication

▲ Concentration in Online/Print News Journalism

(512)

- MUL 335 Desktop Publishing
(Prerequisite: COM 200 or equivalent)
- JRN 355 Writing at the Margins
(Prerequisites: JRN 330; JRN 335)
- COM 360 Representation and Diversity in the Media
(Prerequisites: ENG 100/101)
- COM 380 Democracy in the Information Age
(Prerequisites: ENG 100/101)

▲ Concentration in Broadcast Journalism

(513)

- JRN 430 Reporting for TV News
(Prerequisites: JRN 300, 310, 320, 321, 330, 335)
- JRN 431 Writing the TV News Script
(Prerequisites: JRN 430)
- BRO 330 Field Production I
(Prerequisite: BRO 305 or JRN 310)
- BRO 340 Studio Production I
(Prerequisite: BRO 305 or JRN 310)

Upper-division Elective Courses

(1 course, 4.5 quarter units)

To complete the requirements for the major in journalism students must take one (1) elective course at the 300 and/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.

School of Media and Communication Minors

● Minor in Multimedia Arts

(176)

(Students with a major in multimedia arts are not eligible for this minor.)

Program Requirements

(6 courses, 27 quarter units)

- MUL 330 Communication Tools
- MUL 331 Principles of Graphic Design
(Prerequisites: ENG 100/101 and COM 100)
- MUL 332 Electronic Design and Layout
(Prerequisites: ENG 100/101 and COM 100)

Please choose any three of the following:

- MUL 335 Desktop Publishing
(Prerequisite: MUL 332)
- MUL 340 Principles of Web Design
(Prerequisite: ENG 100/101 and COM100)
- MUL 440 Multimedia Design for the Web
(Prerequisite: MUL 340)
- MUL 350 Web Presentations
(Prerequisites: COM 100/200)
- MUL 450 Advanced Web Presentations
(Prerequisites: MUL 350 and MUL 340)
- MUL 360 Digital Audio and Video
(Prerequisites: ENG 100/101 and COM 100)

- MUL 460 Advanced Digital Audio and Video
(Prerequisite: MUL 360)
- MUL 370 Digital Interactivity
(Prerequisite: COM 100/200)

● Minor in Video Gaming

(183)

A minor in video gaming provides comprehensive instruction in video game design and development.

Program Requirements

(7 courses, 28.5 quarter units)

- MUL 380 3-D Modeling & Rendering
(Prerequisites: ENG 100/101; COM 100 or COM 200)

Note: BA Multimedia students may not use this course as fulfillment of minor in Video Gaming because it is already a Core course in BA Multimedia. Please choose any MM elective course instead.

- MUL 385 Video Game Animation
(Prerequisite: MUL 380)
- MUL 325 Psychology of Video Games
(Prerequisite: PSY 100)
- MUL 310 Introduction to Video Gaming
(Prerequisite: ENG 100/101)
- MUL 315 Video Game Design
(Prerequisites: MUL 310)
- MUL 318 Video Game Production
(Prerequisite: MUL 315)
- MUL 318A Video Game Production Lab (1.5 units)
(Prerequisite: MUL 315)

Graduate Degrees

■ MASTER OF FINE ARTS IN DIGITAL CINEMA

(715-506)

Faculty Advisor: E. Alyn Warren III • (714) 429-5131 • awarren@nu.edu

The Master of Fine Arts in Digital Cinema (MFA-DC) provides graduates with a foundation in film history and theory and in-depth study of digital motion picture production and post-production. The program focuses on developing well-round filmmakers versed in all aspects of film production and screenwriting with the ability to work on low budget, independent and documentary style filmmaking. Students produce a professional digital cinema portfolio tailored to the student's interests, needs and desire for self-development. The program 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. The goal of the program is to develop both the critical acumen and technical abilities of students in the area of visual communication and media. Graduates will develop the ability to generate screenplays, to plan and produce film and video projects, and to critically evaluate film and video projects based on theoretical models in communication, media, information design and film aesthetics.

The MFA-DC program is composed of eight online courses, one hybrid, online/onsite course and two courses offered in an accelerated one-month onsite residency format. In the area of film theory and criticism, students take two online elective courses in film studies or a graduate level course in a related area. Three additional on-line courses cover cinematography, digital editing and film production from development to release. Two online screenwriting workshops provide students the opportunity to generate a screenplay for a thesis project. Together these courses provide the

School of Media and Communication

theoretical and practical foundations for the art of digital filmmaking.

Onsite Residency Classes

In preparation for the thesis production project, students take three courses: one online-onsite hybrid course in directing and production management, and two accelerated production courses, digital cinema production and digital post-production, in an onsite "residency" at a National University campus. The residency classes consist of MDC 683 (hybrid one month online and one month onsite) and the onsite intensive courses MDC 688 (first two weeks) and MDC 689 (second two weeks). The hybrid course begins online to prepare students in directing and pre-production for the two-week intensive digital production course. The directing course continues onsite during both the digital production and the subsequent two-week course in digital post-production. These three courses function as pre-thesis practica, providing students with hands-on production experience in a collaborative environment using professional equipment.

A production equipment fee for digital production equipment is an additional cost of these practica courses. The fee covers rental of professional digital camera, lighting and sound equipment and other production related expenses. The costs for accommodations and transportation related to the residency are not included in the tuition or fees and are the responsibility of each student. For more information, contact the program faculty advisor.

Digital Portfolio

The MFA-DC digital portfolio functions as a digital cinema résumé. Student products from all the courses that are featured in the professional digital portfolio include short samples of editing and cinematography assignments, a production budget and storyboards, a screenplay, artist's self-reflections and other production and post-production documentation.

Thesis

To receive a Master of Fine Arts in Digital Cinema, candidates must enroll in the online course MDC 691, Thesis Production, with the thesis advisor. Students will keep in regular communication with their thesis advisor through the online course interface, Internet and telephone conferencing. The program advisor will assist the student in assembling a three-person committee to evaluate the thesis and digital portfolio collection of previous work. To graduate a student must submit the thesis project and digital portfolio for evaluation by the thesis committee within one year of the start of MDC 691.

The thesis project consists of a short subject digital motion picture and a critical evaluative summary included in the digital portfolio. In the evaluative summary, the writer discusses her/his evolution as an artist and evaluates the work to demonstrate the student's ability to communicate coherently, critically, and creatively. The thesis committee evaluates the digital portfolio and short subject motion picture project to determine whether the student has met the requirements for the MFA in Digital Cinema.

Program Learning Outcomes

At the completion of the Master of Fine Arts in Digital Cinema, 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. Specifically, by the end of this program, students will be able to:

- Conduct independent research and apply relevant criticism in sustained analyses and interpretations of specific films.

- 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 director, period or genre.
- Evaluate films from the theoretical perspective of cinematic techniques.
- Evaluate films from the theoretical perspective of cinema editing techniques.
- Generate a screenplay that is original, significant and complex enough to engage and sustain the interest of a discriminating audience.
- Participate in rigorous critiques of the creative works of others.
- Participate in the planning, production and editing of a short digital motion picture in a graduate level workshop setting.
- Synthesize current theory and practice by integrating professional cinematography and visual and sound editing techniques in the production of digital motion pictures.
- Create an original short motion picture that is significant and complex enough to engage and sustain the interest of a discriminating audience and is suitable for submission to a film festival.

Application Requirements

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information for graduate degrees.

Students are expected to possess or have access to a computer and high-speed Internet connection including an email account outside of National University for course projects and assignments. Given the nature of digital video production and editing the computer should be at least a Pentium IV Pentium IV (3GHz) / Macintosh G4 or G5, with 128 MB video processor, 120 GB HD, 2GB RAM, and a FireWire 400 or 800 (IEEE 1394) port. In addition students will need to possess or have access to a digital still camera, a digital video camera (with still image capabilities) for MDC651 and 652. Software required for these courses includes Microsoft Office (Word, Excel, PowerPoint, Internet Explorer), a variety of standard browser plug-ins (i.e. JavaScript, Flash, Shockwave, QuickTime, etc.), Adobe Photoshop (or equivalent photo image processing program) and AVID Express Pro or a comparable digital video editing software package. (NOTE: the residency post production uses AVID on site.) A digital scanner is also recommended.

Students are responsible for arranging their own accommodations and transportation during the month-long onsite intensive. Production equipment fees for digital film production equipment rental and supplies are in addition to the course tuition. Production equipment fees must be paid in advance for MDC 688 and 689. For more information contact the program advisor.

Degree Requirements

(11 courses, 49.5 quarter units)

To receive a Master of Fine Arts in Digital Cinema, students must complete at least 49.5 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 9 quarter units at the graduate level from a regionally accredited institution in the areas of film, communication or media studies, provided the units have not been used to satisfy the requirements of an awarded degree. Students may apply for transfer of 4.5 elective units in a non-film related area of graduate study. 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.

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Program Prerequisites

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.

Advancement to Candidacy

After the successful completion with a minimum grade no lower than a “B” in any three production courses (MDC 650, 651, 652, 683, 688, 689), a student may apply for advancement to candidacy for the Master of Fine Arts degree by writing a request to the program faculty advisor. At that time, the student selects or is assigned a thesis advisor.

Core Requirements

(9 courses, 40.5 quarter units)

MDC 650	Digital Film Production
MDC 651	Digital Cinematography
MDC 652	Digital Video Editing
MDC 680	Screenwriting
MCW 680A	Advanced Workshop in Screenwriting (Prerequisite: MDC 680)
MDC 683	Directing and Production Management (Prerequisite: MDC 652)
MDC 688	Digital Cinema Production (Prerequisite: MDC 652)
MDC 689	Digital Cinema Post-Production (Prerequisite: MDC 652)
MDC 691	Thesis Production (Prerequisite: all other MFA core courses)

Electives

(2 courses, 9 quarter units)

To complete the program, students can select electives from any of the following Film Studies courses or apply for equivalency with a graduate level course in media studies, media production, art or literary criticism, narrative or dramatic writing or theory.

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

■ MASTER OF SCIENCE IN EDUCATIONAL AND INSTRUCTIONAL TECHNOLOGY

(720-503)

Faculty Advisor: Michaela Monahan • (858) 642-8393 • mmonahan@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.

This program divides into two specializations, an Educational Technology Specialization for K-12 and higher education bound educators, and an Instructional Technology Specialization for corporate and private industry instructional designers and trainers. Those in the Educational Technology specialization will develop expertise in both designing and conducting technology-facilitated

instruction. These 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. Those in the instructional technology specialization prepare 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, and 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 Outcomes

Graduates of this program will be able to:

- Conduct a needs assessment, including analysis of subject matter, job/task, audience, and context.
- Demonstrate the ability to make interdisciplinary connections between technology, psychology, and computer-assisted interactive communications by preparing a multimedia product report.
- Complete an instructional design project, utilizing appropriate instructional design models.
- Design and implement an instructional module, demonstrating knowledge of and skill in the multimedia development cycle.
- Identify and evaluate effective methods for teaching adult learners using available technologies.
- Design an instructional module delivered through a completely digital form of distance education, and evaluate its effectiveness.
- Research, analyze and document the social, political, economic, and educational consequences of the continued growth of the World Wide Web for all learners.
- Evaluate the instructional effectiveness of a game/simulation, and embed as a component of a multimedia product.
- Demonstrate mastery of project management skills in the implementation of a large scale instructional design project.
- Write functional specifications for an instructional product and assess the costs and benefits of the chosen modes of development and delivery.

Degree Requirements

(10 courses, 45 quarter units)

To obtain a Master of Science in Educational and Instructional Technology, students must complete 45 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 matriculation.

Students are expected to possess or to have access to a computer outside of National University to work on projects both on and off campus.

Given the nature of educational and instructional technology, the off-campus computer should have at least 1.6 GHZ of processing speed with 512 MG RAM. In addition students should have access to MS Office (Word, PowerPoint, Excel, and Internet Explorer), as well as Adobe Dreamweaver 8. More software may be required depending on courses selected.

School of Media and Communication

Program Prerequisites

Candidates seeking admission to the program must possess a baccalaureate degree in good academic standing from a regionally accredited institution. Students considering this program should contact the program lead faculty prior to enrollment.

Core Requirements

(4 courses, 18 quarter units)

EDT 601	Instructional Design
EDT 603	Advanced Instructional Design
EDT 607	Multimedia in Instruction
EDT 609	Distance Learning

Students will choose between one of the following two specializations:

(4 courses, 18 quarter units)

▲ Specialization in K-12 and Higher-Ed Classrooms

(720-503-510)

EDT 605	Technology, Educational Theory and Practice
EDT 612	Creating Meaningful Learning with Technology
EDT 614	The Effect of the Internet on the Meaning of Schooling
EDT 616	Motivating Learners through Gaming and Simulation

▲ Specialization in Corporate, Military, and Government Training

(720-503-511)

EDT 611	Current Issues in Instructional Technology
EDT 613	Simulations and Virtual Reality
EDT 615	Seminar in Performance Technology
EDT 623	Web-Based Instruction

Integration Seminars and Project

(2 courses, 9 quarter units)

EDT 693	Evaluating and Improving Instructional Programs
EDT 695	Educational and Instructional Technology Capstone Project

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The University of Values



Extended Learning

Division of Extended Learning

The Division of 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. National University is a member of the University Continuing Education Association (UCEA), a nationwide professional organization comprised of prominent colleges and universities in the country. In addition, many of these programs are approved for continuing education units (CEUs) for various professional organizations.

National University, Division of Extended Learning
11355 N. Torrey Pines Rd., La Jolla, CA 92037
Phone: 1 (800) NAT-UNIV, ext. 8600
(858) 642-8600, Fax: (858) 642-8714, 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 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, and follow National University's illustrated tuition rates for undergraduate and graduate courses. 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 is allowed toward degree requirements.
- 1200X-1299X Course for which graduate credit may be allowed toward degree requirements.
- 1300X-1399X Credit course for teachers designed to serve the need for professional upgrading, salary advancement and in-service education requirements.
- 1400X-1499X Course which meets requirements for professional level courses and certificate programs, or provides opportunities for professionals as well as others from the general public to enhance their knowledge in various academic fields.

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 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.

Grading System

Grade	Definition
A	Exceptional
B	Very Good
C	Satisfactory
D	Marginal
F	Failing
S	Satisfactory
U	Unsatisfactory/No Credit

Financial Aid

Division of Extended Learning 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 Division of Extended Learning or National University. Additionally, the Division of Extended Learning provides guidance to students who are utilizing funds through Tuition Assistance, Veteran's Assistance, and /or the Workforce Investment Act. The Division of 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 Veterans' Affairs Office located at 4121 Camino del Rio South, San Diego, (619) 563-7270, or (800) 628-8648, ext. 7270. For more information, please call (800) 628-8648, ext. 8600.

Tuition

Tuition rates in effect as of **August 28, 2006**.

Course Level	4.5 qtr unit	3 qtr unit	1.5 qtr unit
100, 200, 300, 400	\$1134	\$756	\$378
500 (Undergrad)*	\$1134	\$756	\$378
500 (Grad)*	\$1287	\$858	\$429
600 & 700	\$1287	\$858	\$429

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

All academic courses follow the above tuition rates with the exception of EDX 1201X and HEDX 1201X, which cost \$395.

Refund/Withdrawal Requests

Students may withdraw from a course at anytime. To secure a refund, please contact the Division of Extended Learning. In all cases in which refunds are awarded, the cost of books and materials will be deducted. Non-attendance or notifying an instructor does not constitute officially dropping or withdrawing from a course.

The refund policy is as follows:

Refund	Percentage of Sessions Remaining
100	75-100%
50%	67-74%
No Refund	0-66%

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-

Extended Learning

house training programs can be customized to any specifications necessary. Through these courses, National University can provide the services to maximize training budgets. Discounts are available for three or more students from the same organization.

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.

Division of Extended Learning Certificate and Course Offerings

Certificate Programs

▲ Orthopedic Technology Certificate Program

Program Description

The Orthopedic Technician program prepares the graduate to be able to:

- Assist Orthopedic Surgeons in the treatment of patients.
- Apply, adjust and remove casts, splints and braces.
- Set up adjust and maintain traction configurations.
- Assist with the care of acutely injured patients.
- Assist the physician in the reduction and/or manipulation of orthopedic injuries.
- Manage insurance, medical billing and coding for orthopedic procedures.
- Assume professional, ethical, legal behavior upholding the standards of entry into the profession.
- Be employed in hospitals, clinics and private practice offices.

Successful completion of the Orthopedic Technology program leads to a certificate from National University Extended Learning/California Medical Institute. Students who successfully complete the program are eligible to take the certification examination offered by the National Board of Certification for Orthopedic Technologists.

Degree Requirements

(9 courses, 40.5 quarter units)

To receive the Certificate in Orthopedic Technology, students must complete and pass at least 40.5 quarter units (9 courses).

Admission Requirements

Completion of a college level course in Human Anatomy or Anatomy/Physiology, with a grade of C or better. If the Anatomy course has not been completed, a student with medical work experience with a recommendation will be considered. Students admitted to the program must submit a satisfactory physical examination report, and provide a record of current immunizations and current CPR card.

Certificate program consists of the following courses:

Students can begin this program at two different points; however, students must have completed the first eight courses prior to starting the Clinical Practicum:

Open Enrollment/Entry Point A

ORT 1000X	Functional Anatomy & Biomechanics of the Upper Extremity
ORT 1001X	Orthopedic Techniques: Clinical Lab A
ORT 1004X	Advanced Upper Extremity; Trauma/Pathology-Operative/ Conservative Treatment Concepts
ORT 1005X	Orthopedic Techniques: Clinical Lab C

Open Enrollment/Entry Point B

ORT 1002X	Functional Anatomy & Biomechanics of the Lower Extremity
ORT 1003X	Orthopedic Techniques: Clinical Lab B
ORT 1006X	Advanced Lower Extremity; Trauma/Pathology-Operative/Conservative Treatment Concepts
ORT 1007X	Orthopedic Techniques: Clinical Lab D
ORT 1008X	Supervised Hospital Clinical Practicum
(Prerequisite: students must have completed ORT 1000X – ORT 1007X to be eligible for the practicum)	

▲ Alcohol and Drug Counselor Certificate

The Alcohol and Drug Abuse Counseling program, offered in a California Association of Alcoholism and Drug Abuse Counselors (CAADAC) or a certificate track, provides professional development for those currently working with or those who wish to work with the chemically dependent. National University's Division of Extended Learning has been designated by CAADAC as an institution whose curriculum meets the educational requirements for certification in this field.

The CAADAC program track is designed for those students who are currently not working as an alcohol and drug abuse counselor. This program is ideal for individuals interested in preparing for a counseling career in the addictions field or for those who would like to work in a state-licensed or non-licensed recovery home or outpatient clinic. Professionals already working the field may wish to pursue the non-CAADAC track (Track II). These programs are excellent for therapists, nurses, social workers, probationers or corrections professionals with practices or caseloads of clients, or concerned individuals in the community.

Admission Requirements

Recovering drug or alcohol users must provide proof of a minimum of one year of sobriety or non-drug use..

Track I: CAADAC Certificate

(10 courses, 37.5 quarter units)

To earn the certificate you must complete 37.5 units of study. These consist of 10 required courses, including the Supervised Field Practicum, 4.5 unit course, and 255 hours at an approved agency setting where direct supervision is provided by a qualified staff person. For the certificate, a grade of "C" or above must be received for all classes in the program. You must enroll for a letter grade in all classes. Students can start with any course in the track except ADC 1110X.

Certificate program consists of the following courses:

ADC 1101X	Sociological Perspectives on Alcoholism and Drug Addiction
ADC 1102X	Physiological and Pharmacological Aspects of Substance Abuse
ADC 1103X	Counseling Techniques/Practical Applications
ADC 1104X	Counseling Special Populations

Extended Learning

ADC 1105X	Treatment Approaches for Alcoholism and Substance Abuse Counselor
ADC 1106X	Alcoholism and Substance Abuse Prevention and Intervention Education (3.0 quarter. units)
ADC 1107X	Chemical Dependency and Psychiatric Illness
ADC 1108X	Legal and Ethical Practices for Drug and Alcohol Counselors (1.5 quarter. units)
ADC 1109X	Personal and Professional Growth (1.5 quarter. units)
ADC 1110X	Practicum- Field Work 255 Hours

For complete information on the CAADAC certification process, or to order a CAADAC Handbook visit www.caadac.org or call (916) 368-9412.

Track II: Professional Certificate

(6 courses, 21 quarter units)

The prevalence of alcohol and drug abuse in today's society, health and human service professionals, counselors, teachers, nurses, ministers, law enforcement, and industry and government officials need education and training with alcohol and drug abuse problems.

This 21 unit certificate will build upon the theoretical and practical basis of the required Alcohol and Drug Abuse courses and provide the student with specialized training in counseling.

Certificate program consists of the following courses:

ADC 1101X	Sociological Perspectives on Alcoholism and Drug Addiction
ADC 1102X	Physiological and Pharmacological Aspects of Substance Abuse
ADC 1103X	Counseling Techniques/Practical Applications
ADC 1104X	Counseling Special Populations
ADC 1106X	Alcoholism and Substance Abuse Prevention and Intervention Education

Successful completion is defined as earning the grade of "C" or higher in all courses of the curriculum. Those who successfully complete the courses will be awarded a certificate.

▲ Medical Billing, Coding and Information Technology Certificate Program

Medical billing and administration is one of the ten fastest growing career fields in the nation, according to the U.S. Department of Labor. Through this intensive, eight-course Medical Billing, Coding and Information Technology Certificate Program, students will learn the essential skills to help prepare them for a career in this growing field.

Program Learning Outcomes

Upon completion of the Medical Billing, Coding and Information Technology Certificate Program, students will demonstrate an understanding of:

- Navigating within a Windows computer operating environment.
- Creating basic spreadsheet reports and word documents to support their role in the Medical Billing field.
- The human anatomy as it pertains to the Medical Billing and Administration field of study.
- The various healthcare programs such as Medicare and Medicaid.
- The legal and ethical implications in their role as a Medical Billing representative.
- Medisoft, the software most commonly used for medical billing purposes.
- The various forms of coding used in the medical billing profession.
- The various types of insurance programs (Blue Cross, et al) and the billing requirements for each.

- Executing proper billing and follow-up procedures for Worker's Compensation claims.
- The skills necessary to gain an entry-level position in the Medical Billing field.

Degree Requirements

(8 courses, 31.5 quarter units)

To receive the Certificate in Medical Billing, Coding and Information Technology, students must complete and pass at least 36 quarter units, 31.5 of which must be taken in residence at National University.

Certificate program consists of the following courses:

Students can enroll and begin this program at three different points throughout the track. In the order classes will be scheduled, those points are as follows:

Open Enrollment/Entry Point A

SCX 1001X	Human Anatomy & Physiology I
SCX 1002X	Human Anatomy & Physiology II

Open Enrollment/Entry Point B

MBL 1003X	Medical Terminology (Prerequisites: SCI 1101X & 1102X)
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Open Enrollment/Entry Point C

MBL 1005X	Medical Insurance I
MBL 1006X	Medical Insurance II (Prerequisites: MBL 1105X)
MBL 1007X	Medical Insurance III (Prerequisites: MBL 1105X, MBL 1106X)

Open Enrollment/Entry Point D

ILX 1060X	Information Literacy & Report Writing
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Open Enrollment/Entry Point E

HXC 1109X	Legal and Ethical Issues and Health Professions
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▲ Pharmacy Technician Certificate Program

This certificate program will prepare students for entry-level pharmacy technician positions. Medical and pharmaceutical terminology will be introduced, and basic anatomy related to the pharmacology of medications will be a major component of the coursework along with pharmaceutical calculations. This program will provide students with the necessary information required to pass the National Certification Exam offered by the Pharmacy Technician Certification Board.

Program Learning Outcomes

Upon completing the Pharmacy Technician Certificate program, the students will demonstrate an understanding of:

- Defining the differences between the hospital and retail pharmacy setting.
- Ethical conduct in all duties performed.
- Understanding the laws that govern pharmacy, both federal or state mandated.
- Interpreting physician orders and prescriptions.
- Preparing and distributing medications.
- Defining medical and pharmaceutical terms and common abbreviations.

Extended Learning

- Understanding the pharmacology of medications in relation to the anatomy they affect.
- Performing pharmaceutical calculations,
- Communicating effectively with patients and medical professionals.
- Understanding the importance of confidentiality of all patient information.
- Processing insurance billing and/or collect payments.
- Controlling inventory.

Degree Requirements

(8 courses, 36 quarter units)

To receive the Certificate in the Pharmacy Technician Program, students must complete and pass 36 quarter units (8 courses) which must be taken in residence at National University.

Certificate program consists of the following courses:

PHT 1001X	The Role of Pharmacy Technicians
PHT 1002X	Pharmacy Law and Ethics
PHT 1003X	Medical and Pharmaceutical Terminology
PHT 1004X	Pharmaceutical Calculations
PHT 1005X	Pharmacology
PHT 1006X	Insurance and Inventory
PHT 1007X	Practicum: Clinical Rotation
PHT 1008X	Pharmacy Technician Certification Board Review

Courses for Educators

These courses provide both current and future educators with the opportunity to excel in the classroom. Coursework includes preparation and CLAD-required classes, as well as CD ROM courses designed to help teachers meet their requirements for professional development.

HEDX 1201X	Health Education for Teachers
EDX 1201X	Computer Based Technology in the Classroom
EDX 1342X	Vocational Education Level I: The Instructional Process in Vocational Education and Techniques of Teaching – 90 hours
EDX 1343X	Vocational Education Level II: Principles and Practices of Vocational Education – 90 hours
EDX 1820X	Reading Instruction Competence Assessment (RICA) Preparatory Course – 10 hours
EDX 1810X	California Subject Examination for Teachers (CSET) Multiple Subject Preparatory Course – 24 hours
EDX 1915X	California Subject Examination for Teachers (CSET) Single Subject Math Subtest I Preparatory Course
EDX 1916X	California Subject Examination for Teachers (CSET) Single Subject Math Subtest II Preparatory Course
EDX 1938X	U.S. Constitution Preparatory Course and Examination – 10 hours

Self-Paced CD-ROMs

TEDX 1343X	Behavior is Language: Strategies for Managing Disruptive Behavior
TEDX 1344X	Attention Deficit Disorder: Information and Interventions for Effective Teaching
TEDX 1345X	Violence in Schools
TEDX 1346X	Learning Disabilities: Practical Information for Classroom Teachers
TEDX 1347X	Harassment in Schools: Guidelines and Policies for Prevention
TEDX 1348X	Drugs & Alcohol in School: Understanding Substance Use & Abuse
TEDX 1349X	Autism and Asperger's Disorders
TEDX 1351X	Functional Analysis: Introduction to Completing Behavior Assessments
TEDX 1368X	Sexually Transmitted Infections: Information for Education Faculty and Personnel

TEDX 1369X	Inclusion: Working with Special Needs Students in Mainstreaming Classrooms
TEDX 1371X	Understanding Aggression: Coping with Aggressive Behavior in the Classroom
TEDX 1372X	Talented & Gifted Education: Working with High Achievers
TEDX 1379X	Child Abuse: Working with the Abused & Neglected

Institute for Persons Who Are Hard of Hearing or Deaf (IHHD)

IHHD is committed to reducing barriers, enhancing lifelong education, and improving the quality of life for persons—from infancy through adulthood—who are hard of hearing or deaf and their families. IHHD offers two online certificate programs and the following online courses:

IHD 1809X	Introductory Sign Language
IHD 1810X	Intermediate Sign Language
IHD 1815X	Practical Communication
IHD 1816X	Creative Communication
IHD 1817X	Entrepreneurship
IHD 1818X	Living with Hearing Loss: Psychosocial Consequences and Effective Accommodations
IHD 1819X	Understanding Hearing Loss & Deafness

IHHD Certificate Programs

These online certificate programs can be taken for continuing education units or for academic credit.

▲ Improving Early Hearing Detection and Intervention Service Delivery for Infants and Young Children who are Hard of Hearing or Deaf (Ages Birth-Five Years)

IHD 1201X\1801X	Interdisciplinary Screening, Assessment, and Planning
IHD 1202X\1802X	Family-Centered Programming
IHD 1203X\1803X	Facilitating Outcomes: Language, Learning, Speech & Listening
IHD 1204X\1804X	Quality Indicators in Early Intervention Programming

▲ Enhancing Educational Outcomes for Children and Youth Who Are Hard of Hearing or Deaf (Ages 5-21)

IHD 1205X\1805X	Understanding Hearing Loss and Deafness
IHD 1206X\1806X	Language and Communicative Competence Development
IHD 1207X\1807X	The Interdisciplinary Team: Collaboration is Key
IHD 1208X\1808X	Social Emotional Development, Services, & Considerations

Technology Series Certificate Programs

The Technology Series Certificate programs are intended to prepare students for careers in the diversified industry of Information Systems, Network Administration and Engineering and Mass Communications systems. Programs are offered in nine-month and three-month formats. Each module is taught in a classroom environment with both lecture and hands-on laboratory being interactively exchanged.

Extended Learning

▲ Information Systems Technology Program

Length: 36 Weeks / 720 Hours / 9 Courses

Cost: \$11,995

Program Objective: The program provides instruction with currently used operating systems, computer system hardware, network installation, assembly, troubleshooting, testing techniques, procedures, Internet applications, web design, and security techniques for networks and computer systems at a technologist level. The purpose of the program is for students to learn the information necessary to become qualified in the diversified industry of information sciences. Each module is taught in a classroom environment with both lecture and hands-on laboratory being interactively exchanged.

Certificate program consists of the following courses:

ISY 1000X	Client Operating Systems
ISY 1001X	Linux Concepts and Implementation
ISY 1002X	PC System Essentials
ISY 1003X	Network Essentials
ISY 1004X	PC and Network Diagnostics and Troubleshooting
ISY 1005X	Microsoft Office Applications
ISY 1006X	Web Design
ISY 1007X	Internet Essentials
ISY 1008X	PC System Security

▲ Mass Communications Technology

Length: 36 Weeks / 720 Hours / 9 Courses

Cost: \$10,995

Program Objective: The program provides instruction on current standards and practices in telecommunications technology at a technologist level. Instruction is provided on telecommunications systems (see Telecommunications Technology Program objectives) and also includes IEEE 802.11a/b/g Wireless Local Area Networks (WLAN), Cellular/PCS networks (digital and analog systems), Voice over Internet Protocol (VoIP), and Computer Systems. Each module is taught in a classroom environment with both lecture and hands-on laboratory being interactively exchanged.

Certificate program consists of the following courses:

MAS 1000X	Voice and Data Cabling
MAS 1001X	Local Area Networks
MAS 1002X	Introduction to Wireless Networks
MAS 1003X	Wireless Network Planning
MAS 1004X	Fiber Optics
MAS 1005X	Business Communications Systems
MAS 1006X	Basic Electricity and Electronics
MAS 1007X	PC System Essentials
MAS 1008X	Internet Telephony

▲ Network Administration and Engineering

Length: 36 Weeks / 720 Hours / 9 Courses

Cost: \$12,995

Program Objective: The program provides instruction with currently used network and client operating systems, high performance computer system hardware, network installation, assembly, troubleshooting, testing techniques, procedures, Internet applications, and security techniques for networks and computer systems at an engineering level. The purpose of the program is for students to learn the information necessary to become qualified in the diversified industry of information services. Each module is taught in a classroom environment with both lecture and hands-on laboratory being interactively exchanged.

Certificate program consists of the following courses:

NAE 1000X	Client Operating Systems
NAE 1001X	Windows Server Administration
NAE 1002X	Network Design and Infrastructure
NAE 1003X	Windows Services
NAE 1004X	Network Security
NAE 1005X	Novell Administration
NAE 1006X	Linux Concepts and Implementation
NAE 1007X	Linux and Novell Applications
NAE 1008X	Routers and Advanced Networking

▲ Telecommunications Technology

Length: 12 Weeks / 240 Hours / 3 Courses

Cost: \$5,000

Program Objective: The program provides instruction on current standards and practices in telecommunications technology to include telephone and data systems, networks, and equipment, voice/video/data cabling systems installation, maintenance, and documentation, testing procedures and techniques, electrical and electronic theories, and fiber optics. Instruction is also provided on transport technologies such as T-Carrier, Integrated Services Digital Network (ISDN), Digital Subscriber Line (xDSL), and transport services such as X.25 Packet Switching, Frame Relay, Asynchronous Transfer Mode (ATM) and Switched Multi-megabit Data Services (SMDs). Each module is taught in a classroom environment with both lecture and hands-on laboratory being interactively exchanged.

Certificate program consists of the following courses:

MAS 1800X	Voice and Data Cabling
MAS 1801X	Fiber Optics
MAS 1802X	Business Communications Systems

▲ Data Communications Technology

Length: 12 Weeks / 240 Hours / 3 Courses

Cost: \$5,000

Program Objective: The program provides instruction on current standards and practices in telecommunications technology to include telephone and data systems, networks, and equipment, voice/video/data cabling systems installation, maintenance, and documentation, testing procedures and techniques, electrical and electronic theories, and fiber optics. Instruction is also provided on transport technologies such as T-Carrier, Integrated Services Digital Network (ISDN), Digital Subscriber Line (xDSL), and transport services such as X.25 Packet Switching, Frame Relay, Asynchronous Transfer Mode (ATM) and Switched Multi-megabit Data Services (SMDs). Each module is taught in a classroom environment with both lecture and hands-on laboratory. Covers the skills and knowledge needed by a PC Technician in order to be able to install, configure, troubleshoot a wide range of common PC hardware, including: CPU; RAM; ROM; Hard drives; Optical drives; Video and sound systems; Input and output devices; and Operating System and application interactions. Additionally, the course covers in detail proper techniques to troubleshoot and repair a wide range of PC hardware and software failure modes. Covers the detailed interaction between hardware and software with a focus on the interactions that take place in a networked environment.

Certificate program consists of the following courses:

MAS 1800X	Voice and Data Cabling
MAS 1801X	Fiber Optics
ISY 1802X	PC System Essentials

▲ Computer Systems Technology

Length: 12 Weeks / 240 Hours / 3 Courses
Cost: \$5,000

Program Overview: The program provides instruction with currently used operating systems, computer system hardware, and network installation, assembly, troubleshooting, testing techniques and procedures at a technician level. Students will learn the information needed to become qualified in the diverse industry of computer systems. Each module is taught in a classroom environment with both lecture and hands-on laboratory.

Certificate program consists of the following courses:

ISY 1802X PC System Essentials
ISY 1803X Network Essentials
ISY 1804X PC and Network Diagnostics and Troubleshooting

Workforce Readiness Certificates

The Workforce Readiness Certificate programs provide students with quality training for employment readiness. Through National University's exceptional learning environment, these programs combine formal education with real-world situations. This practical approach is designed to prepare students for gainful employment. Each course module entails 48 clock hours of instruction.

▲ Computer Applications

Length: 8 Weeks / 192 Hours / 4 Courses
Cost: \$2,800

This program provides students with the knowledge of basic computer hardware and software applications, as well as familiarity with various terminologies. A portion of the program will be spent reviewing the components of the Microsoft Operating System. Students will receive hands-on training in a variety of computer applications relevant to today's office environment. Courses include:

Certificate program consists of the following courses:

ISX 1935X Introduction to Computers
WPA 1800X Word Processing Applications
DBA 1800X Database Applications
ISX 1952X Spreadsheet Applications

▲ Healthcare Office Administration

Length: 8 Weeks / 192 Hours / 4 Courses
Cost: \$4,400

Students in this program learn the basic skills required to gain entry-level employment in private medical offices, medical clinics, hospital-billing departments, and independent billing offices. Students will gain a fuller understanding of the responsibilities involved in working in a medical office setting. Courses include:

Certificate program consists of the following courses:

MEDX 1800X Medical Terminology I
MEDX 1801X Medical Terminology II
MEDX 1802X Medical Billing – Practical
MEDX 1803X Computerized Billing

▲ Healthcare & Human Resources Administration

Length: 14 Weeks / 336 Hours / 7 Courses
Cost: \$4,900

As one of the 10 fastest growing industries, healthcare administration is in need of qualified individuals. Through this program, students will learn the expectations and human resource applications of the medical billing industry, and will gain the necessary skills for an entry-level position in this field. Courses include:

Certificate program consists of the following courses:

MEDX 1800X Medical Terminology I
MEDX 1801X Medical Terminology II
MEDX 1802X Medical Billing – Practical
MEDX 1803X Computerized Billing
BUSX 1888X Introduction to Human Resources
BUSX 1889X Labor and Employment Law
BUSX 1892X Company Compensation and Benefits

▲ Human Resource Technician

Length: 6 Weeks / 288 Hours / 3 courses
Cost: \$4,100

This program provides students with entry-level skills in a human resource environment. Graduates will understand how to maintain and update personnel records, understand employer laws, employer benefits and compensations packages, and learn general human resource terminology and administration. Courses include:

Certificate program consists of the following courses:

BUSX 1888X Introduction to Human Resources
BUSX 1889X Labor and Employment Law
BUSX 1892X Company Compensation and Benefits

English Language Programs (ELP)

▲ Language Proficiency

Students can complete the University's language proficiency requirement through the English Language Programs University Preparation program in San Diego. International students who need English proficiency are tested and placed in the appropriate class level. English language classes follow the University calendar and provide 100 hours of instruction per month. At the end of each month, students are evaluated for advancement. Students in the advanced level can apply for early admission to academic courses.

▲ University Preparation Program

The University Preparation program is a very intensive program designed for 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.

This program follows a four-week format and provides 100 hours of instruction per month. Courses range from beginner through advanced levels. Each level can be completed in two months. Classes are offered at all levels every month.

Extended Learning

Graduation from the last level fulfills the National University language proficiency requirement so the Test of English as a Foreign Language (TOEFL) examination is not required.

English Language levels consist of core courses increasing in difficulty and complexity from beginning to advanced.

Levels 400 - Beginning

These levels are designed for those who have had no exposure to the English Language, have absolutely minimal knowledge of the English language, or have minimal skills in conversation, reading, and writing.

Levels 500-600 - Beginning Section II

Levels 500 to 600 are designed for those with more-than-basic skills in grammar and writing, and sufficient skills for beginning reading, vocabulary, listening, and speaking.

Level 700 - Intermediate

In this level, students are given high-fluency-level lessons in all the four core components: reading, writing, grammar, and speaking, as well as in some electives.

Level 800 - Advanced

In this highest level in the University Prep Program, students work on developing all their skills and preparing for the academic programs. In this level, students also have opportunities to study other electives. Emphasis is on writing and research method, presentation skills, and accent reduction. Tuition rates for ESL courses are \$1,044 per course with a one time \$75 application fee.

ESL 1510X	ESL I
ESL 1520X	ESL II
ESL 1610X	ESL III
ESL 1620X	ESL IV
ESL 1710X	Intermediate ESL I
ESL 1720X	Intermediate ESL II
ESL 1810X	Advanced ESL (Communication/Presentation)
ESL 1820X	Advanced ESL (Writing and Research Seminar)

English Language Programs (ELP) Core Course Descriptions

Listening

Non-native English speakers in this course improve their listening and not-taking skills by discussing tapes and lectures. This gives students many opportunities to interact with each other and with the instructor.

Speaking

Students gain proficiency in oral communication through group discussions and individual presentations, and by discussing personal as well as academic topics. In the more advanced levels, students give short speeches and participate in group discussions. Small groups allow students to interact with each other and with the instructor.

Reading

Students improve their reading ability by learning and practicing key reading comprehension and vocabulary skills.

Vocabulary Development

Students expand their vocabulary through various types of activities as well as presentation of roots, suffixes and affixes.

Grammar and Writing

The rules of English grammar are studied and used in context at the different levels. The focus is on applying grammar structures to written communication.

Writing and Editing

Students learn writing skills from developing basic paragraphs, summaries and outlines to composing full-length essays. Activities include academic writing, informal/free writing and grammar-based writing.

In addition, each course level offers a variety of enhancement courses such as idiomatic expressions and cinema, writing research papers and newsletters, conducting academic research, world celebrations, American culture, the American legal system and U.S. culture and history. These controversial topics are just a sample of the complementary courses each level in the program must complete in addition to the core classes.

ELP offers programs for students who want to study the English language but do not plan to enroll in a Bachelor or Master Degree program at National University.

▲ English Communication Program

This program is designed for individuals who want to improve their English communication skills for purposes of professional advancement or simply for personal enjoyment. This program focuses on developing fluency in listening, speaking, and reading along with writing and grammar. The program provides 100 hours of instruction per month.

Classes are offered at all levels from beginners to advanced every month following the NU monthly format.

Conversation and American Culture

This is a special, short-term vacation program designed for groups or individuals who want to improve their English conversation skills and learn more about American culture. Tuition per course: \$1044

Classroom instruction in Conversation is combined with various social and recreational activities, emphasizing the study of American culture and lifestyle. The program has 3 to 4 hours of instruction per day.

Specialized Course Program

The courses in this program are designed for high level ESL students, academic international students, or individuals who want to improve their skills in specific areas such as writing and oral communication. Tuition rates for specialized courses are \$300 per course with a one time \$50 application fee.

Research and Writing Skills

Students learn writing skills, from developing basic paragraphs, summaries and outlines, to composing full-length essays. Activities include academic writing, informal/free writing and grammar-based writing. The components of gathering research are also discussed. Topics include methods in information gathering, theme development, document structure, and source documentation.

Accent Reduction Workshop

The course gives students the tools and practice they need to improve their pronunciation of American English. The students work intensively on correct vowel and consonant formation, word stress, sentence stress, intonation and rhythm. This is done by evaluating individual student needs and addressing problem areas.

Customized Group Programs

ELP offers customized programs for special groups in the health and business fields.

▲ Teaching English to Speakers of Other Languages (TESOL) Certificate Program

National University's Certificate in TESOL is a comprehensive series of five content courses that culminate in a practicum project designed to offer maximum teaching experience to participants. The principal goal of the certificate is to develop participants' teaching skills through hands-on practice and to give them the knowledge and confidence to teach ESL at any level. Tuition rates for TESOL courses are \$350 per course with a one time \$50 application fee for domestic students, \$75 for international students.

Length: 220 hours/6 courses.

Cost: \$2150 for domestic students, \$2175 for international students.

Before entering a live ESL classroom to work alongside an experienced instructor, students will study a variety of courses, including:

TSL 1400X	Theories and Methods of Language Teaching and Acquisition – 36 hours
TSL 1401X	Structure of English and Grammar Teaching Techniques – 36 hours
TSL 1402X	Teaching Reading and Writing – 36 hours
TSL 1403X	Teaching Listening and Speaking – 36 hours
TSL 1404X	Practical Issues in Second Language Pedagogy – 36 hours
TSL 1405X	TESOL Practicum – 40 hours

Interested students can apply directly to 9388 Lightwave Ave., San Diego, CA 92123 or contact (858) 541-7968.

Extended Learning Course Descriptions

ADC 1101X

Sociological Perspectives on Alcoholism and Drug Addiction

This course will examine the history of alcohol and other mood-changing drugs in the United States; the myths and stereotypes of alcohol use; the socio-cultural factors that contribute to the use of drugs; and the patterns and progressions of alcoholism. A variety of different aspects and perspectives for understanding alcohol and drug use behaviors will be explored.

ADC 1102X

Physiological and Pharmacological Aspects of Substance Abuse

This course is designed to examine the effects of alcohol and similar legal/ illegal psychoactive drugs to the body and in behavior. Areas to be covered include tolerance, gender differences, and the disease model. Students will be presented with pharmacological and physiological treatment/ recovery strategies to assist in forming the most appropriate level of care.

ADC 1103X

Counseling Techniques/Practical Applications

This course will provide the major theories and techniques of alcohol and drug counseling. The focus is to make practical application of theory and technique to clinical and case study situations. This course is designed to provide familiarity with the relevant techniques and comfort with the applications of those techniques.

ADC 1104X

Counseling Special Populations

This course focuses on how to provide alcohol and drug counseling to special populations. The basic counseling theories and techniques may be utilized, however emphasis placed on awareness and

knowledge of the special population's needs, can positively influence the course of treatment. Therapeutic approaches need to be adapted to the uniqueness of the individual.

ADC 1105X

Treatment Approaches for Alcoholism and Substance Abuse Counselor

This course is designed to cover the major therapeutic orientations related to alcohol and substance abuse counseling. The course will familiarize students with the therapeutic progression and current issues as applied to the treatment unit. Assessment, formulation of treatment plans, and relapse prevention will be addressed. Utilize individual, family and group counseling for treatment of alcohol and drug abuse.

ADC 1106X

Alcoholism and Substance Abuse prevention and Intervention Education

This course is designed to cover the concepts of prevention, community education, and community outreach. In addition, this course will provide education and prevention models and the role of community groups in these models. The effectiveness of alternative prevention strategies, education and training methods, and adult education techniques will be included.

ADC 1107X

Chemical dependency and Psychiatric Illness

This course is designed to cover the concepts of prevention, community education, and community outreach. In addition, this course will provide education and prevention models and the role of community groups in these models. The effectiveness of alternative prevention strategies, education and training methods, and adult education techniques will be included.

ADC 1108X

Legal and Ethical Practices for Drug and Alcohol Counselors

This course considers various ethical and legal issues that influence the practice of drug and alcohol counseling. Topics include ethical systems and standards, legal systems and issues. Students will have the opportunity to develop their own standards and explore their values for further clarification.

ADC 1109X

Personal and Professional Growth

The course will focus on two interrelated parts, personal growth and professional growth. In order to be an effective counselor, an awareness of one's own thoughts, feeling, and experience needs to occur. This course is designed to allow students to work through or at least become cognitively aware of their own issues and counter transference. Self awareness is the beginning to becoming a better alcohol and drug abuse counselor.

ADC 1110X

Practicum – Field Work 255 Hours

This course consists of 45 classroom hours taught by an instructor who will see that the student completes 255 hours at an approved agency setting where direct supervision is provided by a qualified staff person. The instructor will be available for consultation with the student. Group supervision, individual consultation, and case review will focus on difficult aspects of case management for the beginning counselor. The 255 practicum hours needs to be completed within one year of the practicum class.

BBB 1802X

Customer Relations

This course focuses on understanding the behavior of internal and external customers. Students learn the fundamentals of customer satisfaction and effective ways to respond to customer dissatisfaction. Effective techniques such as positive verbal communication, nonverbal communication and the steps involved with the listening process are reviewed in this course.

Extended Learning

BUSX 1888X

Introduction to Human Resources

This course is designed to provide an understanding of the elements of human resources. Emphasis is placed on employment law and human resource training. Students will cover such topics as organizational effectiveness, evaluation and training, and the objectives of a human resources department.

BUSX 1889X

Labor and Employment Law

This course provides students with a review of standard company employment policies. Students will also gain critical knowledge of labor and employment laws affecting today's workplace.

BUSX 1892X

Company Compensation and Benefits

The emphasis of this course is company compensation and benefits packages. Students will also review job classification systems and human resource database. California regulations regarding wages and garnishing plans, safety issues and incentive plans are also discussed.

DBA 1800X

Database Applications

This course provides the students with a complete and integrated electronic office practice set. This course is designed with exercises that simulate realistic on-the-job work experiences. Students have the opportunity to apply spreadsheet, database and information-processing skills already learned in previous courses.

EDX 1201X

Computer-based Technology in the Classroom

This is a comprehensive overview of the use and integration of computer technology in the educational environment. Course content will address computer terminology, the Internet, impact of the use of different computer modalities, i.e., computers as a tool, tutor and tutee in education, selection and evaluation of educational software. Learning theories involved in the integration of computer technology are also covered. Also includes hands-on practice with computer tools, e.g., word processing, spreadsheet, database and presentation tools. Satisfies the CCTC technology requirement for a professional clear Ryan credential and the preliminary SB2042 credential

EDX 1342X

Vocational Education Level I: The Instructional Process in Vocational Education and Techniques of Teaching

As more and more adult learners return to the classroom, it is important that teachers know how to reach this mature audience student population. This class will provide students with the concepts and developmental skills necessary for vocational instruction.

EDX 1343X

Vocational Education Level II: Principles and Practices of Vocational Education

Building upon the concepts presented in Level I, this course provides a broad overview of vocational education.

EDX 1810X

California Subject Examination for Teachers (CSET) Preparatory Course

This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the CSET. It emphasizes techniques for multiple choice and constructed response questions to help students effectively utilize knowledge of specific subject areas. It is a test preparation class only and is not a substitute for required class work.

EDX 1820X

Reading Instruction Competence Assessment (RICA) Preparatory Course

This intensive, one-day 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.

EDX 1915X

California Subject Examination for Teachers (CSET) Math Subtest I Preparatory Course

This course emphasizes the math subtest one area: algebra and number theory. This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the CSET.

EDX 1916X

California Subject Examination for Teachers (CSET) Math Subtest II Preparatory Course

This course emphasizes the math subtest two area: geometry, probability and statistics. This informative, intensive course is designed to familiarize students with a variety of proven strategies for passing the CSET.

EDX 1938X

U.S. Constitution Preparatory Course and Examination

This insightful, two-part 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 the framers' intents.

HEDX 1201X

Health Education for Teachers

This course provides an integrated curricula approach to health by infusing the components of nutrition, sexually transmitted diseases, and substance abuse (including alcohol, drugs, tobacco, and narcotics) into the general curriculum. It emphasizes promoting an overall healthy lifestyle that encourages life-long practices in students. Satisfies the CCTC health education requirement for a professional clear Ryan credential and the preliminary SB2042 credential. Does not grant graduate credit and cannot be used as an elective in a graduate program.

HGX 1109X

Legal and Ethical Issues and Health Professions

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.

IHD 1801X

Interdisciplinary Screening, Assessment, and Planning

This course describes current preferred practices in newborn hearing screening and interdisciplinary diagnostic follow-up. The integral role of family members/caregivers is emphasized, with informed family choices at the core of the service delivery plan.

IHD 1802X

Family-Centered Programming

With the implementation of newborn hearing screening, babies are identified with hearing loss in infancy creating increasing demands for professionals who are trained in family-centered early intervention to work with younger children and their families in optimizing family choices and outcomes.

IHD 1803X

Facilitating Outcomes: Language, Learning, Speech & Listening

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.

Extended Learning

IHD 1804X

Quality Indicators in Early Intervention Programming

The following topics are discussed in this course: Family-Centered Service Delivery, Seamless Transition Environmental Supports, and Supporting Strengths and Needs of All Children.

IHD 1805X

Understanding Hearing Loss and Deafness

This course describes current preferred practices in hearing screening and assessment, interdisciplinary follow-up, and educational intervention.

IHD 1806X

Language and Communicative Competence Development

This course describes the stages of natural communication acquisition, as well as the effects of hearing loss or deafness on communication competence. A wide range of communication approaches are described and discussed.

IHD 1807X

The Interdisciplinary Team: Collaboration is Key

This course is designed to enhance the interdisciplinary assessment, education, and service delivery needed by educators, speech-language pathologists, audiologists, psychologists and related professionals to address the unique needs of students who are hard of hearing or deaf particularly for those integrated in general education classrooms.

IHD 1808X

Social Emotional Development, Services, & Considerations

This course is designed to enhance the preparation of educators, speech-language pathologists, audiologists, psychologists, counselors, and other related professionals to address the unique psychosocial developmental needs of students who are hard of hearing or deaf particularly in general education settings. This course will provide an overview of social emotional developmental needs, strategies, and services

IHD 1809X

Introductory Sign Language

This course provides 12 dramatic lessons for the beginning signer, using acclaimed "Ready, Set, Sign!!" CD-Roms with accompanying online instruction—developed exclusively for IHHD by the original designers of this award-winning program. Successful completion of both the introductory and intermediate courses are deemed equivalent to two years of American Sign Language (ASL) for the purpose of foreign language credit at the secondary level.

IHD 1810X

Intermediate Sign Language

This course provides lessons for the signer who possesses a basic level of signing skill and/or familiarity with American Sign Language vocabulary, grammar, and fingerspelling. Beginning with Review Lesson 13 from the Introductory course, the Intermediate course covers lessons 14 through 24 of acclaimed "Ready, Set, Sign!!" on CD Rom, with accompanying online instruction. Successful completion of both the introductory and intermediate courses are deemed equivalent to two years of American Sign Language (ASL) for the purpose of foreign language credit at the secondary level.

IHD 1815X

Practical Communication

This course emphasizes everyday written communication in the worlds of business, academia, and other administrative settings. The unique course was designed specifically for adults who are deaf or hard of hearing, and is presented in American Sign Language by skilled ASL actors. Signed and Captioned.

IHD 1816X

Creative Communication

This course was designed specifically for adults who are deaf or hard

of hearing. It is presented in American Sign Language by skilled ASL actors. This unique course is divided into two sections: Presentations on the World Wide Web and Creative Writing for Persons Who Are Hard of Hearing or Deaf. Signed and Captioned.

IHD 1817X

Entrepreneurship

This course is designed for both the prospective and existing small business entrepreneur. Program content provides the aspiring or nascent entrepreneur with the critical knowledge needed for starting or sustaining a small business venture. Captioned and sign language interpreted.

IHD 1818X

Living with Hearing Loss: Psychosocial Consequences and Effective Accommodations

This course includes discussion of the variety of psychological, social, and physical effects of the inability to understand from both perspectives the various reactions to communication breakdowns and suggested approaches, techniques, and technology for reducing communication breakdowns. Captioned.

IHD 1819X

Understanding Hearing Loss & Deafness

This course explains the nature, types, degrees, and causes of hearing loss in adults, as well as appropriate audiologic assessment and rehabilitation, including amplification and assistive technology options for enhancing communication access.

ILX 1060

Information Literacy & Report Writing

A cross-disciplinary course that teaches effective report and research paper writing through the use of key computer technologies. This course includes internet research, MLA and APA style formats, computer technologies, spreadsheets and the application of multimedia software and graphics for report presentation.

ISX 1935X

Introduction to Computers

This course provides a history of computers from the early stages to present. Students explore the relationship of terminology as well as the basic concepts of using computers. Students can expect to learn everything from starting a computer and working with windows to managing files and sharing data.

ISX 1952X

Spreadsheet Applications

This course provides the student with an understanding of Microsoft Excel applications utilized in the workplace. Students will benefit from this course as they learn to use sum function, various mathematical formulas, work with multiple worksheets, and create charts and graphs.

ISY 1000X

Client Operating Systems

Provides the student with the experience and skills needed to install, configure, and operate common client operating systems with a focus on the Microsoft Windows family.

ISY 1001X

Linux Concepts and Implementation

Provides the student with the skills and knowledge needed to install, configure, and administer the Linux Operating System. The skills developed by the student are also applicable to other Unix-like operating systems such as Sun Solaris, Free BSD, and IBM AIX.

ISY 1002X

PC System Essentials

Provide the student with the skills and knowledge needed by a personal computer technician to install, configure a wide range of common personal computer hardware and software. Operating

Extended Learning

systems include Windows 2000, XP and Linux. Covers the detailed interaction between hardware and software with a focus on the interactions that take place in a networked environment.

ISY 1003X

Network Essentials

Provides the student with the information and skills needed to implement personal computers on a networked environment. The information includes: Protocol stacks (TCP/IP, IPX/SPX, APPLETALK, DLC etc.), IEEE Standards, The OSI Model, Switching and routing, Selection and use of various network media including UTP, STP, Fiber and wireless (802.11). The course also covers configuration and operation of personal computer clients on UNIX, Linux, Novell, and Microsoft networks, and Networking hardware.

ISY 1004X

PC and Network Diagnostics and Troubleshooting

Provide the student with the skills and knowledge needed by a personal computer technician in order to troubleshoot a wide range of common personal computer hardware, including CPU, RAM, ROM, hard drives, optical drives, video and sound systems, input/output devices, and operating system and application interactions. Additionally, the course covers, in detail, proper techniques to troubleshoot a networked environment.

ISY 1005X

Microsoft Office Applications

Covers the skills and knowledge needed in order to install, configure, operate, and troubleshoot the Microsoft Office Suite. Includes coverage of Word, Excel, Access, PowerPoint, and Outlook.

ISY 1006X

Web Design

Prepares students to plan and develop Web sites that combine effective navigation with the use of graphics, text, and color. In addition to building HTML skills, users learn to enhance Web pages and gain a critical eye for evaluating Web site design.

ISY 1007X

Internet Essentials

Provides students the strategies and skills required to use the Internet as a valuable research and productivity tool. Also provides skills in preventing and eliminating malicious web content accessed through browsers and e-mail.

ISY 1008X

PC System Security

Provides the student with the skills and knowledge needed to design and implement security solutions in a PC environment. Also provides an introduction to network security.

ISY 1802X

PC System Essentials

Provide the student with the skills and knowledge needed by a personal computer technician to install, configure a wide range of common personal computer hardware and software. Operating systems include Windows 2000, XP and Linux. Covers the detailed interaction between hardware and software with a focus on the interactions that take place in a networked environment.

ISY 1803X

Network Essentials

Provides the student with the information and skills needed to implement personal computers on a networked environment. The information includes: Protocol stacks (TCP/IP, IPX/SPX, APPLETALK, DLC etc.), IEEE Standards, The OSI Model, Switching and routing, Selection and use of various network media including UTP, STP, Fiber and wireless (802.11). The course also covers configuration and operation of personal computer clients on UNIX, Linux, Novell, and Microsoft networks, and Networking hardware.

ISY 1804X

PC and Network Diagnostics and Troubleshooting

Provide the student with the skills and knowledge needed by a personal computer technician in order to troubleshoot a wide range of common personal computer hardware, including CPU, RAM, ROM, hard drives, optical drives, video and sound systems, input/output devices, and operating system and application interactions. Additionally, the course covers, in detail, proper techniques to troubleshoot a networked environment.

MAS 1000X

Voice and Data Cabling Technology

Provides the student with the skills and knowledge needed to plan, document, install, test and troubleshoot voice and data cabling systems in accordance with TIA / EIA industry standards and local loop installation and troubleshooting. The skills developed by the student include cable pair color code identification, modular jack and plug wiring patterns, planning, documentation and installation of Horizontal and Backbone cabling systems to include termination of category-rated cables on IDC blocks 66 and 110, patch panels and Telecommunications Outlets. Introduction to the Public Switched Telephone Network (PSTN).

MAS 1001X

Local Area Networks

Provides the student with the knowledge and skills needed to plan, document, install and test wired LANs and wireless LANs (WLAN) as stand-alone and integrated networks. The skills developed by the student include site surveying, system placement and equipment configurations. Additional knowledge developed by the student includes LAN protocols IEEE 802.3 including Fast Ethernet, Gigabit Ethernet and 10 Gigabit Ethernet and IEEE 802.5, 100VG AnyLAN and Fiber Distributed Data Interface (FDDI).

MAS 1002X

Introduction to Wireless Networks

Provides the student with the knowledge and skills needed in cellular and WLAN fundamentals to include cellular site equipment, radio wave propagation, first through third generations of cellular wireless technologies, wireless protocols, public services, Wireless LAN (WLAN) configurations, and other RF technologies (terrestrial microwave, satellite, Bluetooth, GPS and paging systems). Hands-on labs using wireless trainer equipment, oscilloscope and spectrum analyzer.

MAS 1003X

Wireless Network Planning

Provides the student with the knowledge and skills needed for the design and principles of cellular operation. The student will develop knowledge in cellular radio system parameters, planning and testing of systems through the use of the EDX software program. The student will also develop skills and knowledge through hands-on labs, performing radio link budgets and training on wireless trainer equipment, oscilloscope and spectrum analyzer.

MAS 1004X

Fiber Optics

Provides the student with the knowledge and skills needed to document, install, test and troubleshoot optical fiber cabling systems. The skills developed by the student include optical link budget preparation, connector installation and testing, mechanical and fusion splicing installation and testing, power meter testing, Optical Time Domain Reflectometer (OTDR) testing and cabling system documentation. Characteristics of optical fiber and the principles of light propagation.

MAS 1005X

Business Communications Systems

Provides the student with the skills and knowledge needed to plan, document, install, test and troubleshoot Main Distribution Frames (MDF) and business telephone systems. The skills developed by the student include preparation of system documentation, installation,

Extended Learning

testing and troubleshooting of cabling systems and distribution frames, programming and installation of business telephone systems and system bid estimation. Circuit and packet switching technologies, including the latest developments in telephony and data networks and emerging technologies.

MAS 1006X

Basic Electricity & Electronics

Provides the student with skills and knowledge in the fundamentals of electricity and electronics to include technologies, terms and elemental concepts in electron theory, electrical symbols and units, electronic components and circuits, Ohm's Law, Kirchoff's Laws, network theorems (Thevenin, Millman and Norton), DC and AC circuit analysis, soldering and wire wrapping and test equipment labs with multimeters, oscilloscope and spectrum analyzer.

MAS 1007X

PC System Essentials

Provide the student with the skills and knowledge needed by a personal computer technician in order to be able to install and configure a wide range of common personal computer hardware and software. Operating systems include Windows 2000, XP and Linux. Covers the detailed interaction between hardware and software with a focus on the interactions that take place in a networked environment

MAS 1008X

Internet Telephony

Provides the student with the knowledge and skills needed install, test and troubleshoot Voice over Internet Protocol (VoIP) user devices and gateways. The student will develop knowledge on circuit-switched and packet-switched networks, technical standards, IP call processing protocols, VoIP platforms, path establishment via service providers, and interoperability between the Public Switched Telephone Network and IP networks.

MAS 1800X

Voice and Data Cabling Technology

Provides the student with the skills and knowledge needed to plan, document, install, test and troubleshoot voice and data cabling systems in accordance with TIA / EIA industry standards and local loop installation and troubleshooting. The skills developed by the student include cable pair color code identification, modular jack and plug wiring patterns, planning, documentation and installation of Horizontal and Backbone cabling systems to include termination of category-rated cables on IDC blocks 66 and 110, patch panels and Telecommunications Outlets. Additional knowledge and skills developed by the student include an introduction to the Public Switched Telephone Network (PSTN), local loop characteristics, installation and troubleshooting and Local Area Network installation and testing.

MAS 1801X

Fiber Optics

Provides the student with the knowledge and skills needed to document, install, test and troubleshoot optical fiber cabling systems. The skills developed by the student include optical link budget preparation, connector installation and testing, mechanical and fusion splicing installation and testing, power meter testing, Optical Time Domain Reflectometer (OTDR) testing and cabling system documentation. The student will also develop knowledge on the characteristics of optical fiber and the principles of light propagation.

MAS 1802X

Business Communications Systems

Provides the student with the skills and knowledge needed to plan, document, install, test and troubleshoot Main Distribution Frames (MDF) and business telephone systems. The skills developed by the student include preparation of system documentation, installation, testing and troubleshooting of cabling systems and distribution frames, programming and installation of business telephone systems and system bid estimation. The student will also develop knowledge

in circuit and packet switching technologies, including the latest developments in telephony and data networks and emerging technologies.

MBL1003X

Medical Terminology

(Prerequisites: SCI201, SCI202)

This course provides introductory material serving as the foundation to the medical billing, coding and administration certificate. Students are provided with the medical terminology and classification system used in the health care industry. Students will learn the roots, suffixes, prefixes, and definitions of the different systems in the human body.

MBL1005X

Medical Insurance I

Students will study the medical insurance industry and its associated terminology. They will also gain introductory knowledge to the Medicare, Medi-Cal, and TRICARE programs along with programs available through the private sector. Topics discussed will include the importance of accurate claims and the responsibilities of the billing specialist. Legal and ethical considerations of billing are also covered.

MBL1006X

Medical Insurance II

(Prerequisites: MLB1105)

Students are introduced to computerized account management through the use of MediSoft, the software most commonly used in medical offices. The course covers the general flow of information in a medical office and the role computers play in the medical office administrative tasks. Content is based on industry practice and addresses electronic claims and a variety of compliance issues.

MBL1007X

Medical Insurance III

(Prerequisites: MLB1105, MLB1106)

This course is an introduction to the concepts and techniques of CPT-4 and ICD-9 coding. It will cover the purpose behind coding and how to use the various coding reference materials commonly found in medical offices. This course also introduces HCFA-1500 (Universal Claim Form) and the billing requirements for commercial insurance, Blue Cross/Blue Shield, TRICARE/CHAMPUS, Medi-Cal and Workers' Compensation. Students will learn which fields are needed for which insurance and various billing requirements for the different programs. Students will also learn the various legal and ethical techniques for collecting from insurance companies. Various regulations for collecting will be discussed.

MBL1114X

Information Literacy and Report Writing

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.

MEDX 1800X

Medical Terminology I

Through the Vocational Rehabilitation programs, students become acquainted with beginning medical terminology. Emphasis is on principal parts of the body and pronunciation as it is related to medical transcription and medical billing. Students will become familiar with the basic structure of medical terms as they relate to anatomy and physiology. Course covers prefixes, word roots and combining forms as they relate to medical terms.

MEDX 1801X

Medical Terminology II

Through the Vocational Rehabilitation programs, this course

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acquaints students with advanced medical terminology. Emphasis is on principal parts of the body and pronunciation as it is related to medical transcription and medical billing. Students will become familiar with the basic structure of medical terms as they relate to anatomy and physiology. Course covers prefixes, word roots and combining forms as they relate to medical terms.

MEDX 1802X

Medical Billing Practical

With a hands-on approach, students learn coding diagnoses and procedures for billing services rendered through the Vocational Rehabilitation programs. This course is designed with exercises that simulate realistic on-the-job work experiences.

MEDX 1803X

Computerized Medical Billing

Through the Vocational Rehabilitation programs, students review coding diagnoses and procedures for computerized billing services rendered. This course is designed with exercises that simulate realistic on-the-job work experiences. The delivery method for this course provides students with a hands-on approach to the subject matter.

NAE 1000X

Client Operating Systems

Provides the student with the experience and skills needed to install, configure, and operate common client operating systems with a focus on the Microsoft Windows family.

NAE 1001X

Windows Server Administration

Covers the installation, configuration, operation, and troubleshooting of the several Microsoft Windows Network Operating Systems. Included are details of Windows NT Server, the Windows 2000 Server family, and the Windows 2003 Server family.

NAE 1002X

Network Design and Infrastructure

Provides the student with the skills and knowledge needed to design and implement computer networks with a focus on Microsoft Windows Server based networks. Covers a wide range of IEEE standards and the OSI model. Also discusses in detail the several common protocol stacks, their selection and use in real-world situations.

NAE 1003X

Windows Services

Covers the installation, configuration, operation, and troubleshooting of Microsoft Windows services. Included are Active Directory services and Microsoft Exchange services and their use in enterprise wide systems.

NAE 1004X

Network Security

Provides the student with the skills and knowledge needed to design and implement network security solutions in homogenous and heterogeneous network environments. Also focuses on Microsoft Windows 2003 Server security.

NAE 1005X

Novell Administration

Provides the student with the skills and knowledge needed to install, operate, and administer the Novell Netware Operating System. While the focus is on newer versions of Netware, information on earlier versions is also provided due to popularity of these earlier versions in the industry.

NAE 1006X

Linux Concepts and Implementation

Provides the student with the skills and knowledge needed to install, configure, and administer the Linux Operating System. The skills developed by the student are also applicable to other Unix-like operating systems such as Sun Solaris, Free BSD, and IBM AIX.

NAE 1007X

Linux and Novell Applications

Covers the installation, configuration, operation, and troubleshooting of several essential services and applications operating on Novell Netware and Linux servers. Included are Apache web server, SAMBA, and GroupWise. Some supporting services for these will also be covered.

NAE 1008X

Routers and Advanced Networking

Covers router technology and the installation and configuration of routers and managed switches in a networked environment. Also focuses on advanced networking concepts such as T-carriers, DSL, Cable Internet Services, fiber optic networks, and subnet masking.

NBCX 1201X

National Board Certified Teacher Academy

ORT 1000X

Functional Anatomy & Biomechanics of the Upper Extremity

A study of the development of the muscular-skeletal systems with the emphasis divided between gross anatomy, the cellular detail (histology) of tissues, arterial and venous perfusion, as well as relevant nervous innervations of these systems, as they relate to the treatment of upper extremity orthopedic injuries.

ORT 1001X

Orthopedic Techniques: Clinical Lab A

An introduction to cast room protocols, including instrumentation, the techniques for the application of the basic types of casts and the special considerations required for treatment of upper extremity orthopedic trauma cases. This course will include application of upper extremity orthopedic casts in the laboratory setting.

ORT 1002X

Functional Anatomy & Biomechanics of the Lower Extremity

A study of the development of the muscular-skeletal systems with the emphasis divided between gross anatomy, the cellular detail (histology) of tissues, arterial and venous perfusion, as well as relevant nervous innervations of these systems, as they relate to the treatment of lower extremity orthopedic injuries.

ORT 1003X

Orthopedic Techniques: Clinical Lab B

An introduction to cast room protocols, including instrumentation, the techniques for the application of the basic types of casts and the special considerations required for treatment of lower extremity orthopedic trauma cases. This course will include application of lower extremity orthopedic casts in the laboratory setting.

ORT 1004X

Advanced Upper Extremity; Trauma/Pathology-Operative/Conservative Treatment Concepts

This course provides advanced instruction in a systems approach to the evaluation and treatment of specified upper extremity orthopedic injuries and disease. Topics include the development, function and interrelationships of the muscular and skeletal systems with emphasis on gross anatomy, cellular structure, vascular perfusion, neural innervations, and congenital and acquired orthopedic pathophysiology.

ORT 1005X

Orthopedic Techniques: Clinical Lab C

This course is a continuation of Orthopedic Techniques: Clinical Lab A with emphasis of cast room protocols, instrumentation, upper extremity orthopedic casting techniques and the assessment and treatment of casting complications. Emphasis will be on the application of special casts, pediatric casts, full body casts and various traction configurations and techniques.

ORT 1006X

Advanced Lower Extremity; Trauma/Pathology-Operative/Conservative Treatment Concepts

This course provides advanced instruction in a systems approach to

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the evaluation and treatment of specified lower extremity orthopedic injuries and disease. Topics include the development, function and interrelationships of the muscular and skeletal systems with emphasis on gross anatomy, cellular structure, vascular perfusion, neural innervations, and congenital and acquired orthopedic pathophysiology

ORT 1007X

Orthopedic Techniques: Clinical Lab D

This course is a continuation of Orthopedic Techniques: Clinical Lab B with emphasis of cast room protocols, instrumentation, lower extremity orthopedic casting techniques and the assessment and treatment of casting complications. Emphasis will be on the application of special casts, pediatric casts, full body casts and various traction configurations and techniques.

ORT 1008X

Supervised Hospital Clinical Practicum

This course is designed to provide clinical application of orthopedic technology in a hospital environment. Students participate in the normal day-to-day activities of an orthopedic service where they develop and refine their skills in the application of orthopedic casts, set up and application of traction devices and the pre and post operative care of the orthopedic patient. The student is required to demonstrate clinical orthopedic competencies as part of this course.

SCX 1001X

Human Anatomy and Physiology I

This course is concerned with the Anatomy and Physiology of the Human Body. Areas for study include cells and tissues, some of our organs (skin and body membranes; the skeletal, muscular and nervous systems), the special senses (eye, ear, balance, taste and smell), 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.

SCX 1002X

Human Anatomy and Physiology II

This course on human anatomy and physiology focuses on the endocrine system; blood; the cardiovascular system; the lymphatic system and body defenses; the respiratory system; the digestive system and body metabolism; the urinary system; the reproductive system and their functional relation to each other. The aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

TEDX 1844X

Behavior is Language

Strategies for Managing Disruptive Behavior

This self-paced CD ROM course is designed to give 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. After successfully completing this course, participants will be better equipped to find and implement creative, effective solutions to behavioral problems.

TEDX 1344X

Attention Deficit Disorder

Information & Interventions for Effective Teaching
Covering the history of the disorder, accepted methods to assess and identify students with the disorder, and various methods, medications and strategies that are currently used to treat the disorder, this **self-paced CD ROM** course will help teachers achieve a better understanding of ADD and intervention strategies to facilitate positive student change. For situations where a student needs services beyond what teachers can provide in the classroom, this course covers the referral process for getting help for the student. Reference materials include a list of resources for both teachers and parents who would like more help or information about ADD or ADHD.

TEDX 1345X

Violence in Schools

This **self-paced CD ROM** is designed to give 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 1346X

Learning Disabilities

Practical Information for Classroom Teachers

This **self-paced CD ROM** course describes diverse theoretical approaches to handling learning disabilities in the classroom. This course lays the foundation for sensitive, appropriate assessment and evaluation of students. In addition, the course covers program planning and implementation, stresses the importance of a close, positive partnership with parents or alternative caregivers, and explores methods for ensuring that the home-school axis is effective and meaningful. Teachers will also learn about major trends and unresolved issues in the field of learning disabilities.

TEDX 1347X

Harassment in Schools

Guidelines and Policies for Prevention

In this interactive **self-paced CD ROM** course, teachers will gain a better understanding of harassment issues in schools and learn intervention strategies to use for protection from harassment. Discussing the relationship between discrimination and harassment, as well as the impact of sexual harassment on victims and the workplace, the course also describes the legal and operational definitions of the forms of harassment, methods for stopping harassment, and guidelines for creating and implementing policies to prevent harassment.

TEDX 1348X

Drugs & Alcohol in School

Understanding Substance Use & Abuse

Take this **self-paced CD ROM** course to gain a more comprehensive understanding of alcohol, drugs and their influences in the classroom. This course provides a contextual framework for understanding what students may be experiencing either through their own substance use or from the substance use of persons close to them. This course provides a basic historical perspective of substance use along with the biological, psychological and social factors that comprise the disease of addiction. Upon course completion, teachers will better understand the complex dynamics that contribute to this biological and social phenomenon.

TEDX 1349X

Autism & Asperger's Disorder

This **self-paced CD ROM** 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 1351X

Functional Analysis

Introduction to Completing Behavior Assessments

This interactive **self-paced CD ROM** course will help teachers achieve a better understanding of Functional Behavior Assessment (FBA) and Positive Behavior Support (PBS) strategies that students can use to facilitate positive student behavior. Because the results of FBAs often lead to proactive intervention, this course is particularly useful for educators who work with students with disabilities. This course includes an overview of the hierarchy of assessment procedures used to conduct FBAs, and details the procedures and treatment packages that can be implemented based on the results of functional analyses. Particular emphasis is placed on reinforcement-based interventions and dimensions of reinforcement.

Extended Learning

TEDX 1368X

Sexually Transmitted Infections

Information for Education Faculty & Personnel

This **self-paced CD ROM** course provides an in-depth understanding of sexually transmitted infections. It is not a medical text; instead, it is a course designed specifically for teachers, aides, counselors, administrators and other education professionals so that they can understand and learn about the sexually transmitted infection epidemic that affects so many students each year.

TEDX 1369X

Inclusion: Working with Special Needs Students in Mainstream Classrooms

This interactive, **self-paced CD ROM** course is designed to help special and general educators gain a better understanding of inclusion, an educational reform movement that advocates educating students with disabilities in the general education classrooms. Upon course completion, teachers will be able to define key concepts and terms, identify and describe federal legislature and court cases, and describe the federal definition of students entitled to special services. This course will also help teachers identify their role in providing special services to students educated in inclusive classrooms.

TEDX 1371X

Understanding Aggression

Coping with Aggressive Behavior in the Classroom

Understanding aggression includes topics on violence, aggression in the classroom, youth gangs, and aggression in sports and on television, how drugs and alcohol play a role in aggression and violence, and “hot spots” that tend to breed aggression and violence. The **self-paced CD ROM** course helps school personnel become more aware of the causes of aggression and ways to evaluate aggression and intervene before it turns to violence in the schools. The course also addresses aggression in our communities through driving, dating, sports, television, music and how these issues are dealt with in modern society.

TEDX 1372X

Talented & Gifted Education

Working with High Achievers

Talented and Gifted Education provides information on the history of the exceptional in relation to education, current law, and accepted methods for referral, assessment, and identification of these students. The **self-paced CD ROM** course also covers major program models and methods of differentiating instruction to meet the rate and level of learning of those students identified. The curriculum reviews ways to meet the affective needs of the gifted and talented student in the regular classroom and lists resources for teachers and parents.

TEDX 1379X

Child Abuse: Working with the Abused & Neglected

This interactive, **self-paced CD ROM** program shows teachers how to recognize the signs of physical abuse, emotional abuse, sexual abuse, physical neglect and emotional neglect in children. Participants will also explore the 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.

TSL 1400X

Theories and Methods of Language Teaching and Acquisition

Beginning from a historical perspective, this course covers the most prominent theories of second language pedagogy. These will serve as a springboard for discussion and reflection about the process of teaching, before moving on to more concrete issues such as learning styles, cultural influences and personality factors. This course will introduce concepts that participants can modify and apply in subsequent courses in the series, thus helping to create a personalized teaching style.

TSL 1401X

Structure of English and Grammar Teaching Techniques

A clear and deep understanding of English grammar is absolutely

essential for teachers of ESL/EFL. It is, ironically, the most common weakness of teachers, whether native speakers or not. The purpose of this course is twofold: (a) to help teachers acquire the necessary foundation and sense of grammar and (b) to give them practical and immediately applicable techniques they can use to teach grammar to their students. Topics include:

- Discussion of common problem areas for students.
- English specific to academic writing.
- Games and activities to make grammar accessible to students.
- TOEFL-related grammar issues.

TSL 1402X

Teaching Reading and Writing

This course introduces the topics typically covered in ESL reading/writing courses and also provides techniques for teaching these topics. For example, reading courses usually include skimming and scanning, finding the main idea and inferring meaning. In a writing course, topics of study include idea generation techniques, organizational skills and paragraph and essay structure. In addition, the course covers strategies for testing reading and writing, TOEFL-specific reading and writing issues and practical and lively games designed to reinforce important topics.

TSL 1403X

Teaching Listening and Speaking

Teachers are introduced to the topics typically covered in ESL listening/speaking courses, as well as the techniques for teaching these topics. For listening, topics include note-taking, use of videos and songs and cloze exercises. For speaking, topics of discussion range from dialog-based production at the lowest levels to speech preparation and delivery at the highest. The course will also discuss strategies for testing listening and speaking, TOEFL-specific listening comprehension issues and practical and lively games designed to reinforce important topics.

TSL 1404X

Practical Issues in Second Language Pedagogy

Teachers in this course will cover topics such as lesson planning, teaching materials, classroom interaction and classroom management, all essential to efficient teaching. Other topics include the teaching of vocabulary, pronunciation and other subjects sometimes deemed “elective” classes. The goal of the course is to synthesize and to fill in the gaps in the rather large amount of material covered to this point in the series. Upon completion, participants will have acquired the tools necessary to feel confident entering the ESL/EFL classroom.

TSL 1900X

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 allows students to display their newly acquired knowledge and skills by working side-by-side with an experienced ESL teacher in a classroom environment.

Students wishing to take the TESOL Practicum must speak with the project 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.

WPA 1800X

Word Processing Applications

Students are introduced to office automation concepts and basic applications. Students review and learn system commands utilizing up-to-date word processing systems. Additionally, students review tables, inserting graphic elements, and exploring the internet.

Course Descriptions

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The University of Values



Prefix/Subject Area by National University School

College of Letters and Sciences

Prefix	Subject Area	Page
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ASL	American Sign Language	255
BGS	General Studies	255
BIS	Interdisciplinary Studies	255
CAL	Center for Adult Learner	257
CHD	Chemical Dependency	259
ENG	English	272
GLS	Global Studies	278
HIS	History	279
HUB	Human Behavior	282
HUM	Humanities	283
ILR	Information Literacy	283
IOP	Industrial Organization	283
LAS	Language Arts	285
LIT	Literature	287
MCW	Creative Writing	288
MSM	Multiple Subject Matter	291
MTH	Mathematics	291
MUS	Music	296
PHL	Philosophy	300
POL	Political Science	302
PSY	Psychology	303
SCI	Natural Sciences	305
SOC	Sociology	308
THR	Theater	313

School of Business and Management

Prefix	Subject Area	Page
ACC	Accounting	253
ADC	Alcohol and Drug Counseling	253
ADR	Alternate Dispute Resolution	254
BKM	Business Knowledge Management	255
BUS	Business	257
CHD	Chemical Dependency	259
CJA	Criminal Justice Administration	260
DSM	Domestic Security Management	265
ECO	Economics	266
ELB	Electronic Business	269
EMB	Executive Master in Business (plus Spanish version)	270
FIN	Finance	275
FSC	Forensic Sciences	277
HCM	Hospitality and Casino Management	279
HRM	Human Resources Management	281
IBU	International Business	283
LAW	Law	285
LED	Organizational Leadership	286
MGT	Management	289
MKT	Marketing	290
MNS	Management Science	291
ODV	Organizational Development	298
PAD	Public Administration	298
PLA	Paralegal Studies	300
SMG	Sports Management	308
TAX	Taxation	310

School of Education

Prefix	Subject Area	Page
BTE	Bilingual Teacher Education	256
CED	Counselor Education	257
CLD	Cross-Cultural, Language & Academic Dev	261
CUR	Curriculum and Instruction	263
DHH	Deaf and Hard-of-Hearing	264
ECD	Early Childhood Education	265
EDA	Educational Administration	267
EXC	Special Education	273
HED	Health Education	279
ILD	Instructional Leadership	283
MAT	Master of Arts in Teaching	287
MTE	Master of Education in Teaching	289
NBC	National Board Certified	296
PED	School Psychology	299
TAL	Teaching the Adult Learner	310
TED	Teacher Education	311

School of Engineering and Technology

Prefix	Subject Area	Page
CEN	Construction Engineering	258
CIS	Information Systems	259
CSC	Computer Science	261
DAF	Defense Architectural Framework	263
DEN	Design Engineering	264
EEA	Enterprise Architecture	269
EGR	Engineering	269
ENE	Environmental Engineering	271
ENM	Engineering Management	273
IEM	Industrial Engineering	283
ITM	Information Technology Management	284
PME	Project Management	302
SCL	Supply Chain Logistics	306
SSE	Safety and Security Engineering	309
SYE	Systems Engineering	310
TMG	Technology Management	314
WCM	Wireless Communications	314

School of Health and Human Services

Prefix	Subject Area	Page
GER	Gerontology	278
HCA	Health Care Administration	278
HSC	Health Science	282
NSG	Nursing	296

School of Media and Communication

Prefix	Subject Area	Page
BRO	Broadcast Media	255
COM	Communications	261
EDT	Educational and Instructional Technology	267
MDC	Digital Cinema	289
MUL	Multimedia	293

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 degree program.

600-Level Courses:

Master's level courses.

Note: All courses are 4.5 quarter units unless otherwise specified.

Course Descriptions

ACC – Accounting

ACC 201

Financial Accounting Fundamentals

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 principals” (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 Fundamentals (Prerequisite: 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 Technology for Accountants

(Prerequisite: ACC 201)

This course familiarizes accounting majors with the technological tools and resources needed for career opportunities in both financial and managerial accounting areas. Emphasized are the adaptation of computer accounting software to the specific needs of an enterprise, as well as the design and use of spreadsheet models to perform specialized accounting and finance-related tasks.

ACC 410A

Intermediate Accounting I

(Prerequisite: ACC 201)

(Prerequisite: 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 provides an in-depth review of the accounting process, the principal financial statements, accounting concepts, theory and application of the time value of money, and accounting for cash, receivables, and inventories.

ACC 410B

Intermediate Accounting II

(Prerequisite: ACC 201)

Often referred to as “Intermediate Accounting,” (See ACC 410A for a series description.) ACC 410B covers accounting for plant, property and equipment, intangible assets, investments, current and long-term liabilities, and stockholders’ equity and retained earnings.

ACC 410C

Intermediate Accounting III

(Prerequisite: ACC 201)

Often referred to as “Intermediate Accounting,” (See ACC 410A for a series description.) ACC 410C covers revenue and expense recognition, accounting for leases, pensions, income taxes, earnings per share, accounting changes and errors, segment and interim reporting, and preparation of the statement of cash flows.

ACC 431

Advanced Accounting

(Prerequisite: ACC 201)

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

(Prerequisite: ACC 201)

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

(Prerequisite: ACC 201)

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

(Prerequisite: 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

(Prerequisite: 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 Non-Profit Accounting

(Prerequisite: 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

(Prerequisite: ACC 201)

A study of financial statement audits by CPAs performed in accordance with AICPA generally accepted auditing standards. Topics include professional ethics, legal liabilities, the planning of audit engagements, internal control and its relationship to the nature, timing and extent of evidence-gathering procedures, EDP controls and audit sampling.

ACC 435B

Auditing II

(Prerequisite: ACC 435A)

A continuation of ACC 435A, this course focuses on the auditing procedures of individual financial statement line items including cash, receivables, inventory, payables, long-term debt, equity balances and related income statement accounts. Also emphasizes the writing of auditor’s reports, special reports and review and compilation reports in accordance with AICPA standards.

ACC 501

Accounting Fundamentals (Formerly BUS 501A) (two weeks)

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.

ACC 604

Managerial Accounting

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 650A

Financial Accounting Theory I

(Prerequisite: ACC 201 or equivalent taken within two years of the start of the course)

Often referred to as “Intermediate Accounting,” ACC 650A and B is a comprehensive two-course sequence covering a substantial portion of the U.S. financial reporting principles known as GAAP (generally accepted accounting principles). In particular, ACC 650A provides us an in-depth review of the accounting process and preparation of the principal financial statements. This course emphasizes revenue and expense recognition, along with the accounting for cash, receivables, inventories, and plant, property and equipment.

ACC 650B

Financial Accounting Theory II

(Prerequisite: ACC 201)

The second course of a comprehensive two-course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP, ACC 650B covers accounting for intangible assets, investments, current and long-term liabilities, stockholders’ equity, investments, income taxes, compensation, leases, accounting changes and errors, earnings per share, and statement of cash flows

ACC 652

Taxation for Investors and Managers

(Prerequisite: ACC 201)

Theory and practice of federal income taxation of individuals, partnerships and corporations, including capital gains, depreciation, and deferred compensation rules and regulations are covered.

ACC 655

Auditing and Internal Control

(Prerequisite: ACC 201)

Financial statement audits and other assurance services performed by independent auditors in accordance with AICPA generally accepted auditing standards are examined, with emphasis on internal control principles and procedures.

ACC 657

Accounting Information Systems

(Prerequisite: ACC 201)

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 are studied.

ACC 690

Guided Study

This course is individual study under the direction of an instructor. It requires prior approval of the appropriate academic department.

ADC – Alcohol and Drug Counseling

ADC 200

Sociological Perspectives on Alcoholism and Drug Addiction

(4.5 units)

This course will examine the history of alcohol and

Course Descriptions

other mood-changing drugs in the United States; the myths and stereotypes of alcohol use; the socio-cultural factors that contribute to the use of drugs; and the patterns and progressions of alcoholism. A variety of different aspects and perspectives for understanding alcohol and drug use behaviors will be explored.

ADC 210 Physiological and Pharmacological Aspects of Substance Abuse (4.5 units)

This course is designed to examine the effects of alcohol and similar legal/ illegal psychoactive drugs to the body and in behavior. Areas to be covered include tolerance, gender differences, and the disease model. Students will be presented with pharmacological and physiological treatment/ recovery strategies to assist in forming the most appropriate level of care.

ADC 220 Counseling Techniques/Practical Applications (4.5 units)

This course will provide the major theories and techniques of alcohol and drug counseling. The focus is to make practical application of theory and technique to clinical and case study situations. This course is designed to provide familiarity with the relevant techniques and comfort with the applications of those techniques.

ADC 230 Counseling Special Populations (4.5 units)

This course focuses on how to provide alcohol and drug counseling to special populations. The basic counseling theories and techniques may be utilized, however emphasis placed on awareness and knowledge of the special population's needs, can positively influence the course of treatment. Therapeutic approaches need to be adapted to the uniqueness of the individual.

ADC 240 Treatment Approaches for Alcoholism and Substance Abuse Counselor (4.5 units)

This course is designed to cover the major therapeutic orientations related to alcohol and substance abuse counseling. The course will familiarize students with the therapeutic progression and current issues as applied to the treatment unit. Assessment, formulation of treatment plans, and relapse prevention will be addressed. Utilize individual, family and group counseling for treatment of alcohol and drug abuse.

ADC 250 Alcoholism and Substance Abuse prevention and Intervention Education (3.0 units)

This course is designed to cover the concepts of prevention, community education, and community outreach. In addition, this course will provide education and prevention models and the role of community groups in these models. The effectiveness of alternative prevention strategies, education and training methods, and adult education techniques will be included.

ADC 260 Chemical dependency and Psychiatric Illness (4.5 units)

This course is designed to examine the dual diagnosis of chemical dependency and psychiatric illness. Whether there is a correlation of each is independent of the other, treatment needs to be provided for both diagnoses for a successful recovery and relapse prevention.

ADC 270 Legal and Ethical Practices for Drug and Alcohol Counselors (4.5 units)

This course considers various ethical and legal issues that influence the practice of drug and alcohol counseling. Topics include ethical systems and standards, legal systems and issues. Students will have the opportunity to develop their own standards and explore their values for further clarification.

ADC 280 Personal and Professional Growth (1.5 units)

The course will focus on two interrelated parts, personal growth and professional growth. In order to be an effective counselor, an awareness of one's own thoughts, feeling, and experience needs to occur. This course is designed to allow students to work through or at least become cognitively aware of their own issues and counter transference. Self awareness is the beginning to becoming a better alcohol and drug abuse counselor.

ADC 299 Practicum – Field Work 255 Hours (4.5 units)

This course consists of 45 classroom hours taught by an instructor who will see that the student completes 255 hours at an approved agency setting where direct supervision is provided by a qualified staff person. The instructor will be available for consultation with the student. Group supervision, individual consultation, and case review will focus on difficult aspects of case management for the beginning counselor. The 255 practicum hours needs to be completed within one year of the practicum class.

ADR – Alternate Dispute Resolution

ADR 400 Alternative Dispute Resolution Processes

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 and 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 Cultural 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.

ADR 600 Alternative Dispute Resolution

An advanced interactive course designed to deepen students' understanding of the field of Alternative Dispute Resolution, including an in-depth analysis of the primary dispute resolution processes currently in use (mediation, arbitration, facilitation, neutral evaluation, and neutral fact finding for employment complaints). This course will trace the history of ADR in the United States and examine its contemporary usage in the commercial sector. Applications of dispute resolution processes in everyday business situations will be emphasized. This workshop style course will utilize role play exercises, interactive exercises, video demonstrations, and other hands-on techniques to enable students to practice dispute resolution skills and to experience various ADR processes.

ADR 605 Negotiation

An advanced interactive course designed to develop the verbal and analytical skills required by ADR professionals to perform effectively as a negotiator in any conflict situation. In addition, the course will provide an opportunity for the students to identify their strengths as a negotiator and to identify and improve any weaknesses. The course utilizes advanced negotiating principles, sophisticated hands-on simulations, written planning documents, videos, written self critiques and case studies.

ADR 610 Facilitation

An advanced, interactive course designed to develop dispute resolutions and consensus building processes for group settings. The course will teach group facilitation theory, and processes and techniques necessary to effectively perform as a group facilitator. The course utilizes large group simulations and role plays, and case studies.

ADR 615 Mediation

An advanced interactive course designed to develop the skills required to perform effectively as a mediator. The course teaches the stages of mediation and the necessary skills a mediator must have in order to perform effectively for each stage. The course also covers the various steps required in reaching settlement and drafting settlement agreements. The course utilizes advanced mediating principles, sophisticated hands-on simulations, written planning documents, videos, written self critiques and case studies.

ADR 620 Arbitration

An interactive, course that enables students to participate in sophisticated simulations and mock arbitration both as advocates and arbitrators, prepare opening and closing statements and draft written decisions. Students will be introduced to Arbitration Statutes and Commercial Arbitration

Course Descriptions

Rules. The course will also provide students with insight into the Ethical and Professional Standards of Responsibility required of Arbitrators. Areas of focus are labor relations, securities, construction, personal injury, consumer-related disputes and commercial transactions.

ADR 625 Crisis Negotiation

Theory and practice of the dynamics involved in crisis negotiations with emphasis placed on domestic hostage incidents. The course utilizes a combination of psychological and communication approaches to crisis negotiation to signify the dynamics created between hostages and negotiators. Students will gain experience through role playing, and case studies.

ADR 630 Labor Negotiation

Students and business professionals will learn the art of collective bargaining. How labor and management in a unionized environment reach agreement regarding employee wages, benefits and other terms and conditions of employment. Participants will engage in face-to-face negotiations experiencing first-hand the economic dynamics at play, developing tactical strategies to achieve (mutually) beneficial results.

ART – Art

ART 100 Introduction to Art History (Prerequisites: ENG 100/101)

A survey of the main periods and traditions in art history, with emphasis on the complex relationship between art and society. Explores traditions including the Renaissance, Gothic, Baroque, Rococo, classical, Neoclassicism, impressionism, expressionism, realism, fantasy, environment art, architecture, formalism and contemporary avant-garde forms.

ART 200 Visual Arts

Fundamentals of visual and applied arts presented through painting, photography, video, or other media. Emphasis is determined by instructor. Students develop an awareness of aesthetic values, learn how to handle materials and develop an understanding of formal, technical and conceptual issues. Students supply some laboratory materials.

ART 200A Visual Arts Laboratory

(Prerequisite: ART 200)
The laboratory portion of Visual Arts, in which students focus on hands-on work.

ART 315 Film as Art

(Prerequisites: ENG 100/101)
A survey of the art of cinema from the silent period to the present, with emphasis on the social construction, distribution and consumption of film in historical context. Examines basic film techniques and theories and systematically explores diverse film styles and genres. Focuses on elements of film such as lighting, editing and cinematography. Develops awareness of film as a complex artistic text. Establishes a basis by which students can make their own aesthetic judgments. In addition to contemporary mainstream films, students view classic, independent, experimental and foreign films.

ART 323 Modern Art

(Prerequisites: ENG 100/101)
An introduction to the major movements, styles and artists from Impressionism to Post Modernism. Examines how themes of Modern Art reflect the social, historical and cultural events of the period.

ART 329 World Art + (Prerequisites: ENG 100/101)

The fundamentals of visual and applied arts from a global perspective. Focuses on the art of India, China, Japan, Pre-Columbian Central and South America, Native North America, Oceania and Australia, Africa and the Middle East. Also covers the accelerated changes in world art since 1945 and diversity issues related to world art.

ART 400 Expressive and Integrative Arts

(Prerequisites: ART 200, MUS 100, MSM 301, PSY 301 or equivalents)
Emphasizes the California Standards in the areas of dance and theater and builds on prior learning in music and the visual arts. The course prepares the student to integrate all these areas into daily instruction in grades K-8. The course emphasizes reconstruction of cultural diversity through activities in the arts as well as a basic knowledge of content areas for planning appropriate cross-curricular activities.

ASL – American Sign Language

ASL 120 American Sign Language I

Designed as an introduction to American Sign Language (ASL) for those with no previous experience. 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

Designed as a continuation of American Sign Language I. It is intended for those with some background and experience in ASL and American Finger-Spelling. Students will learn intermediate ASL skills used in a variety of situations, including the kinesics, morphology, and syntax of ASL. Idiomatic expression is included. This class is taught using American Sign Language. Voice and written communications are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

ASL 320 American Sign Language III

Designed as a continuation of American Sign Language II. It is intended for advanced students with intermediate background and experience in ASL and American Finger-Spelling. 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.

BGS – General Studies

BGS 499 Portfolio Project (Prerequisite: Completion of other major requirements)

Students submit work from all courses within and related to their major, as well as a final creative and/or scholarly project developed with the approval of a faculty advisor. Students enroll in the Portfolio Project after completing all other requirements for the major.

BIS – Interdisciplinary Studies

BIS 301 Introduction to Interdisciplinary 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-exchange." Emphasis is placed on reading, reflection, web resources and enrichment lectures, action research, writing, dialogue, and debate.

BIS 401 Interdisciplinary Practice: Integrating Knowledge with Technology

This course is a sequel to the introductory course 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 interdisciplinarity.

BIS 490 Interdisciplinary Studies Seminar

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.

BKM – Business Knowledge Management

BKM 400 Business Knowledge Management Strategies

In the quest for sustainable global competitive advantage companies have finally come to realize that technology alone is not that. What sustains is 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, transfer it, how to share it, and how to manage it. BKM 400 provides the student with practical guidance on linking knowledge management to business strategy rather than approaching KM from a technically biased perspective.

BKM 600 Knowledge Management for Business Strategies

An overview of the methodologies used in today's learning organization for the capture, transfer, sharing and management 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.

BRO – Broadcast Media

BRO 210 History of Television

(Prerequisites: COM 100 or COM 200 and ENG

Course Descriptions

100/101)

This course provides an overview of the history, theory and criticism of broadcast television in the United States and abroad. Students will learn about the creative and technical evolution of television, as well as investigate the social, political and cultural impact of broadcast television on 20th and 21st century society.

BRO 305

Media Storytelling

(Prerequisites: Broadcast Media Preparation Courses or Equivalents)

Media Storytelling is designed to provide the student with the basic theory, terminology, and practice essential to narrative formats in broadcast and multimedia production. Students will develop conceptual, analytical and creative writing skills necessary to produce a program “from page to stage.” They will have a solid grasp of the innate narrative differences between contemporary television and multimedia formats, including fiction, nonfiction and reality television.

BRO 310

Media Facilities Operations

(Prerequisites: Broadcast Media Preparation Courses or Equivalents)

This course examines the structure of a professional media facility involved in the broadcast environment. Students survey the operational requirements and processes of the production, operations, and business departments. Topics include financing, programming, marketing and promotion.

BRO 320

Producing I

(Prerequisite: BRO 305)

This course provides an in-depth, practical overview of the “development phase” of a television project, including conceptualization, description, component analysis and budgeting. Students receive hands-on experience in managing the development phase of any new television program. Topics include synopsis, scene breakdown, crew assessment and budget.

BRO 325

Producing II

(Prerequisite: BRO 320)

This course provides an in-depth, practical overview of the “pre-production” and “production” phases of a television project. The course covers all principal tasks, goals and pitfalls of this production phase, including creative, technical and financial pressures at all key milestones in the project. Students receive hands-on experience in managing a television project once it has been formally “greenlighted” and entered into preproduction. Topics include casting, location scouting, production board development, wardrobe and property, principal photography, post-production, and program release.

BRO 330

Field Production I

(Prerequisite: BRO 305)

This course provides an introduction to single-camera field production for television and the roles and responsibilities of the field production team. Students learn the skills necessary for producing a taped remote video production such as news reports, interviews and informative presentations.

BRO 340

Studio Production I

(Prerequisite: BRO 305)

This course provides an introduction to television studio production and the roles and responsibilities of the production team staff. Topics include production design, lighting, studio camera operations, audio recording, and directing.

BRO 410

Broadcast Media Law and Ethics

(Prerequisites: All Broadcast Media Core Courses)

This course provides an overview of the provisions of media law and ethical considerations governing the production of a television project. The course covers all principal legal milestones of a project, from initial title search to copyright filing and broadcast release. Students examine legal and ethical issues that effect choice of content in electronic media to gain a functional understanding of the legal rules and principles relevant to broadcast professionals in the United States. Issues include the First Amendment, copyright, intellectual property, contractor relationships, licensing and the legal rights of talent and the ethical responsibilities of media producers.

BRO 415

Media Programming

(Prerequisites: All Broadcast Media Core Courses)

This course provides a study of how broadcast media content is selected, managed, evaluated, scheduled and promoted to audiences and advertisers. Topics include broadcast television and the newer media of cable, satellite, and online video.

BRO 420

Electronic Media Management

(Prerequisites: All Broadcast Media Core Courses)

This course provides an in-depth study of topics in electronic media management, including new technology, business practices and the evolution of content delivery systems. The course covers analytical techniques necessary to weigh business strategies and technology choices in bringing a variety of types of electronic media content to market.

BRO 430

Field Production II

(Prerequisites: All Broadcast Media Core Courses)

Field Production II covers the advanced theory and practice of multi-camera field production. The course focuses on the planning, video taping and editing of interview, news, information and performance formats. Students learn the skills necessary for producing remote multi-camera video segments to be included in longer programs.

BRO 440

Studio Production II

(Prerequisites: All Broadcast Media Core Courses)

Studio Production II is the capstone course for the Broadcast Media program. Students from the management and production concentrations work together in a multi-camera studio setting to produce a broadcast program for distribution over a variety of media outlets. Students collaborate in teams on the project from development to broadcast.

BTE – Bilingual Teacher Education

BTE 612

History and Culture of Latinos in the U.S.

An examination of historical, cultural and social characteristics of major Latino groups in the U.S. Reviews the following issues: contributions Latinos have made to American society, the cultural conflict experienced by these groups, the implications of such conflict on American society and the effects of changing demographic, migration and immigration patterns. Analyzes the legal, political and social movements that influenced the social/educational status of Latinos in the U.S. Taught in language of emphasis.

BTE 621B

Reading and Language Arts Methods for Elementary Schools

(Prerequisites: TED 615, TED 621A)

This course provides Multiple Subject Candidates with research-based methods and strategies for designing and implementing a balanced and comprehensive program of systematic instruction in reading, writing and related language arts aligned with the state adopted English Language Arts Academic Content Standards for Students and the

Reading/Language Arts Framework. Course content is organized into four Reading Instruction Competence Assessment (RICA) domains. Taught in language of emphasis.

BTE 622A

Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts

(Prerequisites: TED 615, TED 621A)

BTE 622A focuses on 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. Taught in language of emphasis.

BTE 622B

Curriculum and Instruction II: Mathematics and Science

(Prerequisites: TED 615, TED 621A)

BTE 622B focuses on 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. Taught in language of emphasis.

BTE 624

Content Area Literacy for Secondary and Middle Schools

(Prerequisites: TED 615, 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. Taught in language of emphasis.

BTE 625A

Curriculum Development for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623)

This course integrates the California K-12 academic content standards with effective curriculum development principles for diverse learners. Through guided field activities, teacher candidates will access student background information for the purpose of designing and reflecting upon long and short term planning that enables engaged student learning and provides access to the curriculum for all learners. Taught in language of emphasis.

BTE 625B

Instruction and Classroom Management for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623 and BTE 625A)

This course builds on the curricular principles established in TED 625A by incorporating within a well-designed lesson plan, instructional strategies and related classroom management principles. The class also provides strategies for dealing with unproductive student behavior. Taught in language of emphasis.

BTE 630A

Beginning Student Teaching

(Note: Does not grant graduate level credit)

TED 630A comprises the first month of the full-day, full-time, semester-long Student Teaching experience, in which candidates are placed with certified field supervisors. Candidates must successfully complete four components in their supervised Beginning Student Teaching: (1) school-site and classroom orientation including school personnel interviews, (2) onsite classroom observations,

Course Descriptions

(3) lesson plan design and presentation, each component within the context of fulfilling (4) professional responsibilities. Candidates also attend TED 629 Student Teaching Seminar, which integrates theory and practical approaches to real-life situations experienced by candidates during TED 630A. Note: The grade assigned for the course will be either satisfactory or unsatisfactory.

BTE 630B, BTE 630C, BTE 630D **Student Teaching**

(Prerequisite: BTE 630A)

(Note: Does not grant graduate level credit)

Student Teaching BTE 630 B, C, D comprises the second, third and fourth months of the full-day, full-time semester-long Student Teaching experience. Candidates are placed with certified teacher supervisors and are required to successfully complete four components: (1) Classroom responsibilities, (2) lesson plan design and presentation, (3) off-site classroom observations, each component within the context of fulfilling (4) professional responsibilities.

Multiple-subject candidates spend eight weeks in both a K-2 and a 3-6 classroom (non-traditional programs may vary). One of the two assignments is with a certified Field Supervisor. Single-subject candidates experience teaching a minimum of four academic periods a day in two grade levels; a minimum of three of four periods must be in their designated academic area. Candidates complete BTE 629 Student Teaching Seminar (as begun in BTE 630A), which integrates theory and practical approaches to real-life situations experienced by candidates during BTE 630 B,C,D. Note: The grade assigned for the course will be either satisfactory or unsatisfactory.

BTE 660

The Bilingual Child

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis)

An introduction to research, theory and practices related to the learning and development of the bilingual, bi-cognitive child. Examines theories on culture, cognition, bilingualism, biculturalization and psychological dynamics of a positive self-esteem and academic development. Gives candidates the skills necessary to understand and assess the cognitive and linguistic developmental stages of bilingual, bicultural children. Raises consciousness and sensitivity to the effects of culture conflict on the academic achievement of bilingual children.

BTE 661

Sociolinguistics

(Prerequisites: BTE 662 and passing competency test with 3.5 or above in the language of emphasis)

An examination of the development of language within the socio-cultural context. Covers the significant role of language in culture transmission and social/political control and the role of code-mixing and code-switching as a communication system in a multilingual, multicultural society and linguistic registers. Examines the social factors of language and its importance in social interaction. Also provides the necessary skills to teach in a cross-cultural and linguistically diverse classroom. Assists students in analyzing language proficiency and understanding the variations found in languages.

BTE 662

Comparative Linguistics

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis)

An examination of the structure, phonology and morphology of the language of emphasis and English. Compares and contrasts the structure of the two languages and addresses the linguistic problems in the transfer of errors from L1 to L2. Includes strategies for teaching English as a second language. Prepares candidates to understand both first and second language acquisition. Also provides candidates with the skills necessary to understand the structure and form of the two lan-

guages and to predict the transfer of linguistic problems in the transition period of language acquisition.

BTE 664

Advanced Theory and Research in Bilingual Education

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis)

A seminar in research and studies that have been conducted on bilingual students. Assesses and evaluates models of bilingual programs. Also provides an opportunity to compare and contrast research conducted on bilingual education. Students critique the strengths and weaknesses of research studies.

BTE 665

Advanced Grammar and Composition

(Prerequisite: Passing competency test with a score of 3.5 or above in the language of emphasis)

Teaches advanced skills in composition and grammar, including writing skills, through the use of the computer lab. Provides the opportunity to use word processing programs in English and in the language of emphasis to compose and edit work. Students acquire the necessary skills to write their term papers or thesis in the language of emphasis. Taught in the language of emphasis.

BTE 667

Socio-Cultural Issues in Bilingual Education

(Prerequisite: Passing competency test with 3.5 or above in the language of emphasis)

A seminar in issues that affect the socialization and enculturation of children in a multicultural society. Examines factors that affect the learning process, the role of the teacher as a change agent and institutional change in education. Provides the opportunity to critically analyze current political and social issues that affect the bilingual classroom. Helps students develop a personal philosophy of education.

BTE 668

Survey of Children's Bilingual Literature

(Prerequisite: Passing competency test with 3.5 or above in the language of emphasis)

A survey of children's literature in both English and the language of emphasis. Provides effective strategies for fostering reading for enjoyment and understanding as well as critical skills for assessing literature for bicultural, bilingual students. Teaches a variety of ways to encourage students to read. Also gives teachers an opportunity to read and evaluate the books that are age- and grade-appropriate.

BUS – Business

BUS 480

Integrated Business Policy

(Capstone course)

This course 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. Students are graded "H" (for Honor), "S" (for Satisfactory work), and "U" (for Unsatisfactory work). 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.

BUS 500A

Intermediate Algebra

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 500B

Statistics

An introduction to statistics for business graduate students with no previous exposure to the subject. It covers topics that include arranging data, constructing a frequency distribution, measures of central tendency, measures of variability, and probability distribution. No credit is awarded.

BUS 500C

Macro and Microeconomics

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. Students are graded "H" (for Honor), "S" (for Satisfactory work), and "U" (for unsatisfactory work). 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.

CAL – Center for Adult Learner

CAL 600

Introduction to Adult Learning

This course examines the fundamentals of andragogy, a theory of learning and methodological approach which is applicable to adults and their idiosyncratic lifestyles within a societal context ever more culturally and linguistically diverse. Graduate students analyze theory, research, and practice as a basis for improving the learning environments of formal and non-formal adult education programs.

CED – Counselor Education

CED 600

Student Diversity in Development and Learning

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.

Course Descriptions

CED 601

Consultation in the Schools

(Prerequisites: CED 610, CED 611, CED 603 and Advancement to Candidacy.)

This course introduces students to specific techniques including communication and interpersonal skills necessary towards effective consultation at the individual, group and systems levels. Emphasis is on team building and on the provision of indirect services by school counselors and school psychologists including program development, staff development, and written communication skills. Practicum experience is required.

CED 602

Contemporary Issues in School Counseling

Introduces students to topical social issues related to counseling. It is meant to expose students to critical issues, their possible solutions and the most current thinking and research. Practicum experience is required.

CED 603

Multicultural Counseling

(Prerequisites: CED 610, CED611 and Advancement to Candidacy)

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 604

Orientation and Field Experience in School Counseling

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 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.

CED 606

Development and Evaluation of School Counseling Programs and Services

(Prerequisite: CED 604)

This course will focus on the designing, developing, implementing, and evaluating 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 needs of the community they are servicing. Practicum experience is required.

CED 610

Advanced Counseling Theories and Techniques

(Prerequisites: CED 604 or PED 604)

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)

Application of basic knowledge of the roles, func-

tions, and dynamics among group leaders and group participants: covers group process theory and the research pertaining to group process; students analyze the interaction within a group. Practicum experience is required.

CED 612

Career and Academic Counseling

(Prerequisite: CED 601)

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

Psycho-Educational Assessment

(Prerequisite: CED 604)

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. Diversity issues, limitations of standardized testing and alternatives to traditional assessment are explored.

CED 614

Legal and Ethical Practices for School Counselors

(Prerequisite: CED 604)

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 Internship I

CED 617

School Counseling Internship II

CED 617

School Counseling Internship II

Students are placed in a school setting and expected to perform a variety of counseling related activities for a minimum of 600 hours. (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.

CED 620

Best Practices Seminars in School Counseling

(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.

CED 637

School Counseling Action Research

(Prerequisite: ILD 680)

This course is designed to provide the knowledge and skills required to understand, interpret, generate and evaluate research relevant to school counseling. The work of the school counselor will be emphasized throughout the course as students produce a major professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. Maximum length of time is 12 months. (Note. Grading is by H (honors), S (satisfactory), or U (unsatisfactory).

CED 694

Thesis

(Prerequisite: ILD 680)

Provides supervised experience culminating in the completion of a thesis project that was designed in ILD 680. Maximum length of time in 12 months. (Note. Grading is H (honors), S (satisfactory), or U (unsatisfactory). Class size is 5.

CEN – Construction Engineering

CEN 320

Surveying, Metrics and GIS

(Prerequisite: EGR 319)

Land and topographic surveying with global positioning 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 301 and EGR 304)

Introduction to analysis of wood, steel and concrete structures. Basic structural loads, forces and moments 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 410

Construction Materials and Methods

(Prerequisite: EGR 304)

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

(Prerequisite: EGR 319)

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

Mechanical and Electrical Systems

(Prerequisite: EGR 313)

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

Estimating, Scheduling and Control

(Prerequisites: CEN 410 and CEN 413)

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

Estimating, Scheduling and Control II

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.

Course Descriptions

CEN 421

Construction Accounting, Finance and Law

This course applies the principles of business accounting 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. Concepts for cash flow for construction and the time value of money are covered. Legal aspects specific to construction industry contracts are introduced.

CEN 422

Field Inspection and Safety

(Prerequisite: CEN 419)

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 & Construction Process Integration

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.

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

Additions: Contexts and Treatment

A comprehensive study of the theories, etiology, assessment, diagnosis and treatment of additions. Also covers medical and legal aspects, education and prevention strategies; and HIV/AIDS issues for chemically dependent clients and their families.

CIS – Information Systems

CIS 302

Data Mining

(Prerequisite: CIS 446)

An introduction to the concepts of data mining as it applies to the data warehouse system environment. Data mining models, methodologies, techniques and common operational issues will be covered.

CIS 404

Remote Access and Wireless Networking

(Prerequisites: CIS 443 and CIS 444)

The course provides an introduction to the funda-

mental concepts of remote access and wireless networking. The focus is on standard and proprietary wireless solutions including: 802.11, HiPER LAN and major proprietary technologies including Medium Access Control (MAC) Layer, Frequency Hopping Spread Spectrum (FHSS) Physical Layer, Direct Sequence Spread Spectrum (DSSS) Physical Layer, Infrared (IR) Physical Layer and Roaming Standards.

CIS 406

Multimedia Applications on the Internet

Presents different multimedia technologies and provides the students with basic skills to integrate various multimedia technologies into a website environment, as well as an introduction to HTML.

CIS 407

Web Development – Static

Survey and review of different programming tools used for static website development. Explore the practical aspects and process used for building static websites. Practical application by building a static website.

CIS 408

Web Development – Dynamic

Survey and review of different programming tools used for dynamic, server-side website development. Explore the practical aspects and process used for building dynamic websites. Practical application by building a dynamic website.

CIS 409

Internet/Intranet Application Development for E-Commerce

(Prerequisites: CIS 407, CIS 408)

Provides students with the basic skills and understanding to build Internet and intranet Web-based applications for the electronic commerce environment.

CIS 414

Data Warehousing

(Prerequisite: CIS 446)

An in-depth exploration of data warehousing using an automated tool, as well as technical instructions on how to select the appropriate hardware architecture, design the warehouse for optimum performance, techniques for distributing and mining data and building and running the database.

CIS 415

SQL for Database Developers

(Prerequisite: CIS 414)

Offers students an extensive introduction to data server technology. The class covers the concepts of relational databases and the powerful SQL programming language. Students are taught to create and maintain database objects and to store, retrieve and manipulate data. In addition, students learn to create blocks of application code that can be shared by multiple forms, reports and data management applications.

CIS 416

Database Administration

(Prerequisites: CIS 302, CIS 446, CIS 414)

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 418

Database Network Administration

(Prerequisites: CIS 302, CIS 446, CIS 414)

Introduces students to the trends and problems associated with business networking and presents the various solutions required to tackle these problems. The class prepares participants to implement the solutions in a classroom environment, explains in detail the architecture of Net8 and describes the

steps in which connections are established between peers. Students then implement a basic connection between a client and server node using various naming methods. As an integral part of this class, students configure and simulate middle-tier systems such as a names server and connection manager.

CIS 420A

Information Systems and Technology Project I

(Prerequisite: 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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work, or "U" (for Unsatisfactory, "D" or below).

CIS 420B

Information Systems and Technology Project II

(Prerequisite: CIS 420A) Two-month course, meets once a week.

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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work, or "U" (for Unsatisfactory, "D" or below).

CIS 425

Programming for Information Technology Environment

An introduction to programming concepts in an integrated computing environment. Examines contemporary programming design techniques including event-oriented approaches. Students develop applications using Microsoft Visual Basic in a graphical user interface (GUI) environment.

CIS 443

Local Area Network Technologies

An introduction to emerging local area network (LAN) technologies. Includes topics such as integration of hardware and software elements, network architecture and protocols

CIS 444

Wide Area Networking Concepts and Services

(Prerequisite: CIS 443)

Review of the latest telecommunications technology developments, such as ATM, Gigabit, and Ethernet and Fiber Optic connections. Builds on LAN basics from IS 443, 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. Also covers integrated high-performance router and switch technologies from Cisco, Bay and 3Com.

CIS 446

Data Modeling in Information Technology Environments

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.

CIS 601

Information Systems Strategies, Policies and Ethics

An in-depth analysis of strategies, policies and ethical issues facing the Information Systems manager in today's business organization. This course also explores the merger of information Systems with legal, ethical, cultural, human resources, business philosophies and organizational structures. Through lectures, readings, case analysis and projects the student will learn the strategic role IS professionals play in the modern work-place environ-

Course Descriptions

ment. Through analysis, and projects the student will learn the strategic role telecommunications plays in the modern work place, networked environment.

CIS 602 **Network Services and Protocols**

(Prerequisite: CIS 601)

An in-depth study, from a managerial perspective, of the principles and applications of telecommunications in organizations. 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. Through lectures, readings, case analysis and projects the student will learn the strategic role telecommunications plays in the modern work place, networked environment.

CIS 603 **Database Management for Decision Support Systems**

(Prerequisite: CIS 601, CSC436, CIS 302)

An overview course in the development, deployment and management of decision support systems and its components. Topics covered will include relational database management systems, the planning, design, implementation, documentation and maintenance of DSSs following standard methodologies. Through lectures, readings, case analysis and projects the student will learn the strategic role decision support systems play as a pivotal tool in the modern work place for executive decision-making and strategic planning.

CIS 604 **Organizational Management and Information Systems**

(Prerequisite: CIS 601)

An in-depth study of organizational management, network infrastructures and information security in the modern organization. Topics covered will include information risk analysis, threats, vulnerabilities and protection methods in the business enterprise. Through lectures, readings, case analysis and projects the student will learn how to 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**

(Prerequisite: CIS 601)

An in-depth study of the end-user approach to systems analysis, addressing the links between information systems technology, people and organizational goals. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis and implementation, with a practical focus on shaping information systems to enhance employee performance and carry out "real-world" business strategies. There is a strong emphasis on workgroup (collaborative) technologies, knowledge management and change leadership.

CIS 607 **Systems Integration and Client/Server Computing**

(Prerequisite: CIS 601)

An in-depth study of information systems technology through systems integration and distributed computing, to maximize efficiencies to meet organizational goals. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis and implementation, with a practical focus on client server computing and the integration of legacy systems with newer applications to meet changing business needs.

CIS 608 **Knowledge Management – Knowledge Based Systems**

(Prerequisites: CIS 601, CIS 302, CIS 446)

An in-depth study of decision support systems, inclusive of knowledge based systems, expert systems and artificial intelligence and its practical

application in the organization. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis and implementation, with a practical focus on shaping information systems to enhance executive decision making to meet the changing internal and external environment facing business's today. There is a strong emphasis on data mining, knowledge management and management decision tools and skills.

CIS 609 **Automated Knowledge Management Systems**

(Prerequisites: CIS 607 and CIS 608)

An in-depth study of knowledge management through project implementation. The course provides a comprehensive hands-on application of business systems analysis, database integration and creation of decision support systems. There is a strong emphasis on individual and team project development using the acquired knowledge and skills from previous courses. This class represents a cumulative effort of acquired learning.

CIS 620A **Master's Research Project I**

(Prerequisite: Completion of all program core requirements with a GPA of 3.0 or better)

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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

CIS 620B **Master's Research Project II**

(Prerequisite: Completion of 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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" less than C level work).

CJA – Criminal Justice Administration

CJA400 **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.

CJA401 **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 427 **Introduction to Criminal Justice**

This course describes and introduces the basic concepts and components of the criminal justice systems in the United States; provides a general consensus and summary of the CJ system, including the factors of crime, judicial process, police perspectives, corrections, probation and parole.

CJA429 **Policing in America**

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 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 437 **The Juvenile Offender**

An introduction 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 440 **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 441 **Organized and 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 **Current 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 **Criminal Justice 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

Course Descriptions

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 451

Court Systems and 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 452

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 456

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 457

Minorities, Crime and Social 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 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 Criminal Justice

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

(1.5-9 quarter 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. Students are evaluated on a satisfactory/unsatisfactory basis by the faculty and placement supervisor.

CJA 467

International and Domestic Terrorism

CJ 467 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 Criminal Justice Senior Project

(Prerequisite: CJA 449)

Supervised senior project undertaken by students of criminal justice when they have completed all core courses in the program. Coordinated by full-time faculty and chaired by a criminal justice faculty member chosen by the student from previous courses taken within the program. Students select a committee and a viable topic in criminal justice to research and then meet with a committee member once a week for two months. Upon completion, students present their project to the committee, other faculty and peers in an open forum. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below). 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 "K" 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" can be given for this course.

CJA 490

Guided Study

(1.5-9 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

CLD – Cross-cultural, Language and Academic Development (CLAD)

CLD 627

Methodology for Cross-Cultural Instruction

(CLAD Certificate Course only)

(Prerequisites: Possession of a credential approved by the California Commission on Teacher TED 621A or TED 623)

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.

COM – Communications

COM 100

Introduction to Communications

An examination of the cultural, linguistic and institutional factors that shape even the most everyday communications. Through readings and course projects, introduces students to semiology, rhetorical analysis and mass media theory.

COM 200

Effective Communication

An introduction to the principles and practices of spoken communication, with special emphasis on the skills needed to communicate effectively in the workplace. Topics include platform techniques, interpersonal communication strategies, cross-cultural approaches and small group methods.

COM 220

Media Literacy

Media Literacy is the ability to access, analyze, evaluate and communicate information from a variety of media forms. In this course, students investigate message design strategies, the effects of media consumption and information fatigue on human behavior, and how bias and economic forces influence media presentations. Course topics include meaning construction and matching, information authentication, the effects of visual and rhetorical structures on interpretation and the effects of media convergence on message distribution and reception

COM 360

Representation and Diversity in the Media

(Prerequisites: ENG 100/101)

An exploration of the ways in which popular media represents our diverse and dynamic culture. Focuses particularly on images and narratives of race and gender on television, in the movies and in popular culture. 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 380

Democracy in the Information Age +

(Prerequisites: ENG 100/101)

A critical examination of the distribution of information and power in modern democracies. Covers the various theories of democratic participation and media responsibility and how they are measured against contemporary practices around the world. Explores the effect of such developments as television "news," popular access to video and electronic technologies and global electronic network on contemporary political and cultural discourse.

COM 385

Tale, Text and Hypertext

(Prerequisites: ENG 100/101)

An introduction to the range of theories analyzing the evolution of linguistic communication technologies, from oral to written to computer-based. Examines the consequences of these developments for culture, literature, science, politics, pedagogy and identity. Pays particular attention to the uses and effects of networked texts and hypertexts. Includes a project where students prepare hypertexts that can be "published" on the Internet.

COM 422

Technical Writing and Presentation

(Prerequisite: ENG 334A)

An advanced workshop for technical writers, that applies the principles covered in COM 200 and ENG 334A specifically to technical presentations for non-technical audiences. Focuses on writing styles appropriate for user manuals as well as oral presentations and offers training in platform skills, audio-visual techniques and other strategies needed to make technical information understood by business managers, end-users and the public.

COM 490

Independent Study

(1.5-4.5 quarter units)

(Prerequisite: Approval of Instructor and Department Chair)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

CSC – Computer Science

CSC 205

Computer Applications I

An introduction to the use of microcomputers with the emphasis on word processing, spreadsheets, presentation and Internet browser software in the Windows operating system environment. This

Course Descriptions

course offers a foundation for efficient use of microcomputer software in the business and educational environments.

CSC 206B

Discrete Structures and Logic Design

(Prerequisite: MTH 215) (Cross-listed with MTH 325)

A theoretical foundation for computer science, including sets, counting techniques, functions, relations, ordering and equivalences, propositional logic, Boolean algebra and graph theory with application to trees.

CSC 208B

Calculus for Computer Science

(Prerequisite: MTH 215) (Cross-listed with MTH 220)

Differential and integral calculus of one variable with applications. Topics include: origin and structure of the derivative, derivatives from first principles, standard differentiation including chain rule, exponential and log forms, graphing with derivatives, origin and structure of anti-derivative, indefinite integral, standard integration including substitution and parts, rectangle rule and numeric integration.

CSC 242

Introduction to Programming Concepts and Methods

An introduction to modern programming design techniques. Examines problem decomposition, modern programming paradigms and methods. Emphasizes design methodologies, modular programming, software independence, abstract data types and fundamental control structures.

CSC 317

Programming in C++

(Prerequisite: CSC 242 or verifiable programming experience and permission of the instructor)

A developmental course in programming using the C++ language, including syntax and methodologies, program development, debugging functions, arrays structures and pointers.

CSC 330C

Object Oriented Programming in C++

(Prerequisite: CSC 317)

An introduction to the object-oriented programming (OOP) paradigm and advanced techniques of the C++ language. Provides an overview of object-oriented problem solving as well as OOP concepts such as abstract data types and classes, type hierarchies (subclasses), inheritance and polymorphism.

CSC 335

Data Structures and Algorithms

(Prerequisite: CSC 330C)

An overview of data structure concepts, arrays, stack, queues, trees and graphs. Discusses various implementations of these data objects, programming styles and run-time representations. Also examines algorithms, graphics, algorithmic analysis and implementation of advanced data structures primarily utilizing C++.

CSC 341

Introduction to Computer Architecture

(Prerequisite: CSC 206B or permission of the instructor)

A survey of modern digital computing.

CSC 342

Computer Architecture

(Prerequisite: CSC 341)

An examination of advanced hardware design, analysis and programming with emphasis on the structure and function of the computer.

CSC 350

Computer Ethics

An 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. Through lectures, case study, debate and readings, students are helped to develop an ethical outlook on a wide variety of workplace issues in computing.

CSC 400

Operating System Theory and Design

(Prerequisite: CSC 330C)

An introduction to operating system concepts including implementation, processes, deadlocks, communication, multi-processing, multilevel memory management, file systems, protection, resource allocation and scheduling.

CSC 421A

Compiler Design

(Prerequisite: CSC 330C)

An introduction to 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 422C

Principles of Database Design

A survey of principles, structure, analysis and techniques of database design and implementation. Topics include physical and logical design, normalization, database models, security and integrity.

CSC 423

Graphic User Interface Design

(Prerequisite: CSC 317)

A study of the fundamental techniques used in creating and manipulating computer images. Demonstrates the practical use of theories through several computer graphic applications projects.

CSC 425A

Computer Science Laboratory I

(Prerequisite: All the computer science course requirements with a GPA of 2.5)

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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

CSC 425B

Computer Science Laboratory II

(Prerequisite: CSC 425A)

A continuation of the student project. Student teams complete the internal specification and test plan in this course. Grading is by H (for Honors, B or better work), S (for Marginal, C level work) or U (Unsatisfactory, D or below).

CSC 425C

Computer Science Laboratory III

(Prerequisite: CSC 425B) Two-month 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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

CSC 427

Programming in Java

Development of Java applications using control structures, graphical user interface components and multimedia applications.

CSC 430

Programming Languages

(Prerequisites: CSC 330C)

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 440

Advanced Programming in Java

(Prerequisite: CSC 427)

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 450

Artificial Intelligence

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

Artificial Intelligence Programming

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 communications are examined.

CSC 452

Human-Computer Interaction

An introduction to human-computer interaction models. A study of the techniques used in human-computer interface systems. Graphical User Interface systems and natural language processing will be considered.

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 630

Operating Systems

A study of relation between architectures and system software. Topics include process and memory management issues, multiprogramming, timesharing, multiprocessing, inter-process communication, synchronization, distributed systems and real time systems. Resource allocation, computer security and related problems are considered. Scope and limitations of current Operating Systems.

CSC 640

Database Systems

Design and implementation of database and knowledge based systems are studied using various data models, principles, structures, analysis and modern techniques. Topics include physical and logical design, normalization, security, integrity and models such as relational, entity-relationship, object oriented and semi-structured models. Scope and limitations of current database models.

CSC 650

Programming Languages

(Prerequisite: CSC 610 or permission of the instructor)

A study of programming language syntax, semantics and pragmatics. Principles of data types and structures are discussed. Programming language design and implementation issues are emphasized

Course Descriptions

Scope and limitations of programming language theories will be studied.

CSC 655

Compilers and Interpreters

(Prerequisite: CSC 610 or permission of the instructor.)

A study of design and development of programming language translators. Study of lexical analysis, syntax, semantics, code generation and optimization. Scope and limitations of compiler theories will be studied.

CSC 660

Artificial Intelligence

(Prerequisite: CSC 610 or permission of the instructor.)

A study of problem solving using modern artificial intelligence techniques. Examines the role of knowledge in problem solving. Concepts such as agents, search, production systems and natural language communication are studied. Experimental artificial intelligence systems are developed. Scope and limitations of artificial intelligence theories will be studied.

CSC 670

User Interface Engineering

(Prerequisite: CSC 610, SEN 620, CSC 630, CSC 650 or permission of the instructor)

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

(Prerequisite: 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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

CSC 687

Computer Science Project II

(Prerequisite: CSC 686) Two-month 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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

CUR – Curriculum and Instruction

CUR 604

Global Perspectives in Curriculum

A basic foundation in the development and implementation of global programs and activities.

Includes an overview of the purpose, scope and approaches to global education and demonstrates how teachers can use current electronic communication technology to globalize existing curriculum and instructional materials.

CUR 606

Issues and Trends in Curriculum

Examines current curriculum practices from the point of view of an interdependent paradigm of global concerns, local needs and the development of the individual in a complex society. Curriculum is responsive to current issues in education and society, rather than of predetermined content.

DAF – Department of Defense Architectural Framework

DAF 601

Architecture Framework Basics

DoDAF Framework background, history, and planned evolution, government regulations, uses of architecture, framework philosophy, concepts and definitions, review of the DoDAF six step process, products overview and relationships, details of government regulations and reporting requirements, case Studies, comparison with other frameworks and methods, and overview of Universal Reference Resources for the DoD Framework.

DAF 602

Core and Supporting Products

Overview of each of the 40 core and supporting products and their relationships from each of the DOD architecture framework views (operational, systems and technical). Understanding of how to model each of these products and to how to integrate them into a viable DOD Architecture Framework for different DoD functions, organizations, programs and operations. Each of these products represents a different type of model. Students learn how to create each product and use EA DoDAF specified tools.

DAF 603

Enterprise Architecture Planning

Introduces the concepts and theories associated with organizational strategic planning as the basis for enterprise architecture, provides an examination of the Federal Enterprise Architecture Program Management Office reference models, how to define business architecture utilizing business strategy, goals and objectives, the technological environment and external variables including location, organizational culture and strategic business planning. Provides an understanding of how to plan and manage an EA project within an enterprise, including development of a statement of work, scheduling, requirements analysis, risk management, the role of security and information assurance, and the formulation of architectural principles.

DAF 604

Advanced Architecture Modeling and Analysis

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).

DAT – Database

DAT 600

Database Theory, Modeling and Design

This course introduces the history of databases and the development of database theory and modeling. The course explores the hierarchical, network, relational, object oriented and semantic models. Students read and respond to database theories, such as those offered by Dr. E. F. Codd. Students compare modeling methods and tools and design a normalized database.

DAT 610

Database Implementation & Maintenance

Prerequisite: DAT 600

This course explores database best practices for implementing and maintaining efficient databases. Students implement a comprehensive database using one of the standard modeling techniques, building expertise in designing and implementing data-driven business applications using hands-on exercises. Students learn how to maintain databas-

es using database administration and management techniques.

DAT 620

Structured Query Language

Prerequisite: DAT 610

This course teaches the skills for implementing and maintaining databases using Structured Query Language (SQL) commands, including Data Design Language and Data Manipulation Language commands. 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; optimizing database performance by using SQL Profiler and the Index Tuning Wizard; and implementing security.

DAT 630

Database Programming

Prerequisite: DAT 620

This course teaches advanced skills for managing databases using Structured Query Language features. Students learn to write advanced queries using JOIN statements and client-side reports, imbedded SQL such as T-SQL or P-SQL, as well as command line operations. Students learn to use programming techniques within SQL to build databases designed for web-based deployment.

DAT 640

Database Administration & Security

Prerequisite: DAT 630

This course teaches the skills for administering data resources including managing database users and roles, database maintenance plans, Data Transformation Services, security policies and procedures and documentation. Students learn to design policies comparable to the International Standards Organization and Homeland Security information security standards, and learn how to use encryption and decryption to protect data.

DAT 650

Database Disaster Recovery

Prerequisite: DAT 640

This course teaches the skills for protecting corporate data resources. Topics include database security, backup and restoration, replication, disaster planning and recovery, and business continuity. The course also explores organizational liabilities and vulnerabilities resulting from such legislation as Sarbanes Oxley and HIPAA regulations. Students learn to design security comparable to the International Standards Organization and Homeland Security information security standards.

DAT 660

Enterprise Data Management

Prerequisite: DAT 600

This course teaches students the enterprise data model and related best practices used in Enterprise Resource Planning (ERP) endeavors, such as SAP, Peoplesoft, and Oracle. This course enables students to learn how to transform "data silos" that inhibit data sharing into enterprise data that facilitates data sharing and strategic planning. Students will learn the major obstacles to achieving ERP success.

DAT 670

Enterprise Business Intelligence

Prerequisite: DAT 610

This course teaches skills for designing a business intelligence plan to retrieve organizational data for competitive advantage. Particular emphasis will be placed upon developing adequate scope and setting appropriate goals and expectations for BI projects. Topics include Data Warehousing and Mining, Knowledge Management, and Business Intelligence.

DAT 680

Database Web Technologies

Prerequisite: DAT 630

Course Descriptions

The most successful technology companies are ones who successfully deploy web-based database technologies. This course teaches the skills for dynamically displaying data resources in a browser-based environment. Topics include HTML, Internet Information Server (IIS), Microsoft .NET Platform, ASP.NET, ODBC, ADO.NET, and XML. The students learn how to create interoperable native web services.

DAT 690 **Emerging Data Technologies**

Prerequisite: DAT 680

Database technology will continue to evolve in fast-changing technical environment. This course explores the most recent innovations in database science and technology. By exploring emerging trends, the student will obtain skills for recognizing fundamental shifts in technical and market forces, providing a level of organization safeguard in a rapidly changing technical world.

DAT 691 **Database Research Project I**

Prerequisites: Successful completion of nine of the ten core MSDBA courses.

A graduate capstone project for Database Administration majors. Students work on an original and significant project that integrates concepts, principles and tools that are taught throughout the program. Students research and learn how to apply database management in the development of their final senior capstone projects. This is a one-month course.

DAT 692 **Database Research Project II**

Prerequisite: DAT 691

Two-month course, meets once a week.

A graduate capstone project for Database Administration majors. Students work on an original and significant project that integrates concepts, principles and tools that are taught throughout the program. Students research and learn how to apply database management in the development of their final senior capstone projects. This is a two-month course where students meet once a week for eight weeks.

DEN – Design Engineering

DEN 408 **Computer Aided Engineering I: Simulation Modeling and Analysis**

Prerequisite: EGR 319

Introduction to simulation modeling and analysis, model development, intermediate and detailed modeling, modeling issues and techniques.

DEN 411 **Computer Aided Engineering II: ProEngineer Modeling Software**

Prerequisite: EGR 319

Introduction to the powerful computer aided design package ProEngineer 2001 for mechanical design applications, modeling and analysis.

DEN 414 **Computer Aided Engineering III: LabVIEW Graphical Programming**

Prerequisite: EGR 319

Introduction to the LabVIEW essential techniques for designing virtual instrument configurations and controls.

DEN 417 **Computer Aided Engineering IV: Graphics and GUI with MATLAB**

Prerequisite: EGR 319

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: SolidWorks 3D Mechanical Design Tools**

Prerequisite: EGR 319

Introduction to the three-dimensional parametric modeling tools, features and functions supported by the latest version of the SolidWorks software with emphasis on mechanical design solutions, standards and techniques.

DEN 423 **Human Factors in Engineering and Design**

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**

Prerequisite: EGR 301

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**

Prerequisite: EGR 301

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 of Products, Manufacturing Processes and Systems**

Prerequisite: DEN 408

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 and 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 600 **Introduction to Bilingual Education of Learners who are Deaf or Hard of Hearing: Theory and Practice**

This one-month course is an overview of professional, legal, and ethical practices including educational policy and perspectives. Critical examination of historical backgrounds, philosophies and theories and their relationships with assessment, curriculum, instructional, and learning pedagogy to meet individual and collective learners' academic and social equity needs are addressed. Emphasis will be on the meaning of effective communication and collaborative partnerships with and through administrators, professionals, community members, families, and learners from diverse backgrounds. Cultural pluralism and multiteracy development as well as sociological and psychological challenges that may arise will also be discussed.

DHH 601 **Signed and Spoken Language Acquisition and Development I**

This is the first of a two course sequence which investigates the diverse communication needs of congenitally deaf and hard of hearing infants and young children. Consideration is given to children with deaf parents who use signed and/or oral communication and children with hearing parents

who use signed and/or oral communication. The course will include an overview of the research regarding children with cochlear implants, children who use a variety of signed systems, deaf and hearing children who acquire American Sign Language as a first language and English as a second language, and deaf and hard of hearing children who acquire spoken English as a first language. Students will apply a bilingual ASL-English framework to the challenge of providing accessible, comprehensible basic interpersonal communication options for infants and young children who are deaf or hard of hearing.

DHH 602 **Signed and Spoken Language Acquisition and Development II: School Age Children and Youth.**

This is the second course in a two course sequence that examines the acquisition of American Sign Language and English by deaf and hard of hearing individuals. The first course focused on infants and young children. This course will focus on the communication development of older children, youth and late-deafened school age individuals who are deaf or hard of hearing. DHH 601 provides a foundation for this course and must be taken first in the sequence. Students will apply a bilingual ASL-English framework to the challenge of developing comprehensible cognitive academic language proficiency in a visually accessible environment. All aspects of both languages will be considered, so that students are able to identify and develop the communicative strengths and academic potential of all types of deaf and hard of hearing learners.

DHH 603 **Assessment of Learners who are Deaf, Hard of Hearing, or Deaf with Special Needs**

In this two-month course, prospective teachers of learners who are deaf or hard of hearing will acquire skills in qualitative and quantitative assessment. Students will learn to collect data through observational methods, as well as through traditional testing, to determine baseline cognitive and communicative abilities. Students will complete a comprehensive case study, a variety of screening projects which require "hands on" use of observational, formal and curriculum-based measures. Fundamental to the course are issues of cultural and linguistic diversity and the role of families in the assessment process. Students will apply Piagetian theory, along with a Multiple Intelligences framework, to identify cognitive and communicative strengths and needs in infants and school age children who are deaf or hard of hearing.

DHH 604 **Development of Literacy with Learners who are Deaf or Hard of Hearing**

In this two-month course, prospective teachers of learners who are deaf or hard-of-hearing will learn about various strategies for developing literacy, reading and writing. They will examine in depth the Workshop Model and how it is integrated into all classrooms, not just those for Deaf and hard-of-hearing children. Students will become familiar with ways to determine the reading level of students who are Deaf or hard-of-hearing and how to build on the student's skills to improve making meaning of text. Students will link State Standards to the development of lesson plans for all parts of the literacy block. They will practice editing written pieces done by Deaf students and how to then plan learning experiences based on the student work. They will also develop a plan for addressing two languages, English and ASL, as part of the literacy block.

DHH 605 **Teaching Deaf Learners with Additional Special Needs**

This one-month course will equip prospective teachers with the necessary tools to assess and develop instruction plans for children who are

Course Descriptions

deafblind and deaf with other special needs. The course is designed to meet the standards of the California Commission on Teacher Credentialing and the national Council on Education of the Deaf.

DHH 606

Curriculum and Instruction in Programs for Deaf and Hard of Hearing Learners

This seminar is devoted to an in-depth examination of the theories and practices involved in assessment, thematic curriculum design, and learning pedagogy. It is also devoted to a consideration of the possible uses of narratives, critical dialogue, and writings in educational settings. The methods to be studied involve: critically contextualizing, facilitating the telling and the writing, and developing expertise in interweaving students' prior knowledge with thematic curriculum design and learning pedagogies with and through individual and collective learners' needs. This supports the development of multiliteracy and cultural pluralism approaches to meet diverse learners' intrinsic motivations, strengths, social needs, and content interests. Cultural, cognitive, communication, and community development theories will be the heart of this ongoing critical dialogue among seminar participants. The focal active learning approach to the seminar will be on collaborative discussions, training with emphasis on current research skills, putting theories into practice, and constant learning through experimentation and constructive feedback.

DHH 607

Bilingual – Multicultural Education of Deaf and Hard of Hearing Learners

This one-month course will focus on understanding the cultural and linguistic diversity that exists within the deaf community. A broad anthropological definition will be used to interpret culture through a variety of identities, such as ethnicity, gender, and hearing status, to which deaf people relate. Lectures will include information regarding the experiences of deaf persons from non-signing, non-English speaking families. Students will become familiar with the literature on multicultural issues from the perspective of a person who is deaf and will learn to design curriculum that considers the diverse cultures represented by the students whom they will teach. Field experiences and guest lectures will help students discover parallels between bilingual ASL-English deaf culture and the culture of deaf persons from trilingual-multicultural backgrounds.

DHH 608A

Student Teaching I

This is the first month of a two full day full time supervised student teaching experience which will provide full day, full-time supervised student teaching with learners who are deaf, hard of hearing or deaf with special needs. Students will participate in public day or residential classes for learners who are DHH for a minimum of 150 supervised contact hours for the first portion of student teaching as required for the Education Specialist credential. Candidates work with credentialed master teachers providing special education services in programs for deaf and hard of hearing students,

DHH 608B

Student Teaching II

This is the second month of a two full day full time supervised student teaching experience which will provide full day, full-time supervised student teaching with learners who are deaf, hard of hearing or deaf with special needs. Students will participate in public day or residential classes for learners who are DHH for a minimum of 150 supervised contact hours to total 300 supervised contact hours with completion of part I and II of student teaching as required for the Education Specialist credential. Candidates work with credentialed master teachers providing special education services in programs for deaf and hard of hearing students,

DHH 609

Student Teaching Seminar

This course integrates theory and current research findings to situations encountered in the student teaching experience. Mentor teachers, student teachers and various members of the professional community will share successful teaching strategies and discuss solutions to challenges that occur in the classroom. Interns will receive guidance in the preparation of Professional Portfolios.

DSM – Domestic Security Management

DSM 401

Survey of 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.

DSM 410

Current Issues in Domestic Security

A study of the current domestic security issues facing the country today. Topics include: weapons of mass destruction (chemical, biological, and nuclear) and other terrorism activities, immigration, and other issues that affect the domestic security of the nation. Discussions also include current trends and best practices that have been developed to address these issues.

DSM 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.

DSM 430

Land Borders, Seaports and Airport 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.

DSM 440

Crisis Response Planning and 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.

DSM 444

Disaster Management

A survey course that discusses the management areas of policy, planning, coordination, response, response management, and recovery during emergencies and/or disasters. This course focuses on defining and analyzing the role of managers in critical situations. Identifies critical incidents as any natural or man-made event, civil disturbance, or other occurrence of an unusual or severe nature that threatens to cause or causes the loss of life or injury to citizens and/or severe damage to property. Identifies the extraordinary measures to protect lives, meet human needs, and achieve recovery.

DSM 470

Legal Issues of Security Management

A study of criminal and civil liability issues con-

cerning government and private entities while preventing acts of terrorism, or during the recovery process after a critical incident. Exposes students to new congressional 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.

DSM 475

Techniques of 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.

DSM 490

Supervised Senior Project

(Prerequisite: Students must have fulfilled all General Education, Core Courses, and Elective Courses requirements prior to beginning this course.)

Supervised senior project undertaken by students once they have completed all core courses in the program. Coordinated by the assigned instructor and chaired by a domestic security management faculty member chosen by the students from previous courses taken within the program. Students select a committee and a viable topic or problem statement related to domestic security to research or solve and then meet with the instructor in a classroom environment once a week for two months. Upon completion, students present the project to the committee, other faculty, and peers in an open forum.

ECE – Early Childhood Education

ECE 210

Child, Family, School, and Community

(Prerequisites: PSY 100 and 301)

The focus is on the interrelationship between home, society and culture and their influence on the typically and atypically developing child. Designed to develop an understanding of: the socialization process; the influence of family, school, media, and community; and the impact of poverty, violence, child abuse, and substance abuse on the young child's development and learning. The importance of nourishing home and family relationships and of involving the family and the community in the education of young children will be explored.

ECE 312

Infant and Toddler Care

Focus is on the study of infants and toddlers, ages 0 to 3, with emphasis on the principles of social, emotional, cognitive, language, and physical development. The importance of close, caring relationships in a cultural context of the child and family in settings of group care will be stressed along with identification of special needs, individual needs and parent partnerships. Theories and current issues of health, safety and nutrition will be reviewed along with an analysis of licensing regulations and CDA Competency Standards for Infant and Toddler Child Development Specialists

ECE 314

Creative Experiences with Infants and Toddlers

Focus is on identifying age appropriate creative experiences for infants and toddlers in a group setting. The study of language development as it influences all areas of learning and development

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will be discussed. Establishing a positive learning environment, positive relationships with parents, history and trends in infant and toddler care, and program management will be emphasized. Licensing regulations analyzed. The CDA Competency Standards for Infant and Toddler Child Development Specialists will be explored.

ECE 330 **Early Cognition**

(Prerequisite: PSY 301)

Explores the nature and tasks of early cognition including: the social, cultural, and biological foundations of early cognitive development (from prenatal through age five). Particular attention will be paid to recent brain research regarding individual differences, cultural representations, Piaget's stage theory, and Vygotsky's socio-cultural theory.

ECE 410 **Language Acquisition**

(Prerequisite: ECE 330)

An examination of the process of early language acquisition and development within the first four years of life. Study will focus on diverse contexts including: the influence of individual, cultural, linguistic, ethnic, social and cognitive differences, as well as abilities and disabilities.

ECE 415 **Meaningful Curriculum: Creative and Integrative Arts**

(Prerequisite: ECE 330)

Focuses on the role and value of the arts in classrooms for young children. Stresses the importance of high-quality, developmentally appropriate experiences in music, artistic media, movement and dramatic play.

ECE 420 **Nature and Numbers**

(Prerequisite: ECE 330)

Exploration and inquiry related to the young child's emerging notions of mathematical and scientific processes. Focus will be on experiential learning dealing with symbols, shapes and patterns. Encourages the development of questioning skills and finding answers.

ECE 430 **Play: Early Social-Emotional Development**

Designed to develop an understanding of the major theories of young children's social, emotional and moral/ethical development and how to plan play so as to facilitate young children's social, emotional and moral development.

ECE 440 **Observation and Assessment of Young Children**

(Prerequisites: PSY 301 and ECE 310)

Observe, record, and assess young children's development and learning for the purpose of planning appropriate programs, environment, interactions and adapting for individual differences including special needs within a multicultural setting. Use of formal and informal assessment instruments and strategies to diagnose and assess young children's learning and development, using the assessment information to plan developmentally appropriate experiences for young children and develop IEPs.

ECE 450 **Seminar/Practicum in Early Childhood Development**

(Prerequisites: Student must have successfully completed all core courses with an average grade of "C" (2.0) or better and have approval from his/her faculty mentor.) A one-month course in which students participate in a collaborative experience at both a designated community site and in a University seminar. The seminar will meet twice a week for two-hour sessions for a period of four weeks while the collaborative experience will occur at the designated site for eight hours per week for a period of four weeks. Approved sites

will be in a Head Start or a preschool setting. Specific activities will include, but are not limited to, onsite observations, behavioral assessments, lesson plan designs and implementation, parent conferences, and other professional responsibilities.

ECE 460 **Administering Early Childhood Programs**

Management and administration of Early Childhood Programs includes providing a quality program; working with parents, staff, volunteers, and the board; hiring, supervising and evaluating staff; designing staff development; planning for staffing, materials, equipment; developing a budget; and conducting and interpreting evaluations of the Early Childhood program.

ECE 462 **Volunteer and Financial Resource Management**

(Prerequisite: ECE 460)

Focuses on effective strategies for recruiting, utilizing and retaining volunteers.

ECE 464 **Legal and Ethical Issues in Early Childhood**

(Prerequisite: HED 220)

Focuses on the legal and ethical practices in early childhood care. Local, state, and federal laws and regulations, National Health and Safety Standards, professional ethics and the National Association for the Education of Young Children's (NAEYC) Code of Ethics will be explored.

ECE 466 **Planning the Physical Environment for the Young Child**

Examines the planning, design, and organization of the physical environment in early childhood classroom. Field experiences and hands-on activities will familiarize the student with the physical environment of the young child. The student will learn how to design a well-protected environment for the safety and welfare of the children. This course will integrate four philosophical/theoretical frameworks and their impact on early childhood environments. The student will directly observe children at play and document their interactions in their physical environment.

ECO – Economics

ECO 203 **Principles of Microeconomics**

In this course, students will study the price system, market structures, and consumer theory. Topics covered 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 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 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 & Philosophy**

Students will learn about the relationship between philosophy and economics. They will study the philosophic 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 & Banking**

(Prerequisites: ECO 203 and ECO 204)

Students will study the U.S. monetary & 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**

This is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

ECO 607 **Economics for Managerial Decision-Making**

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**

(Prerequisite: 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

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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 and Procedure** (Prerequisite: 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 Managers**

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 607 **Induction Seminar**

This is the initial course in the professional administrative services credential program. Students meet in a group setting and individually with the instructor. The group setting consists of four seminars of 4.5 hours per seminar. Individualized meetings will be with the candidate's mentor at the candidate's site. The major focus of the course is the development of the candidate's individualized professional development plan which will guide the choice of activities and content for the remainder of the program. Candidates design and begin a field based project which is to be based on the total curriculum of the program. Candidates are also introduced to the mentoring process and choose mentors for the program. In addition, the course reviews the key competencies of the preliminary administrative services credential; provides an overview of the issues facing administrators in today's schools; and integrates advanced knowledge regarding business, the superintendency, facilities, and technology into contemporary school administration.

EDA 608 **Professional Development Seminar**

This is the professional development course in the professional administrative services credential program. Students meet in a group setting once a month for 4.5 hours per seminar over a two-month period and individually with the instructor. Students report on their progress in implementing the professional development of public policy; organizational and cultural environment; and management of information systems, and human and fiscal resources. A discussion of related ethical issues is included in each seminar.

EDA 609 **Assessment Seminar**

This is the capstone course for the professional administrative services credential program. It is a summative experience which will be conducted in group and individualized settings. The project designed in the induction seminar will be

reviewed. Activities developed during the Professional Development Seminar will be summarized and presented. Projects developed throughout the program will be presented and the course work will be integrated into the context of contemporary problem solving administrative work. There will be an emphasis on applying the knowledge and experience gained in the program to the future challenges facing education.

EDA 614 **Educational Leadership in Schools Today**

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 **Historical and Philosophical Foundations of Leadership**

This course represents the foundational course for the Master of Science in Educational Administration and is designed as preparation for other courses in the program. The writings of Plato, Aristotle, and Machiavelli to teachings in the United States of educational philosophers such as John Dewey and leadership scholars such as James MacGregor Burns, Peter Senge, and Thomas Sergiovanni will be studied to understand the continuum and progression of the history of thought on leadership studies as they relate to educational administration

EDA 618 **Legal and Ethical Foundations in Education**

Introduction to public school finance policies and practices with an emphasis on site level finances. Exploration of federal, state, and local revenue sources, district and school budgeting, and financial management procedures. Introduction to public school budget, accounting procedures, and governing laws. Direction by practicing school administrators when investigating issues in public school finances

EDA 619 **Financial Leadership and Management**

Introduction to public school finance policies and practices with an emphasis on site level finance. Exploration of federal, state, and local revenue sources, district and school budgeting, and financial management procedures. Introduction to public school budget, accounting procedures, and governing laws. Direction by practicing school administrators when investigating issues in public school finances.

EDA 620 **Field Experience in Educational Administration**

Supervised application of theoretical concepts in practical settings. Emphasis on day-to-day administrative functions, policy analysis and implementation. Demonstrated competency in areas of school administration required by the Commission on Teacher Credentialing for awarding the California Preliminary Administrative Services Credential.

EDA 620I **Intern Field Experience in Educational Administration**

Internship for Administrative Services Credential program. Practicum/ field work day-to-day administrative functions, policy analysis and implementation, collaboratively supervised by National University and the candidate's school district of employment. Demonstrated competency in areas of school administration required by the Commission on Teacher Credentialing for awarding the preliminary administrative services credential.

EDA 624 **Supervision and Evaluation of Instruction**

Theoretical and practical framework for supervising

and evaluating instruction. A variety of theoretical perspectives and skills for engaging in the practice of supervision of instruction, curriculum assessment, program quality, and standards-based instruction. Emphasis on instructional leadership in maintaining and increasing teaching effectiveness provided through relevant professional development opportunities.

EDA 625 **Technology and Data Analysis for Effective Instruction**

Administrative perspective on using instructional technology. Methods of using technology to improve administrative functions, including generating instructional data, analyses, using data to improve instruction, and legal and ethical issues surrounding educational technology.

EDA 626 **Human Resources in Diverse School Communities**

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 **Seminar in Educational Leadership and Management**

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 experiences.

EDA 650 **Ethics and Leadership in the Educational Setting**

This course introduces the connection between leadership and ethics. Students will study traditional ethical frameworks as presented by early Greek writers, past and present day theologians, non-believers, and leadership to consider the long-range implications in their leadership activities, especially in the educational setting.

EDT – Educational and Instructional Technology

EDT 601 **Instructional Design**

An overview of the instructional design process. Topics include learning theories, needs assessment, analysis of subject matter content, development of goals and objectives, classification and sequencing of objectives, design of instructional strategies, selection and integration of media-based delivery systems, design of print and multimedia instruction and formative evaluation strategies.

EDT 603 **Advanced Instructional Design**

A graduate seminar/practicum focusing on four aspects of the instructional design process: (1) establishing and maintaining effective relationships with clients and subject-matter experts; (2) analyzing an education/training problem and developing potential instructional solutions; (3) developing effective strategies and materials to implement an instructional solution; and (4) examining theories and practical issues involving instruction, information, cognition and technologies as they relate to the instructional design process. (Prerequisite: EDT 601)

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EDT 605

Technology and Educational Theories and Practices

This course provides a comprehensive view of curricular issues facing the K-12 teacher as the role of technology stimulates change in teaching methodology within the classroom. Topics focus on the using technology to support constructivist learning, building technology-supported learning communities on the Internet, student-directed research projects, collaborative communication both among students and between students and their mentors, and constructing personal hypermedia tools and resources.

EDT 607

Multimedia in Instruction

A comprehensive exploration of current techniques for designing multimedia instructional packages. Topics include pattern languages, object-oriented programming, user-task analysis, visualization, 3D modeling, interaction design, multimedia project management and style guides. (Prerequisite: EDT 603)

EDT 608

Computer-Based Technology in the Classroom

A comprehensive overview of the use of computer-based technology in the educational environment and integration of computer-based applications into instruction in the classroom. Includes study and hands-on experience of such topics as the computer as a tool, tutor and tutee. Addresses the impact of the different computer modalities used in education, terminology, classroom technology management, introduction to the Internet and integration issues of educational technology. Also includes hands-on practice of productivity tools for word processing, spreadsheet and database management.

EDT 609

Distance Learning

An exploration of the central issues involved in distance education from print-based correspondence courses to more contemporary, digital approaches. Focuses primarily on the use of Internet e-mail, the World Wide Web, electronic bulletin boards and conferencing systems and video teleconferencing to provide educational opportunities that are time- and place-independent. Using a systems perspective, this course provides foundational knowledge of the historical context, theory, and processes involved in designing, developing, and delivering distance learning. The course will introduce participants to key concepts and principles that drive the design of effective distance learning, including types and levels of interaction, synchronicity or asynchronicity of interaction, and locus of control over content and pace of instruction. Students are introduced to the larger system in which distance courses are embedded and explore issues and concerns related to initiating distance learning programs and supporting distance learning implementation within an organization. Success of a distance learning system depends on appropriate matching of technologies and media to business and instructional needs. Students therefore develop relevant knowledge and skills in this area, experiencing, reading about, and discussing various media and technologies that can support distance learning delivery. (Prerequisite: EDT 607)

EDT 610

Teaching in the Online and Hybrid Environment

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 Issues in Instructional Technology

A topical seminar exploring the most current issues in instructional technology design. Topics might include new developments in CD- or Web-based authoring tools, privacy and/or copyright issues, international standards or emerging training/educational approaches based on enhanced information technologies (e.g., voice or visual pattern recognition, intelligent agents, improved compression algorithms). (Prerequisite: EDT 609)

EDT 612

Creating Meaningful Learning With Technology

This course focuses on ways to integrate technology as a tool for communication, inquiry, and construction for meaningful learning in K-16 and corporate classrooms. Students apply traditional learning theories to new technology-based methods and techniques, including lesson-based Web projects, chat sessions, and virtual learning communities. Students attain a working knowledge of how to evaluate and operate selected software, design web pages and WebQuests, download files, use listservs, manage school servers, and utilize firewalls. Students wrestle with contemporary issues involving the protection of children on the Internet, copyright law, netiquette, censorship, and the future of the Internet. (Prerequisite: EDT 605)

EDT 613

Simulations and Virtual Reality

Introduction to the use of simulated environments as a component of education/training programs. Topics include a historical review of simulation, instructional design principles applied to virtual reality as a tool for instruction, current constraints in both stand-alone and networked systems, and future possibilities for simulated learning environments. (Prerequisite: EDT 611)

EDT 614

The Effect of the Internet on the Meaning of Schooling

In this course students explore the paradigm shift in the definition of education as the Internet makes information, teachers and other students available across time and space. Learning theories are defined and the ways that the Internet supports and challenges these theories are explored. The course explores the changing role of the teacher as well as of the educational institution, in both K-12 and higher education. E-schools, virtual schools, online instruction, web-supported class room instruction, and other technology-supported models are defined and explored. Challenges to society are explored and current models and a current example of online instruction is researched. (Prerequisite: EDT 612)

EDT 615

Seminar in Performance Technology

An examination of performance technology as a tool for improving organizational effectiveness and applying educational interventions. Reviews literature on performance technology models, approaches to organizational needs analysis, theories and change strategies from the organizational development (OD), human resource development (HRD), human resource management (HRM), environmental engineering (ENG) and electronic performance support systems (EPSS). (Prerequisite: EDT 613)

EDT 616

Motivating Learners Through Gaming and Simulation

Introduces students to the use of video games, simulations and computer games in educational and training environments. The primary focus is to increase students' "games literacy" and demonstrate, through hands-on exploration, how games and simulations can be highly-effective learning tools. Students will play and analyze a variety of

different games, examine games in relation to traditional learning and motivational theories, investigate the various issues surrounding games and look to see what is in store for games in education in the future. Students will also learn how to build games to use in their classroom as well use software that helps their students understand new concepts by creating games themselves. (Prerequisite: EDT 614)

EDT 623

Web-based Instruction

An examination of the most current approaches to using the World Wide Web as a platform for instruction. Review of existing Web-based courses/programs as well as hands-on experience with current design/editing systems including HTML and DHTML—utilizing Dreamweaver. This course provides foundation knowledge of the context, theory, and processes involved in designing, developing, and delivering Web-Based Instruction. The course will introduce participants to 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, globalization issues, technical requirements, and supplemental learning options. To help students develop relevant knowledge and skills in this area, they will analyze current research and thinking on existing and proposed web based instructional theory and implementations. (Prerequisite: EDT 615)

EDT 655

Issue and Trends in Educational Technology

A survey of a wide range of state-of-the-art issues and trends that have an impact on the field of educational technology at local, state, national and international levels. Also addresses the basic principles of professional behavior and ethics with respect to students, peers, administrators and teachers from other disciplines, as well as parents and families.

EDT 660

Multimedia and Interactive Technologies

An overview of the use of multimedia and interactive technologies in the educational environment, this course focuses on the design and production of multimedia products, with an emphasis on the appropriate application of learning theories to the designing process. Students will develop media literacy via exposure to video conferencing, art programs, PowerPoint, Dreamweaver MX, image scanning and editing, as well as video and sound digitization. Students will also gain competence in desktop publishing skills and teacher efficiency tools like Excel for grade sheets and web pages to enhancing parent-teacher communication.

EDT 671

Curriculum Design for Online Learning

A comprehensive course on how to design curriculum that will be implemented in an online teaching environment. Specific online learner methodologies will be discussed. Online course authoring systems for use in K-16 and corporate education will be surveyed. Students also get hands-on experience with web design software, productivity software and data collection tools. Issues in online curriculum design will be explored, such as Internet resource citing, technology trends in learning environments, Internet resources for exceptional children, professional development skills, and popular uses for technology in various subject areas.

EDT 693

Evaluating and Improving Instructional Programs

An exploration of alternative theories and strategies for evaluating the effectiveness of instructional programs. Introduces qualitative and quantitative approaches to student outcome assessment, portfolio evaluation and continuous quality improvement strategies as they apply to the design and

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improvement of instructional systems.
(Prerequisite: EDT 616 or EDT 623)

EDT 695

Educational and Instructional Technology Capstone Project

The final required component of the MS in Educational and Instructional Technology. In this course, students complete an instructional design/multimedia capstone project under the supervision of a faculty member. The scope of the project must be such that students work a minimum of 40 hours. Students meet weekly with a faculty supervisor to make a progress report and discuss issues or problems related to their project. (Prerequisite: EDT 693)

EEA – Enterprise Architecture

EEA 601

Enterprise Architecture Concepts and Theory
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. Analysis of all major enterprise architecture frameworks including Zachman, TOGAF (Open Group), Federal Enterprise Architecture Framework, Treasury Architecture Framework, Homeland Security Architecture Framework and the Department of Defense Architecture Framework. These are also compared with various versions used in the commercial sector. Highlighted areas include executive involvement, governance, value, and support for decision-making. Developing and implementing enterprise architecture programs are covered as is the training of the architecture team.

EEA 602

Enterprise Architecture Planning

Introduces the concepts and theories associated with organizational strategic planning as the basis for enterprise architecture, provides an examination of the Federal Enterprise Architecture Program Management Office reference models, how to define business architecture utilizing business strategy, goals and objectives, the technological environment and external variables including location, organizational culture and strategic business planning. Provides an understanding of how to plan and manage an EA project within an enterprise, including development of a statement of work, scheduling, requirements analysis, risk management, the role of security and information assurance, and the formulation of architectural principles.

EEA 603

Enterprise Architecture Implementation

Analysis and integration of different Enterprise Architecture Methodologies, review of basic concepts in light of an integrated repository, Activity based costing and cost/benefits analysis, developing performance measures in the context of the OMB Reference Models (Performance Reference Model), Balanced Scorecard and GPRA, use of visual modeling from transition to implementation, managing and incorporation of legacy systems, information assurance and security architecture, stakeholder communication strategies and maintenance of EA as an asset within an enterprise.

EEA 604

Enterprise Architecture Integration

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.

EGR – Engineering

EGR 301

Engineering Mathematics

Prerequisite: CSC 208B

An examination of the major mathematical tools for engineers and scientists.

EGR 304

Statics and Strength of Materials

Prerequisite: EGR 301

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 307

Introduction to Software, Engineering and Ethics

This is an introductory course for students enrolled in a bachelor's degree program in the School of Engineering and Technology. Students are introduced to the important aspects of engineering, computer hardware and software and ethics. Team skills and the scientific approach to problem solving through analysis and design are presented. Computer tools and programming are introduced.

EGR 310

Engineering Economics

Prerequisite: MTH 210

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 313

Electrical Circuits and Systems

Prerequisite: SCI 104 and SCI 104A

A study of fundamentals of direct and alternating current, basic circuit theory, three-phase circuits, transformers, electrical generators, and motors.

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 319

Introduction to Engineering Graphics and Auto CAD

Prerequisite: EGR 301

Introduction to the latest version of Auto CAD software for two- and three-dimensional modeling, engineering graphics and technical drawings.

EGR 440

Project Management Fundamentals

Prerequisite: MTH 210

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

Prerequisite: Completion of 12 BSCE or 14 BSDE core courses

A culminating experience for BSDE and BSCE majors involving 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

Prerequisite: 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.

ELB – Electronic Business

ELB 620

ELB 620S - Spanish Version

Principles of 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.

ELB 621

E-Strategies and Business Models

(Prerequisite: ELB 620)

This course provides an in-depth analysis of Internet Business Models and E-Business Strategies. The course enables students to analyze the value and components of E-Business Models and the concept of strategic planning within the context of E-Business.

ELB 622

E-Business Systems Development

(Prerequisite: ELB 620)

The course discusses the business and computing issues and activities essential to developing successful e-Business systems from a combination of user, business and computing viewpoints to identify the range of commerce and computing issues that need to be resolved together to ensure a successful result. The course provides ample guidance on applying this approach within organizations.

ELB 623

Advanced Web Design

(Prerequisite: ELB 620, ELB 622)

This course introduces current principles of Internet Application Development beyond visually appealing user-interfaces. Specific design concepts will be applied to an advanced web-design or web-conceptualization during a class project. The course focuses on the principles of HTML, JAVA and XML application programming. Practical exercises will be conducted throughout the course.

ELB 624

Internet Marketing

The course represents an in-depth analysis of marketing and advertising components of E-Business, strategic marketing decisions in the digital age and a study of successful marketing models. During the course, students create a strategic marketing plan for an Internet business.

ELB 625

Electronic Payment Systems and Internet Security

(Prerequisite: ELB 620)

The course introduces the various concepts of digital money and alternative electronic payment systems. Students explore the role of the banking system and the global monetary system from a managerial perspective. The course includes studies of security methods and systems including access control, firewalls, encryption, public key infrastructure, digital signatures, authentication and non-repudiation.

ELB 625

E-Logistic and Supply-Chain-Management

(Prerequisite: ELB 620)

The course offers a thorough introduction to private and public E-Marketplaces, demand chain structures and Supply Chain Management, procurement and fulfillment. Student will explore the associated digital infrastructure from an E-Business perspective. A special focus will be on current industry applications in this field. The course will offer processes and strategies for evaluation, design and implementation of those highly com-

Course Descriptions

plex applications.

ELB 638

ELB 638S - Spanish Version

E-Business Information and Knowledge Systems

(Prerequisite: ELB 620)

The course introduces the data-information-knowledge-intelligence chain and its relevance to E-Business profitability and growth. It includes a study of the role and deployment of data models, database systems, data warehouses and business intelligence.

ELB 640

Emerging Communication Technologies in E-Business

(Prerequisite: ELB 620)

The course provides a study of telecommunication networks that support the digital global economy and E-Business. Networks are evaluated as enablers of strategy, growth and financial success. The course will also examine the impact of wireless communications and other emergent technologies on business management, operations and planning.

ELB 650A

Master's Research Project I

(Prerequisite: Completion of all program core course requirements with a GPA of 3.0 or better.)

This course is the 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 electronic business. 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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

ELB 650B

Master's Research Project II

(Prerequisite: ELB 650A)

A continuation of ELB 650A. 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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

ELB 656

Cyberlaw and E-Legal Issues

(Prerequisite: ELB 620)

The course focuses on the global level and regulatory framework in which E-Business operates. It provides a study of current and proposed laws and regulations and their impact on E-Business. Emphasis is put on current legal issues relevant to start and operate various E-Businesses. Further emphasis lies on legal case studies from a business prospective.

EMB – Executive Master in Business Administration

EMB 651

Cases Studies in Business Decision Making

Integrating and applying the theories and tools in economics, finance, accounting, management, marketing, knowledge management and business law to solving real world problems through case studies. Multiple industries will be evaluated. Group and individual, as well as oral and written, case-work will be emphasized.

EMB 652

Business Games (Simulations)

Integrating and applying the theories and tools in economics, finance, accounting, management, marketing, knowledge management and business law

to solving real world problems through business simulations, allowing for decision making with multiple variables changing simultaneously, and developing winning strategies in a competitive environment. This course includes the use of computer simulations and situation analysis, and negotiations. Multiple industries will be evaluated. Group (team) and individual, as well as oral and written, work will be emphasized.

EMB 671

EMB 671 S-Spanish Version

Global Business Simulation

This course provides the student with the opportunity to apply concepts and theories learned in their life experiences and academic program to virtual organizations and competitive environments. Students make strategic and functional decisions for virtual organizations that change the internal and external business environments and performance results of the companies. Students are able to "see" the effects of alternative selections in executive decision making.

EMB 672

EMB 672S - Spanish Version

International 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.

EMB 673

EMB 673 S-Spanish Version

International 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 are discussed in order to maximize the efficient and effective allocation of resources in pursuit of competitive advantage.

EMB 674

EMB 674S - Spanish Version

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.

EMB 682

EMB 682S - Spanish Version

Accounting for Managers

This 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.

EMB 683

EMB 683S - Spanish Version

International Economic Strategies

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.

EMB 686

Data and Research Analysis for Decision-Making

This course focuses on applied statistics, research methodology, and problem-solving through the integration of computer technology with quantitative techniques. The course is taught using lectures, case studies, and statistical computer packages.

EMB 689

EMB 689S - Spanish Version

Leadership and Negotiation

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.

EMB 696

EMB 696S - Spanish Version

EMBA Project

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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below). EMB 696/696S is two months in length.

EMB – Executive Master in Business Administration, Spanish

EMB 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.

MKT 631S

Mercadotecnia Global

Es un estudio de la Planeación Estratégica y Organizacional para la Mercadotecnia Internacional, investigando los mercados globales, la mercadotecnia de los productos de consumo, productos industriales y servicios en el mercado mundial. El curso explora la publicidad internacional y los esfuerzos de promoción, ventas y administración de personal, precios, sistemas de distribución, mecanismos y logística de exportación, los requerimientos financieros para la Mercadotecnia Internacional, y la coordinación y control de las operaciones globales. Analiza también los efectos de los tratados comerciales en los negocios internacionales.

ELB 620S

Principios de 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 prevalencientes en cibernética, mercadotecnia por Internet, Infraestructura cibernética y seguridad, aplicaciones de negocios vía Internet, así como modelos emergentes de negocios vía Internet

MNS 601S

Estadística 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

Course Descriptions

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.

EMB 6745

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 internacionales. El curso examina también el impacto de las opciones de negocios en la supervivencia y rentabilidad de una organización. El entorno competitivo es analizado en función de los factores culturales, económicos, sociales, legales, políticos y tecnológicos.

EMB 6825

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.

EMB 6735

Alianzas Estratégicas Internacionales

Este curso examina las oportunidades en los nuevos mercados, las amenazas competitivas y difusión de los modelos de negocios asociados con los negocios internacionales. Los estudiantes desarrollan la habilidad de evaluar el uso estratégico de las alianzas en el marco de las estrategias competitivas genéricas. Se discute la formación de alianzas estratégicas como una herramienta para las empresas multinacionales e internacionales, a fin de maximizar la eficiente y efectiva distribución de recursos en la búsqueda de ventajas competitivas.

EMB 6835

Estrategias Económicas Internacionales

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.

EMB 6725

Administración del Riesgo Internacional

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.

EMB 6715

Simulación de Negocios Globales

Este curso ofrece al estudiante la oportunidad de aplicar conceptos y teorías aprendidas en sus experiencias profesionales y académicas, a organizaciones virtuales y ambientes competitivos. Los estudiantes toman decisiones estratégicas y funcionales para las organizaciones virtuales que cambian sus ambientes de negocios externos e internos, y por ende sus resultados. Los estudiantes pueden "ver" los efectos de seleccionar diferentes alternativas en la toma de decisiones.

MGT 6025

La Toma de Decisiones Estratégica en Negocios Globales

(Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en MGT 6025, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el MGT 610C).

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.

EMB 6965

Proyecto EMBA

(prerrequisito: 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 y presentan su investigación en forma escrita a la organización cliente, y al instructor.

ENE – Environmental Engineering

ENE 601

Environmental Engineering Laboratory

(Prerequisites SCI 101 or SCI 101A)

This course is dedicated to exploring the contemporary Environmental Engineering experience. An in-depth study of standard methods for analysis of water and wastewater, sampling techniques and preservation of samples, and interpretation of analytical data related to biosolids, nitrogen and phosphorous treatments. Through lectures, demonstrations, readings, student will also learn the strategic role of the environmental lab in the modern workplace.

ENE 602

Environmental Microbiology and Biological Treatment

(Prerequisites SCI 330 or SCI 335)

This course provides a comprehensive introduction to the design, analysis and implementation of microbiology and biological treatment. There is strong emphasis on biology of microorganisms and general bacteriology, microbiology of aerobic and anaerobic bacteria as well as physical and chemical properties of water.

ENE 603

Unit Processes of Environmental Engineering

(Prerequisites MNS 205 or CSC 208A)

This course emphasizes the application of physical and chemical methods applied for water and wastewater treatment, filtration and sedimentation, options, absorption, ion exchange, aeration, softening and disinfecting as combined with review of atmospheric science aspects such as water, air and soil.

ENE 604

Engineering Aspects of Environmental Engineering Quality Control

This course introduces application of environmental science and engineering toward remediation of environmental pollution, analysis of water, air and land pollution, including hazardous waste and engineering of mitigation measures as well as water and wastewater pollution prevention. It addresses the current pollution prevention procedures outlined by the EPA for industry that include source reduction, recycling/reuse treatment, ultimate disposal and combinations of these preventive measures.

ENE 605

Foundation of Air Pollution Engineering and Equipment Design

This course provides an overview of the field of air quality management with an emphasis on the sources of air pollution and how they affect the environment, including the effects on humankind, plants and animals. Students will study federal, state and local regulatory requirements and air pollution law, including the California and federal clean air acts, ambient air quality standards and government policies on pollution prevention. This course includes an introduction to air pollution meteorology, climatology, chemistry, atmospheric pollutants, air quality and emissions assessment, control of emissions from stationary sources, prevention and control measures and design.

ENE 606

Principles of Water and Wastewater Engineering and Treatment

(Prerequisites MNS 205 or CSC208A)

This course focuses on the concept of water quality standards, physical, chemical and biological treatment processes of water and wastewater; transportation, storage and distribution of water systems; wastewater collection; sanitary sewers and Governmental Regulatory Water Act; storm drain and advanced water and wastewater treatment. Effect of Federal Regulation on water treatment plant design, design and application of potable water and wastewater systems, chemical conditioning for water softening and corrosion control.

ENE 607

Toxic and Hazardous Waste Remediation Analysis and Solid Waste Recovery

(Prerequisites SCI 101 or SCI 101A)

The intent of this course is to give students an understanding of solid waste; its characterization, production, storage, collection and transportation. The student will also review statutes and regulations for the management of hazardous material/waste; its identification, transportation, monitoring, storage, minimization, treatment and disposal. This course introduces and explores Toxicology from multiple functional levels, measuring toxicity and assessing risk, respiratory toxicology, ecological toxicology and toxic wastes and remediation technologies. Statutory and regulatory basis for toxic and hazardous waste remediation, identification, transportation, monitoring, storage, treatment and disposal.

ENE 608

Site Assessment and Environmental Remediation Methodologies

(Prerequisites SCI 330 or SCI 335)

This course introduces 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. This includes methods for the development site restoration tasks, methods for evaluating the progress of corrective action programs and application of risk assessment methods as a decision-making tool. The focus of this course is to synthesize technically sound principles and techniques that can be applied globally to contaminated sites in different regions of the world.

Course Descriptions

ENE 609A

Applied Research Project #1

(Prerequisites: Completion of all program core course requirements with a GPA of 3.0 or better.) This course is the 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. This is a regular one-month course. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

ENE 609B

Applied Research Project #2

(Prerequisites: ENE 609A)

This is a continuation of ENE 609A. Students complete a detailed analysis and design of the project. This course is a two-month, one session per week course. After completing the project, students formally present their final product to a review panel for evaluation and grading. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

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. S/U grading. (This course is considered developmental in nature and does not award collegiate credit)

ENG 100

Effective College English I

(3 quarter units) (45 class hours of instruction) (Prerequisite: Satisfactory performance on Accuplacer)

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) (45 class hours of instruction) (Prerequisite: ENG 100)

The second of a two-course sequence designed to provide incoming students with expository and argumentative writing skills.

ENG 240

Advanced Composition

(Prerequisites: ENG 100/101)

An advanced course in expository and argumentative writing that continues the work of Effective College English. While Effective College English I and II 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 and Portfolio

A practicum that exposes students to a variety of experiences in English and language classrooms. Through such experience, students are able to analyze the importance of their academic studies in literature, composition, language and linguistics. Students observe a full range of activities common to English classrooms in public middle schools or high schools. In addition, the course gives instruction in the requirements of the English portfolio. Grading is on a Satisfactory/Unsatisfactory basis.

ENG 333

Written Business Communication

(Prerequisites: ENG 100/101)

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 100/101)

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 100/101)

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

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 365

Creative Writing

(Prerequisites: ENG 100/101)

An advanced course for students who want to explore more sophisticated writing genres. The course surveys techniques in writing one or more genres, at the discretion of the instructor: short fiction, drama, poetry and screen writing.

ENG 375

Nature Writing

(Prerequisites: ENG 100/101)

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. Examines the ways that individuals, as thinkers and writers, interact with their local and global environments.

ENG 432

Report and Research Paper Writing

(Prerequisites: ENG 100/101)

An advanced, cross-discipline workshop that focuses on the requirements of effective report and research paper writing. Emphasizes effective organization, clear writing, critical thinking, appropriate source citation and both library and Internet research. Introduces students to all of the major citation formats, including MLA, APA, CBE and Chicago Manual. Techniques learned are appropriate to any academic discipline or vocation that requires reports or research papers.

ENG 490

Guided Study

(1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

ENG 600

Seminar in Literary Theory

This graduate level course examines historical and current issues in literary criticism and theory with particular attention to the developments of the last fifty years. Through an examination of the histori-

cal and theoretical background of contemporary literary criticism, students learn to identify and evaluate assumptions about how we read and understand literature. The course emphasizes both reading and writing literary criticism in order to develop the vocabulary and skills necessary to participate in scholarly literary debate.

ENG 610

Seminar in Multicultural Literature of North America

This graduate level course examines the core concepts of race, ethnicity, culture, and multiculturalism from the standpoint of recent developments in American literary canon formation. Students will analyze these concepts and trace their application in a variety of American literatures such as Asian American, African American, Latino American, and Native American. Students will synthesize current multicultural literary theories with a corpus of significant literary texts.

ENG 620A

Seminar in a Literary Period or Movement I

An advanced, historically oriented study of a literary period, such as the English Renaissance, or of a movement such as Romanticism or Postmodernism. Variable topic selected by the instructor. (May not duplicate content of ENG 620B.)

ENG 620B

Seminar in a Literary Period or Movement II

An advanced, historically oriented study of a literary period, such as the English Renaissance, or of a movement such as Romanticism or Postmodernism. Variable topic selected by the instructor. (May not duplicate content of ENG 620A.)

ENG 640

Seminar in Poetry

An advanced study of the history and practice of poetry through an understanding of poetic forms such as the sonnet, villanelle, haiku, ballad, etc. The focus is on defining the genre through close reading of a rich selection of both traditional and contemporary exemplars of the various forms, including free verse

ENG 660

Seminar in Literary Hypermedia

This graduate level course examines the history and current practice of literary hypermedia. Through the close reading of primary stand-alone and Web-based hypermedia installations, the course examines hypermedia as a specific literary genre but also contextualizes the practice of hypermedia in relation to work in related fields, such as print media, graphic design, film, and performance art. The course also examines the historical antecedents to computer-based literary forms, surveying pre-digital experiments in visual-textual hybrids from the Middle Ages to Modernity.

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 wide range of approaches, including Deconstruction, Existentialism, Marxism, Post-Theory, phenomenology, psychoanalysis, transcendentalism; focussing on such thinkers as Althusser, Bazin, Deleuze, Derrida, Sobchack, and Truffaut. (Essays are included as a part of the MFA digital portfolio.)

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 French, 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.

Course Descriptions

ENG 667

Film History: American Film

A study of the development of cinema in the United States, this course is a broad overview of American film making; topics include genre, the relationship of film to art, politics, religion and society and the treatment of ethnic groups, women and class by Hollywood.

ENG 668

Film Genre Studies

A course in 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, agitprop, or other film genres; an intensive study of the conventions, artists, styles associated with specific genres and the historical conjuncture and circumstances in which the genre appeared.

ENG 669

World Film

A study of the film tradition of a specific nation or group of nations other than the United States, this course is an intensive study of contrasting visual styles of filmmaking, directors, artists and themes prominent in that tradition; a survey of the elements of film making and theory as developed with one country; discussion of transcultural and transcendental film categories, universals, values and the essence of film art.

ENG 670

Seminar in Comparative Literary Studies

This graduate level course examines the history and practice of comparative literary studies. Students analyze literary texts across national and linguistic as well as temporal, cultural, and disciplinary lines. The course juxtaposes texts and cultural artifacts, both literary and nonliterary, of different cultures, disciplines, and genres in a variety of ways in order to develop new perspectives on themes, forms, and contexts. The first part of the course focuses on comparisons across languages and cultures; the second part focuses on comparisons across genres and disciplines.

ENG 680A

Seminar in a Theme I

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by the instructor. Examples of themes might be: exile and return, human maturation and aging, utopia/distopia, or self-reflexivity in literature. (May not duplicate content of ENG 680B.)

ENG 680B

Seminar in a Theme II

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by the instructor. Examples of themes might be: exile and return, human maturation and aging, utopia/distopia, or self-reflexivity in literature. (May not duplicate content of ENG 680A.)

ENG 685

Great Directors: American

The study of the canon of work of a specific American director; a comprehensive study of the artistic achievements of a specific director; detailed interpretation and analysis of the techniques and concepts employed by a specific director.

ENG 686

Great Directors: International

The study of the canon of work of a specific director, excluding American; a comprehensive study of the artistic achievements of a specific international director; detailed interpretation and analysis of the techniques and concepts employed by a specific international director.

ENG 690A

Seminar in a Major Author I

A critical study of the work of a single author, such as Shakespeare, Cervantes, Whitman, Dostoyevsky,

Neruda, Morrison. Variable topic selected by the instructor. Special attention will be given to biography, culture, and literary context. (May not duplicate content of ENG 690B.)

ENG 690B

Seminar in a Major Author II

A critical study of the work of a single author, such as Shakespeare, Cervantes, Whitman, Dostoyevsky, Neruda, Morrison. Variable topic selected by the instructor. Special attention will be given to biography, culture, and literary context. (May not duplicate content of ENG 690A.)

ENG 699

English Capstone Course:

The capstone project consists of a critical essay publishable quality that will serve as the Master's thesis. Program assessment also takes place during this course. Students will take ENG 699 as the last course in the M.A. in English program. Exceptions may be made if the student is within two courses of program completion, with the approval of the program director. (S/U grading)

ENM – Engineering Management

ENM 600

Introduction to Engineering Management

This practical course is designed to equip the students with all the skills and management related topics covered in a graduate course in engineering management. This course which offers its graduate engineers management skills, presenting them with the most recent management concepts and covering such issues as management of quality, materials and new product development, human resource management and communication, project management and critical path networks and management of the supply system and inventory control.

ENM 601

Engineering Project Management

This course focuses on the 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. The emphasis is on project/team management techniques and hands-on training on using MS Project to manage various tasks in a typical project. This course provides an introduction to project negotiation, project manager selection and project auditing and terminating. In addition, this course also provides technical expertise of how to manage projects on the web. In addition, several software packages available commercially for the management of projects will be discussed. This course will be conducted as a computer laboratory course.

ENM 602

Management of Risk, Contracts, and Legal Issues

This course focuses on risks, contracts and legal issues related to engineering management. This course provides an understanding of basic principles of contract law. In addition, this course summarizes a survey of contracts, sales, agencies, personal property, commercial paper, and associated topics. The course also covers materials on the theories and principles of risk management. In addition, it explores a range of issues including cost estimation, pricing competitive bids, risk allocation, and incentive contract design, evaluation of threats and opportunities, buffer management in a supply chain, investment appraisal, portfolio management and safety formula.

ENM 603

Managing Projects in Operation Management

This course examines the design and management of internal capacity as it applies to all organizations. It examines the principles and techniques for designing, analyzing, and managing operations

processes. It addresses how all operations and behavior components fit together and how to identify and resolve the right problem. Topics include statistical process control, supply chain management, safety and security issues, and total quality management. This course also reinforces the concept of project management engineering within operation settings. Topics covered would include: overview of operations management, problem identification and resolution, process design, development, and management, applications of technology and knowledge management, integration and application and evaluation.

ENM 604

Quality Management

This course focuses on quality aspects related to project management, operations and other aspects of engineering. The course covers materials on the theories and principles of total quality management required for a successful organization. In addition, key global trends, strengths and weaknesses of U.S. companies in the global marketplace, costs of poor quality, and ethical dilemmas will be discussed. In addition, concepts related to six sigma, benchmarking, SPC, quality tools, and ISO 9000-2000 will be discussed.

ENM 607A

Engineering Management Capstone Course I

ENM 607B

Engineering Management Capstone Course II

These project courses focus on the application of engineering process learned through this program. The students are to select research topics under the guidance of the instructor and conduct research and write a detailed report. 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. This project may require detailed implementation of computer tools such as Microsoft Project 2002. 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. Two-month course, meets once a week.

EXC – Special Education

EXC 602A

Field Experience: Special Education

(3 quarter units)

A special education field experience that orients students to all types of exceptionalities and service delivery options in the field of special education. Emphasizes the role of the special education teacher and parent involvement. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 602B

Field Experience: Inclusive Settings

(3 quarter units)

A field experience that orients students to all types of exceptionalities and service delivery options for special needs students served in general education settings. Emphasizes the roles of general education and special education teachers and parent involvement. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 603

Typical and Atypical Development in Young Children

An overview of typical and atypical development pathways 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 on the young child's growth and development are examined. Implications of atypical development on play and learning within an ecological framework are addressed.

Course Descriptions

EXC 603A

Student Training Seminar (1.5 quarter units)

Integrates theory and practical approaches to real-life situations experienced by candidates during student teaching. Content areas include portfolio preparation, reflection, collaboration and legal and ethical issues related to the teaching profession. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 604

Exceptionality and Diversity in the Classroom

A survey of the history and definition of special education, theoretical orientations and developmental characteristics of special needs students who manifest various types of disabilities, including mild/moderate and moderate/severe disabilities. Examines the history of racial and ethnic groups in the U.S. In addition to exceptionality, explores cultural and linguistic factors along with issues that impact academic success, critical topics of cross-cultural understanding and awareness, policies of inclusion and the effects of culture and culture contact.

EXC 605

Assessment in Young Children

This course is designed to develop a student's familiarity with a wide variety of assessment techniques and instruments for infants, toddlers, and young children with special needs. Instruments include formal and informal assessments, curriculum-based instruments, observation and data collection methods, evaluations of preschool and infant/ toddler environments and family interviewing techniques. Students complete several screening and assessment projects. Issues related to cultural linguistic diversity and the family's role in assessment and evaluation are addressed.

EXC 606

Family Systems & Partnerships

Families and family-centered practice in early intervention is explored from a family systems theory model, with a focus on strategies for promoting parent/ professional partnerships in service coordination. Culturally responsive practice, the influence of disability on the family, family-to-family support, and the appreciation of families as a dynamic unit with a wide range of strengths, concerns, and aspirations beyond their need for specialized health and developmental services and support.

EXC 607

IFSP Process: Collaboration & Consultation

Student will develop skills in writing Individualized Family Service Plans. This course introduces relevant special education legislation, laws and policies. Students will develop skills in matching intervention strategies to the strengths and needs of young children with disabilities and their families. Students will acquire skills in the development and implementation of Individualized Family Service Plan in a variety of settings.

EXC 608

Interventions for Young Children with Disabilities

This course focuses on the development of teacher competencies as related to design, management, and implementation of ECSE environments and interventions appropriate for young children with special needs. The students will explore, plan, and implement developmentally supportive activities with infants and toddlers and their families. This course takes a family-centered perspective and emphasizes the role of collaborative planning with families and caregivers in preparing developmentally supportive environments maximizing interactions with nondisabled peers

EXC 609

Field Experience

This Field Experience is designed as a culminating experience in the Early Childhood Special Education Certificate Program. Specifically, students will be required to assess, plan, teach and evaluate the progress of young children with disabilities. Each candidate will have at least two in-depth experiences, one in a program for infants and toddlers and their families and one in a preschool program that includes children with disabilities. Students must complete a total of 100 clock hours.

EXC 615

Technology for the Disabled Person with Disabilities

(Prerequisite: Completion of Generic Core Requirements)
An investigation of the current technologies that can empower disabled individuals to access their total environment throughout life. Focuses on technology applications in the school, home, community and workplace.

EXC 615A

Field Study: Technology for the Disabled Person with Disabilities

(1.5 quarter units)
(Prerequisite: Completion of Generic Core Requirements)
Practical field activities designed to promote and supplement the course goals and outcomes of EXC 615. Students are encouraged to take the field study concurrently with EXC 615. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 620

Supporting Positive Behavior

An examination of behavioral, psychodynamic, biophysical and environmental theories of behavior management. Emphasizes practical approaches and strategies useful for managing student behavior in educational settings.

EXC 625

Exceptional Children in the Classroom

An examination of four major types of learners: special education, multicultural, gifted/talented and students at risk. Explores how those groups of learners can be best served in general education using effective instructional and behavior management strategies.

EXC 630

Assessment and Instructional Planning for Special Needs Students

An overview of informal assessment, curriculum-based assessment and a variety of diagnostic tests related to academic performance. Provides procedures for developing the IEP and methods for implementing programs to meet the objectives specified in the IEP case study. Note: This course meets one night per week during a two-month period.

EXC 637

Action Research

(Prerequisite: ILD 680)
This course is designed to provide the knowledge and skills required to understand, interpret, generate and evaluate research relevant to various areas of professional education. The work of the educator, from various areas, will be emphasized throughout the course as students produce a major action research and writing project. This course will 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.

EXC 644

Reading Methods for Special Education

(Prerequisite: Completion of Generic Core Requirements)
A survey of theories about teaching reading and

the language arts to the disabled student. Discusses various assessment instruments relevant to the language arts, selection and administration of instruments and the interpretation and communication of results. Through the use of case studies, students learn how to develop, implement and evaluate prescriptive plans based on diagnostic procedures. Class will meet one night per week for two months.

EXC 644A

Field Study: Reading and Language Arts Methods for Special Education

(1.5 quarter units)
(Prerequisite: Completion of Generic Core Requirements)
Practical field activities designed to promote and supplement the course goals and outcomes of EXC 644. Students are encouraged to take this field study concurrently with EXC 644. Note: Grading is on a satisfactory/unsatisfactory basis. Class will meet the first and last class session of a two-month format.

EXC 650

Consultation and Collaboration for Special Education

A discussion of the spectrum of interpersonal and interactive learning skills required of the special education teacher. Emphasizes counseling with parents to enhance the parent-professional partnership. Stresses the sharing of knowledge and mutual efforts between professionals and parents to meet the special needs of exceptional students.

EXC 655A

Professional Induction Seminar

(3 quarter units)
The first course in the Level II program. An Individual Induction Plan, an action research project, an electronic portfolio and approved non-university professional development activities initiated.

EXC 655B

Exit Seminar

(1.5 quarter units)
The last course in the Level II program. Student presentation of electronic portfolio to University Supervisor and District Support Provider.

EXC 655I

Professional Induction Seminar for the Internship Program

This is a required course for credential students participating in an approved Internship program. An Individual Induction Plan, an action research project, and a portfolio are developed as part of this course.

EXC 656

Best Practices for Special Needs Students

Development of an understanding of the philosophical, political, legal and fiscal variables 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.

EXC 657

Community Resources and 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

Advanced Specialization in Mild/Moderate Disabilities

An advanced course in skills needed for effective collaboration, curriculum design and modification and assessment processes for students with mild/moderate disabilities.

Course Descriptions

EXC 659

Advanced Specialization in Moderate/Severe Disabilities

Advanced methodology designed to ensure that candidates are instructional leaders. Effective communication skills and transdisciplinary relationships with families, caregivers and paraprofessionals stressed.

EXC 660

Instruction of Learners with Mild/Moderate Disabilities

(Prerequisite: Completion of Generic Core Program)

Overview of the characteristics of mild/moderate disabilities. Discusses the planning and evaluation of curriculum, methods, techniques, basic strategies, materials and media used for teaching students who manifest mild/moderate disabilities across the content areas. Addresses positive behavior support. Emphasizes learning strategies, study skills, critical-thinking skills, educational assessment, interactive teaming and parent involvement as they relate to IEP development and evaluation of instruction.

EXC 660A

Field Study: Instruction of Learners with Mild/Moderate Disabilities

(1.5 quarter units)

(Prerequisite: Generic Core Requirements)

Practical field activities designed to promote and supplement the course goals and outcomes of EXC 660. Students are encouraged to take this field study concurrently with EXC 660. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 665

Instruction of Learners with Moderate/Severe Disabilities

(Prerequisite: Completion of Generic Core Requirements)

An overview of the characteristics of moderate/severe disabilities. Discusses the planning and evaluation of curriculum, methods, techniques, basic strategies, materials and media used for teaching students who manifest moderate/severe disabilities. Addresses positive behavior support, communication and social networks, as well as movement, mobility, sensory and specialized health care. Stresses linkages to educational assessment as well as interactive teaming and parent involvement as they relate to IEP development and evaluation of instruction.

EXC 665A

Field Study: Instruction of Learners with Moderate/Severe Disabilities

(1.5 quarter units)

(Prerequisite: Generic Core Requirements)

Practical field activities designed to promote and supplement the course goals and outcomes of EXC 665. Students are encouraged to take this field study concurrently with EXC 665. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 685A

Student Teaching - Mild/Moderate Disabilities

(Prerequisite: All other course work in the Level I Mild/Moderate credential program)

The first month of the full day, full-time supervised student teaching experience with mildly and moderately disabled students. Candidates work with certified master teachers providing special education services to students with mild/moderate disabilities. Consists of a minimum of 100 hours. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 685B

Student Teaching -Mild/Moderate Disabilities

(Prerequisite: All other course work in the Level I Mild/Moderate credential program)

The second month of a full-day, full-time supervised student teaching and experience with mildly and moderately disabled students. Candidates

work with certified master teachers providing special education services to students with mild/moderate disabilities. Consists of 100 hours. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 690A

Student Teaching - Moderate/Severe Disabilities

(Prerequisite: All other course work in the Level I Moderate/Severe credential program)

The first month of the full-day, full-time supervised teaching experience with moderately/severely disabled students. Candidates work with certified master teachers providing special education services to students with moderate/severe disabilities. Consists of a minimum of 100 hours. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 690B

Student Teaching - Moderate/Severe Disabilities

(Prerequisite: All other course work in the Level I Moderate/Severe credential program)

The second month of the full-day, full-time student teaching experience with moderately/severely disabled students. Candidates work with certified master teachers providing special education services to students with moderate/severe disabilities. Consists of a minimum of 100 hours. Note: Grading is on a satisfactory/unsatisfactory basis.

EXC 694

Thesis

(Prerequisite: ILD 680)

This course is a supervised experience culminating in the completion of a thesis. Maximum length of time is 12 months. Note: Grading is by H (for honors), S (for satisfactory work), or U (unsatisfactory work). Class size 5.

FIN – Finance

FIN 310

Business Finance

(Prerequisites: ACC 201 and ACC 202)

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

(Prerequisite: 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

(Prerequisite: 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 and Insurance

(Prerequisite: 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 Management

(Prerequisite: 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 and 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

(Prerequisite: 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

(Prerequisite: 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

(Prerequisite: 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.

Course Descriptions

FIN 501

Finance Fundamentals (Formerly BUS 501B) (two weeks)

(Prerequisite: 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.

FIN 600

Finance for Non-Financial Managers

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

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 630

Financial Institutions

(Prerequisite: 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 sources and uses of funds, their cost and return, and government regulation of the financial sector.

FIN 631

Security Analysis and Portfolio Management

(Prerequisite: 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

(Prerequisite: 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

(Prerequisite: 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

(Prerequisite: 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

Advanced Security Analysis and Portfolio Management

(Prerequisites: FIN 631 and FIN 609A)

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

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

Financial Engineering and 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, multistep 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

Research Project

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.

FIN 670

Finance and Accounting for Executives

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

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 672

U.S. and International Accounting Standards

This course is designed to provide students with the analytical background for dealing with the financial problems in an international context. A concentration in international finance provides effective preparation for careers in multinational corporations, international financial institutions, and various national and international government agencies. The content and instructions are intended to provide a level of understanding and competence appropriate for global general managers in choosing among alternative measurement procedures and establish corporate financial reporting policies.

FIN 673

Valuation: Measuring and Managing the Value of Corporation

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 Institutions and Banking

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

The World Economy, Trade, and Finance

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

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.

Course Descriptions

FIN 677

Financial Derivatives

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

(Prerequisite: FIN 609A)

This course is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

FSC – Forensic Sciences

FSC 620

Advanced Criminalistics

A survey of trace evidence, physiological fluid evidence (blood, semen, etc.), impression evidence (shoe, tire, etc.), questioned documents, firearms, tool marks, and toxicological evidence with an introduction to the operation of a forensic science laboratory; principles of chain of custody; and requisite qualifications and preparation of the expert witness for the courtroom.

FSC 621

Electronic Crime Scene Investigation: Computer Forensics

A study of different, but closely related, types of computer or digital-related crime, including fraud, stalking, prohibited items, identity theft, and internet-related crimes. A study of investigative techniques utilized in the processing, and interpretation of digital evidence. Students in the course will study basic computer theory, operating systems, digital storage methods, and safe extractions of digital evidence. Related issues such as chain of custody, current legal issues on digital evidence, and methods of seizing, imagining, examining, and presentation of digital evidence.

FSC 622

Constitution and Criminal Procedure

An introduction to the foundation for understanding Constitutional laws, the guarantees of the Constitution to citizens of their civil right and civil liberties, and how the Constitution and its amendments influence the criminal justice system. This course covers the constitutional rules, established by Supreme Court, for collecting evidence at crime scene, questioning witnesses/suspects, arresting suspects, and seizing evidence as well as the constitutional rights of the accused at trial.

FSC 623

Advanced Fingerprint Analysis

As introduction to basic principles and techniques of fingerprints as applied to crime scenes, forensic evidence, identification, and court presentation. Emphasis is on the science of fingerprints, history, pattern recognition, and the application of the Henry Classification System. Additional subjects explored include the proper method of collecting both known and latent prints.

FSC 630

Principles of Forensic Medicine

Forensic terminology, anatomy, and physiology of the human body with emphasis on the understanding of the underlying pathology of traumatic and sudden, unexpected deaths encountered in forensics. Bone growth and repair as it relates to child abuse, structure and function of the heart relating to sudden deaths, and anatomic areas of the brain prone to hemorrhagic lesions following trauma. Sudden Infant Death Syndrome (SIDS),

methods of personal identification and different types of injuries with their characteristic features and mechanisms of death in injuries.

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

Analysis of physical trace evidence, including soil, paint, glass, wood, hairs and fibers, grease, cosmetics, arson and explosive residues, blood-pattern analysis, and questioned documents. Also includes qualifications and preparation of expert witnesses, and operation and functioning of a forensic science laboratory.

FSC 633

Advanced Forensic Toxicology

A comprehensive study of forensic toxicology, poisons, action, toxicity, postmortem characteristics, samples required for toxicological analysis and methods of collection, preservation, and analysis. Includes analyses of chemical, toxicological and pathological characteristics of commonly abused drugs, including the following: ethanol, barbiturates, narcotics, stimulants, and hallucinogens. Utilizes most appropriate analytical techniques.

FSC 634

Advanced Forensic Serology and DNA

A comprehensive study of the principles of forensic identification analysis and comparison of biological evidentiary samples such as blood, semen, saliva, and all other biological samples and tissues. Utilizes electrophoresis, isoelectric focusing, DNA extraction procedures, polymerase chain reaction (PCR), DNA typing, sex and race determination and methods of genetics and DNA analysis and detection. Includes forensic applications of enzyme-linked immunosorbent assay (ELISA) as well as laboratory safety, quality assurance and quality control.

FSC 635

Forensic Anthropology and Archeology

Analysis of the methods of skeletal remains (physical and biological anthropology) including species, sex, age, race, stature, congenital abnormality, trauma, cause, manner, and time of death. Analysis of the principles and application of the archeological techniques in crime scene processing.

FSC 641

Physical Aspects of Forensic Science

Survey of forensic physical sciences, fingerprints and other patterned evidence, such as tire marks and shoe prints, firearms and tool marks. Covers document examination and examinations of trace evidence, such as the following: soil, paint, glass, wood, hairs and fibers, grease, cosmetics, arson and explosive residues, blood-pattern analysis, qualifications and preparation of expert witnesses and operation and functioning of a forensic science laboratory.

FSC 642

Forensic Pathology (Medico-legal Investigation of Death),

The scientific techniques used in medico-legal investigations, regional injuries and death, firearm injuries transportation injuries, physical injuries, trauma and disease, battered baby syndrome (child abuse) and shaken baby syndrome, 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, Psychiatry and the Law

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, psychodynamic formulation, organic brain dysfunction and forensic neuropathology.

FSC 644

Forensic Toxicology and Drug Analysis

A comprehensive study of the general principles and fundamentals of forensic toxicology, poisons, action, toxicity, postmortem characteristics, samples required for toxicological analysis and methods of collection, methods of collection, methods of preservation and analysis. Discusses chemical, toxicological and pathological characteristics of commonly abused drugs, including the following: ethanol, barbiturates, narcotics, stimulants and hallucinogens. Details the methods used for analysis, such as color test, micro diffusion, chromatography (GC, GLC, HPLC), mass spectrometry (MS), GC-MS and radioimmunoassay (RIA). Covers the toxicologist as expert witness.

FSC 645

Forensic Serology and DNA

A study of the principles of forensic identification, analysis and comparison of biological evidentiary samples such as blood, semen, saliva and all other biological samples and tissues. Examines electrophoresis, Isoelectric focusing, DNA extraction procedures, polymerase chain reaction (PCR), DNA typing, sex and race determination and methods of genetics and DNA analysis and detection (i.e., immunofixation and immunoblotting). Covers forensic applications of enzyme-linked immunosorbent assay (ELISA) as well as laboratory safety, quality assurance and quality control. Includes case work training and internship. Students obtain hands-on experience.

FSC 647

Crime Scene Investigation

Designed to help students understand techniques and procedures used for approaching and protecting the crime scene. Covers crime scene survey and documentation, collection of fragile and easily destroyed evidence, detailed search of the scene, packaging of initial evidence collected, processing the scene for latent prints, maintenance of the chain of custody and transportation or mail evidence.

FSC 648

Forensic and Crime Scene Photography

An examination of the basic principles and fundamentals of using photography, video and other visual procedures in forensics with the legal aspects and photographic presentations in court or trial.

FSC 651

Selected 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" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

FSC 652

Personal Identification/Forensic Anthropology

A study of the methods of personal identification based on sketches, tattooing, personal effects, occupational marks, birth marks, scars, photo superimposition, finger prints, voice prints, odontology, radiographs and facial reconstruction. Also studies skeletal remains (physical and biological anthropology) including species, sex, age, race, stature, congenital abnormality, trauma, cause, manner and time of death.

Course Descriptions

FSC 654

Criminal Investigation Analysis: Profiling

Designed to help students acquire skills and knowledge in criminal investigation analysis. Students are introduced to 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 Sciences

(1.5-9 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 by H (for Honors, B or better work), S (for Marginal, C level work) or U (Unsatisfactory, D or below).

FSC 662

Supervised Graduate Research Project

Forensic science students can undertake a research project once they have completed all courses in the program. The project is coordinated by full-time faculty and chaired by a FS faculty member chosen by the student from previous courses taken within the program. Students select a committee and a viable forensic science topic to research. Students meet once a week for two months with a committee member. Upon completion, students present the projects to the committee in an open forum that is open to peers. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below). 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 "K" 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 FS 662. No grade of "I" (Incomplete) can be given for this course.

FSC 690

Guided Study

(1.5-9 quarter units)

Individual study under direction of the instructor. Requires prior approval of appropriate academic department.

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 310

Global Communications and Information Technology

(Prerequisite: ENG 240)

An analysis of the history, growth, use and future development of global communications and information systems. Examines the technological, social, political and economic forces that impact the evolution of electronic communications and information technology across the world (global) and around the world (regional and local).

GLS 320

Technologies of Culture

(Prerequisite: ENG 240)

An examination of the international U.S. culture industry, which includes —the increasingly prevalent positioning of American culture abroad, from Hollywood films and television programs to the stuff of the great American lifestyle (toys, clothes, cars, food, images, attitudes, dreams and desires). The course is organized around several examples of international cross-pollination between the U.S. and other cultures in the film industry, the television media, and/or the computer gaming software industry.

GLS 330

Film in an International Context

(Prerequisite: ENG 240)

An examination of how the international cinema portrays various aspects of the societies and cultures represented in film. Emphasizes the film industries of a variety of countries outside the U.S. For example, representative films of Asia, Africa, Europe, Latin America, Australia and Oceania and Canada may be studied.

GLS 331

American Film in an International Context

(Prerequisite: ENG 240)

Discusses the role of American film within a global perspective. Deals with questions in American society that place it in an international context and with specific American attitudes towards those questions as expressed and reflected in American films: the relationship of the sexes, war, labor, nuclear holocaust and marriage and divorce. Emphasis in this discussion is placed not only on transnational concerns of sex, race, nationality and class, but also on universal human experiences and ideological and ethical values.

GLS 410

Gender Studies: Gender Identity in a Global Context

(Prerequisite: ENG 240)

An investigation into how the formation of gender identity is the building block for family life, social roles, political and economic participation and a host of other factors that influence any group's participation in a global community. Topics include the distinction between sex and gender, the ways in which gender impacts education and work, the representation of gender in the media and the arts, struggles for equality between the sexes and the historical transformations of gender related to global political and economic factors.

GLS 420

Ecological Revolutions: Economics, Technology and the Global Environment

(Prerequisite: ENG 240)

This course places contemporary ecological concerns in a global and historical context revealing how humans have fundamentally altered their relationship to the natural environment in the last 500 years. Topics include cultural conceptions of nature and non-human species, the value and use of resources in different societies, the consequences of various kinds of economic organization (particularly capitalism) on the environment and the impact of technological revolutions on the world's ecology.

GLS 430

The Global Economy

(Prerequisite: ENG 240)

Since World War II, the nature of international economic exchanges has changed significantly. Enormous changes in technology, urbanization, finance, markets, lending, the internationalization of both production and multidivisional firms, the organization of work, power relations between nations and world cultures are currently going by the name "globalization." This course examines the nature of those changes and the theories that try to explain them. Also looks at the consequences of and popular responses to, the new global economy.

GLS 440

Study Abroad

(Prerequisite: HIS 320)

During this one month elective course, students will travel as a class and spend two weeks studying in a foreign country. While the course topics will vary depending upon the country of destination and the instructor, the course offers focused study so students develop a genuine appreciation of another culture. Through exercises, readings, and field trips, the course invites learners to take an active role not only in their own preparation for the study abroad experience, but for their personal, academic, and professional growth. This course demands from them a critical exploration of their beliefs, goals, and behaviors. The course covers personal development, learning about one's own culture, learning about another culture, professional development, and the rudiments of learning a foreign language. Each strand of development is addressed at the three crucial phases of the experience: before, during and after the sojourn abroad. The course lasts one month. It is the student's responsibility to find out about any additional fees, waivers, passports, immunizations and other requirements that may need to be fulfilled depending on the destination.

GLS 450

Global Studies Seminar and Portfolio Project

(Capstone course. To be taken as the final course in the major.)

A seminar course that puts students in close contact with key faculty and with each other in forging connections between global culture, business economics and technology. Seminar topics vary. Students need to save all graded essays from required courses in the major for possible inclusion in their portfolio. The portfolio project is the capstone for the Global Studies major and should be of such quality that it can be shown to prospective employers or clients. Students can enroll only if they have completed more than half of their degree requirements.

HCA – Health Care Administration

HCA 609A

Health Care Law, Policy, Politics and Ethics

An examination of current health care public policy and politics in the United States. Studies the role of federal, state and county government in the development of health care public policy and its impact upon health care facilities. An analysis of current legal issues that affect health care providers, administrators and other health care personnel. Reviews contract law as it relates to health care facilities.

HCA 620A

Health Care Management

An overview of health care management, including current issues in health care and theoretical basis for these current issues. Discussions of health care administration emphasizing organization, management, planning, communication, directing and controlling the practice of health care management.

HCA 629

Health Care Finance, Budget and Managed Care

A study of effective management of the limited financial resources in health care industry. Focuses on the basic concepts and techniques of cost accounting, financial reporting, reimbursement, budgeting and financial controls and strategic financial planning. Also includes an examination of managed care structures including Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs) and Independent Practice Associations (IPAs).

HCA 634

Program Planning, Strategic Planning and Evaluation

A survey of basic program planning from the conception of an idea to the implementation of the

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program. Explores the various program evaluation techniques. Emphasizes the value of teamwork in the learning process, as specific individuals will have responsibility for development of specific aspects of an actual program plan for a health care program in an organization.

HCA 636 Ambulatory Care Continuum

A study of various ambulatory care service components. With a shift from inpatient to outpatient services, this is the fastest growing component of the present non-integrated health care systems. Focuses on standards of accreditation and the issues involved in monitoring these proliferating services.

HCA 640 Biostatistics and Research

An introduction to the use of statistical analysis in health care management. Provides an understanding of the basic methods and underlying concepts of statistics and research that are used in management decision-making. Among topics explored are descriptive statistics, probability, sampling, hypothesis testing and non-parametric statistics. Applications in health-related management and research are featured.

HCA 641 Eldercare - Issues into Practice

The aging of America continues to be an issue in the delivery of health care. This course is designed to explore the issues of eldercare, gerontology, legal implications (including patient's rights), systems delivery and ambulatory care management. Discusses the role of administration in eldercare. An exploration into the physical, psychological and sociological aspects of caring for the elderly. This course is designed to provide the student with the option to sit for the State of California Licensing Examination for Administrators.

HCA 691A, B Internship or Research Practicum Module A: Internship

Module A includes a two-day seminar covering the preceptor role, the internship handbook, resume writing and other pertinent information to help the student be successful in their internship placement. Students will then be under contract with a University approved preceptor for their field health care management experience. The hours of these experiences vary depending on the needs and career focus of the student. Students will present a written report on their internships. At the end of the internship, the preceptor completes formal written evaluation of the students as defined in the preceptor's manual. Grading is by "H" for honors, "S" for satisfactory, or "U" for unsatisfactory.

Module B: Research Practicum

Module B includes a two-day seminar reviewing the research process, APA style and other pertinent information to help the student be successful in their research practicum. The student, with faculty advice, will select a topic of current issue in the health care field. The research practicum may be qualitative, quantitative, or both. Students will present both a formal written and oral presentation on their topic. Grading is by "H" for honors, "S" for satisfactory, or "U" for unsatisfactory.

HCM – Hospitality and Casino Management

**HCM 400
Principles of Hospitality and Casino Accounting**
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 comply-

ing with GAAP and legal requirements of financial reporting in the hospitality and casino industries.

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 420 Hospitality and Casino Marketing

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 430
Principles of Hospitality and 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 440 Cultural Diversity and Hospitality Management

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 450 Native American Tribal Community Development

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.

HED – Health Education

HED 220 Health, Nutrition and Safety

(Prerequisites: PSY 100 and PSY 301)
Focuses on the eight components for coordinated health for young children in out-of-home care. Health and physical education, health services, nutrition services, health promotion for the staff, counseling and psychological services, a safe healthy environment, and family/community involvement, children with special needs and legal and ethical issues will be explored.

HED 330 Health Education and Health 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.

HED 602 Introductory Health Education: K-12

An introductory study of a coordinated school health program including: comprehensive health education, health services, a healthy and safe school environment, physical education, nutrition services, physiological and counseling services, health promotion for staff, and family and community involvement. 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. The legal responsibilities of teachers related to student health and safety will be explored. Effective communication with parents and site-based and community resources to meet the individual needs of students, research-based school health programs, life skills and positive behaviors, needs of special populations, and evaluation of health web sites will be discussed. This course meets credential requirements.

HED 620 Coordinated School Health Programs

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 CCTC requirements for advanced health education for the professional clear credential.

HIS – History

HIS 220A History of the United States I +

(Prerequisites: ENG 100/101)
A survey of American historical development from pre-colonial times through Reconstruction. Explores the wide variety of 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 History of the United States II +

(Prerequisites: ENG 100/101)
A survey of American historical development from the Reconstruction era to the present. Explores the wide variety of 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. May involve work in oral history.

HIS 233 World Civilizations I

(Prerequisites: ENG 100/101)
A discussion of how the distinctive cultures, economies and societies of the world developed from prehistoric times up to the European conquest of the Americas (ca. 1500 C.E.). Explores issues of gender, class, personal identity, love, war, imperialism, sexuality, citizenship, religion, urban life and ecology as they pertain to the ancient civilizations, classic civilizations and post-classical (medieval) civilizations in Asia, Africa, the Americas and Europe.

HIS 234 World Civilizations II

(Prerequisites: ENG 100/101)
An explanation of how the cultures, economies and societies of the world developed through the interaction of diverse peoples and civilizations since 1500 C.E. Examines the era of the European Renaissance and such civilizations as Ming China, Mughal India, Ottoman Turkey and Aztec Mexico. Explores issues of class and class conflict, personal and cultural identity, race, work, industrial development, colonialism, ecology and political and eco-

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conomic life to explain the development of the modern world.

HIS 300

Foundations of Western Civilization

(Prerequisites: ENG 100/101)

Explores the important social, material, cultural, and intellectual bases of European civilization and situates them in relation to other major Afro-Eurasian civilizations. Examines hunting-gathering and early agricultural societies, Mesopotamian and Egyptian civilizations, the Hebrew, Greek and Roman worlds, the origins and spread of Christianity, the nomadic invasions of Europe, Europe's Byzantine and Islamic legacies, and the medieval European synthesis of Greco-Roman and Germanic heritages.

HIS 320

Culture, Capitalism and Technology in Modern World History

(Prerequisites: ENG 100/101)

Places contemporary cultural, economic and technological issues in a global and historical perspective. Shows how major issues that concern us today are rooted in the experiences of world civilizations since 1500. These issues include the rise of capitalism, industrialization and commodity production and their diffusion over the world; the pace and nature of technological change; the role of culture in directing economic and technological change; and the impact of capitalism on working life, the natural world, cultural diversity and cultural identity. 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 to exist in the modern world.

HIS 325

Peoples and Places: Migration in Modern World History

(Prerequisites: ENG 100/101)

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 341

History Through Theater

(Prerequisites: ENG 100/101)

An exploration of 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 345

History and Cultures of Latin American

(Prerequisites: ENG 100/101)

An introduction to important issues in Latin American history and culture focusing on the diversity of Latin American societies and their multicultural heritage. Topics may include the impact of colonialism on indigenous societies, the growth of plantation and mining economies, the capture and enslavement of Africans, the struggle for independence, the distribution of political power, the recurrence of popular rebellion and the creativity of artistic and cultural life.

HIS 348

History and Cultures of Asia

(Prerequisites: ENG 100/101)

A critical overview of contemporary Asian history and culture focusing on the diversity of Asian societies. Emphasis is determined by the instructor and will include an in-depth examination of one of the following countries or areas: China, Japan, India, Korea, Taiwan, Southeast Asia, Thailand, Tibet and the Philippines, among others. Topics may include

the distribution of political power throughout the regions, ideological and structural stratification between the east and the west, the impact of "Orientalism" in a global context, the impact of Imperialism on indigenous communities, the effects of sexual and religious stratification, the impact of sex tourism and the repression of ethnic, political and religious differences throughout and within different regions of Asia.

HIS 349

History and Cultures of Africa

(Prerequisites: ENG 100/101)

A critical introduction to the study of African society, culture and history. Explains the sources of African culture, politics and intellectual development, as well as modernization and social change in contemporary African societies. Examines social, economic and intellectual movements including issues of colonialism, post-colonial independence, underdevelopment, genocide, gender inequality, AIDS and the politics of international relief agencies, as well as new cultural forms of art and literature. Provides an overview of Africa both as a geographic location and as a Western idea, with additional emphasis on regional variations and multi-cultural differences within the continent.

HIS 350

Cultural Diversity +

(Prerequisites: ENG 100/101)

An examination of 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.

HIS 360

The American Colonial Experience, 1584-1783

(Prerequisites: English 100/101 and History 220A)

This upper-division course 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. In addition, the course analyses the results of the encounter between peoples of the old and new worlds, the regional patterns and cultures of colonial society, and their implications for the future American nation. It identifies sources of conflict and change throughout the colonial era and explores the economic and political problems that contributed to rebellion and the drive for independence. Major emphasis will be given to the recurrent movement of people as a defining characteristic of American experience.

HIS 361

The Making and Sundering of the United States, 1783-1865

(Prerequisites: English 100/101 and History 220A)

This upper-division course considers the development of American society from the early national period through the Civil War. It will begin with an analysis of the problems of creating a national government and the relationship between economics and politics in framing the United States Constitution. It will explore the process and logic of westward expansion to the Pacific and the conflicts that occurred as affected peoples and societies responded in a defense of their cultures. A prominent element will be an examination of U.S. economic development and its meaning for the growth of sectional identities and distinctiveness. It will also explore the growth of the plantation system and slavery and the corresponding political empowerment of planter capitalists. It will evaluate the social, political, and military problems faced by the contending sides in the Civil War.

HIS 362

The United States between Wars, 1865-1917

(Prerequisite: English 100/101 and History 220B)

This upper-division course investigates the transformation and expansion of America and American influence from the end of the Civil War through World War I. The issues evaluated include the problems of postwar reconstruction; demographic and economic expansion into the western territories; the process of industrialization and the attendant consequences for labor and social relations; mass immigration; the growth of American imperialism; the socialist, populist and progressive movements; and World War I and Wilsonianism. It includes an evaluation of the strains upon laissez faire capitalism with the growth of economies of scale and the resultant expansion of international financial and market networks

HIS 363

The United States Since World War I

(Prerequisites: English 100/101 and History 220B)

This upper-division course explores the social, economic, cultural and political contours of modern America from 1920 to the present. Major attention is given to the factors and developments contributing to economic disorder, cultural shift, and social transformation. These include the crisis, collapse, and restructuring of the capitalist order in the 1930s, the social fluidity that accompanied mobilization for World War II, the affluence and anxieties of the early postwar period, the civil rights and protest movements of the 1960s, and the international and domestic challenges the U.S. faced as it attempted to structure a new global political economy in the 1970s and after. The course includes an evaluation of the role of American interest and power in establishing an international system in the aftermath of Cold War bi-polarism.

HIS 370

History and Cultures of the American Southwest

(Prerequisites: ENG 100/101)

An examination of what has attracted people to the Southwestern United States over the last thousand years and how people have changed and enriched the region with their diverse cultural, social and economic contributions. Places race relations, immigration issues and environmental concerns, resource use, cultural beliefs, gender roles, public order and working life into historical perspective. May involve work in oral history.

HIS 400

History and Historians: Theories & Methods

(Prerequisite: ENG 240)

This course investigates the important methodologies and theories of history that buttress contemporary historical scholarship. Instead of being a general introduction to historiography, the course focuses on the philosophical foundations of historical practice today. We will read historians who reflect critically on their historical assumptions and the historical framework of their interpretations. In the process of reading these historians, this seminar will examine four major theoretical frames that powerfully influence contemporary historical scholarship.

HIS 410

The California Experience +

(Prerequisites: ENG 100/101)

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 100/101)

An examination of the dynamic convergence of economic, geopolitical and racial factors that contributed to the most explosive conflict in U.S. history. Focuses on the consequences of the war for sub-

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sequent American historical development.

HIS 431

The Ancient World

(Prerequisite: English 100/101 and History 233)
This upper-division course investigates major issues in ancient world history from roughly 5000 B.C.E. to roughly 500 B.C.E. Topics examined include the Neolithic revolution; the rise of settled agriculture; complex societies and organized states in Mesopotamia, the Nile Valley, the Indus Valley, the Yellow River Valley, the highlands and lowlands of Mesoamerica, and the Andes; the Indo-European and Bantu migrations; the rise and decline of great powers in North Africa, Southwest Asia, and East Asia; and the formation of Aegean civilization in Greece. Examining these topics, the course will stress issues of gender, class, religion, as well as urban life and rural social relations in Asia, Europe, Africa, and the Americas. One of the chief emphases of the course will be the interpretation of primary sources.

HIS 432

The Classical World

(Prerequisites: English 100/101 and History 233)
This upper-division course focuses on important issues in world history from roughly 500 B.C.E. to roughly 500 C.E., a seminal period called the Classical Age. Topics examined include Classical Greek culture and influence; the Hellenistic world ecumene; religious and philosophical innovation (Socrates, Confucius, Buddha, Zoroaster, Christ); the unification of the Mediterranean world under the Roman Empire; the unification of China under the Qin and Han dynasties; the unification of India under the Mauryan Empire; the culture of Roman, Han and Mauryan societies; the decay and fall of the Roman, Han, and Mauryan empires; and the rise of important regional states like Meroe and Aksum in northeast Africa, Angkor in Cambodia, and Teotihuacán and the classical Maya city-states in Mesoamerica. Major emphases of the course will be the seminal nature of classical civilizations and the construction of historical interpretation through the analysis of primary sources.

HIS 433

The Post-Classical World

(Prerequisite: English 100/101 and History 233)
The post-classical world (ca. 500 C.E. to ca. 1500 C.E.) laid the foundations for our modern world. A list of those foundations include the expansion and subsequent collapse of Byzantium; the nomadic invasions of western Europe and the development of feudalism; the rise of a militant Christianity under Charlemagne and the later Crusades; the rapid geographic dispersion of a militant Islam; the diffusion of Indian classical culture to Persia and Southeast Asia; the reunification of China under the Sui and Tang dynasties, the commercial revolution of the Sung dynasty, and the cultural revival of the Ming dynasty; the warfare and territorial organization that characterized Japanese feudalism; the development of states in eastern and southern Africa; the urban civilizations of Mesoamerica; and the settlement of the Polynesian peoples throughout the Pacific. Examining these topics, the course will stress issues of gender, class, religion, and social change in Asia, Europe, Africa, the Americas and Oceania. The course will explore the historiography of the era in depth.

HIS 434

The Modern World, 1500 to the Present

(Prerequisite: English 100/101 and History 234)
The world has changed remarkably since 1500. In this course we will explore some of the more important transformations. They include the colonial expansion of Europe from 1500 to 1750; the transformation of Europe and the Atlantic world from 1500 to 1770 under the impact of the slave trade and the later triangular trade; the rise and fall of Islamic empires of South and Southwest Asia; the emergence of new regional powers in Eurasia (Russia and Japan); the political and social

revolutions in the Atlantic world from 1770 to 1825; the industrial revolution and the creation of a new imperial order around the globe after 1825; political and social revolutions in Eurasia and Latin America from 1900 to 1949; global wars and their political, social and economic consequences; national liberation movements and the decolonization of Africa and Asia; the rise and fall of a bipolar world; and the crises and realignments of the post-Cold War world. The course will highlight questions of race, class, and gender in these transformations and it will emphasize the integration of primary sources into an interpretive framework created by students.

HIS 490

Guided Study

(1.5-4.5 quarter units)

Individual study under direction of instructor.

Requires prior approval of appropriate academic department.

HIS 499

Capstone Research Project

(Prerequisite: 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 or creative project 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.

HRM – Human Resources Management

HRM 409B

Survey in Human Resources Management and Organization Development

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

Recruiting, Selection, Promotion, and Retention

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 and Benefit Administration, and HR Technology

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 are 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, Regulatory, and Labor Relation Concerns in HRM

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, and Safety Issues in Human Resource Management

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, including employer use of power, organizational business practices, and safety concerns.

HRM 633A

Seminar in Employee Relations, Labor Relations and Union Management

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 and 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 Planning, Development and Outsourcing

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 and Practice of Human Resource Management

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 and 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

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fundamental aspects of wage, salary, benefit administration, and employee rewards and incentives as they are becoming increasingly supported by automated systems.

HRM 669

Research Seminar in Human Resource Management Corporate Strategy

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 encompasses 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.

HSC – Health Science

HSC 300

Legal and Ethical Issues and Health Professions

(Prerequisites: Preparation for the major courses)
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 and Trends in Health Care

(Prerequisite: HSC 300)
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. In-patient, outpatient, and long term care will be explored.

HSC 400

Management for Health Professionals

(Prerequisite: HSC 310)
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 Professionals

(Prerequisite: HSC 400)
Focuses on the role of informatics in contemporary health care. Wireless and mobile computing, maintaining data integrity, information security and confidentiality and HIPPA, telehealth, and electronic health records (EHR) will be explored.

HSC 420

Allied Health Research

(Prerequisite: HSC 330)
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

(Prerequisites: HSC 410 and HSC 420)
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: HSC 420 and HSC 430)
This two-month capstone project undertaken by allied 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 by "H" for honors, "S" for satisfactory, and "U" for unsatisfactory.

HUB – Human Behavior

HUB 301

Behavioral Science

(Prerequisites: ENG 100/101 and PSY 100)
A study of the application of human behavior and behavioral science principles to the practice of management.

HUB 400

Group Structure and Dynamics

(Prerequisites: ENG 100/101 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 100/101 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 100/101 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 100/101 and PSY 100)
A study of the theoretical and practical aspects of interpersonal and group communication.

HUB 440

Organizational Development

(Prerequisites: ENG 100/101 and PSY 100)
A study of human relations and its relationship to organizational effectiveness through planned change and technological development.

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 of Human Behavior

(Prerequisites: ENG 100/101 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

Contemporary 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 Professional 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 and Communication

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-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

Foundations of 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

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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 **Organizational Assessment**

(Prerequisite: 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 680 **Integrative Project in Human Behavior**

(Prerequisite: HUB 650)

The course is the capstone project for the MAHB program. Each student conducts a major project that integrates a topic of special interest. The project will analyze and synthesize theoretical and applied concepts from a specialized area selected by the student. Specific course requirements will vary depending upon the instructor, but the student should expect to produce a 20–30 page paper (APA style) that will be evaluated on clarity, thoroughness, style, format and creativity. An oral presentation of the student's work is also expected. Literature reviews and empirically-based studies are the norm, but other formats are acceptable with the approval of the instructor. The project is conducted for a two-month period and the student may take other courses concurrently if approved by the Committee for the Application of Standards (CAS). The student will normally be required to develop a project proposal during HUB 650 (Foundations of Behavioral Research) or HUB 660 (Organizational Assessment) that can then be completed during the capstone course. This course may not be taken as an independent study.

HUB 690 **Guided Study**

(1.5-4.5 quarter units)

An individual study under direction of the instructor. Requires prior approval of appropriate academic department.

HUM – Humanities

HUM 490 **Guided Study**

(1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

HUM 501 **Civic Culture and Global Awareness**

(Prerequisite: ENG100/101)

Covers the relationship between knowledge and the interdependence of people and focuses on such concepts as citizenship, change and the challenges of migration/immigration patterns, cultural shifts and transnational positioning in our global economy. Also covers the major trends shaping our emerging future and explores the role of citizenship education in perpetuating the value systems that provide the requisite knowledge, skills, attitudes and behaviors for a civil global society. Addresses the needs of the future workplace and marketplace demands and provides a framework for dealing with global citizenship issues and the

collaborative enterprise of community-building, economic development, social responsibility and service.

IBU – International Business

IBU 653 **Global Business & Strategic Planning**

Global Business & Strategic 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.

IEM – Industrial Engineering

IEM 601 **Engineering Economy**

Economic decisions making for engineering projects and capital expenditure proposals. Concepts of time, value of money, cash flow, and capital rationing. Basic comparative models for evaluation alternatives, sensitivity and probability analysis, depreciation and tax consequences, replacement studies, consideration of intangibles. Economic analysis under conditions of risk and uncertainty with particular emphasis on econometric models applied to engineering systems.

IEM 602 **Managing Production Planning and Control**

Analysis of research literature for topics including scheduling capacity planning and lot sizing applied to manufacturing and production. Advanced quality assurance and control topics including multivariate quality control methods, machine control, flexible communications networks, forecasting to develop master production schedules, coordinate inventory ordering policies, periodic review, sequencing and scheduling methods of flow and job shops, principles and methods of analyzing and solving production problems.

IEM 603 **Managing Facilities Planning Layout**

Systematic plant layout methods, analytical and computer-aided approaches for the layout program, location models and analysis, material handling concepts, models, and equipment, warehousing and storage principles and models-automation in facilities design, study of facilities location, structure, and planning for efficient layout and material handling systems. Planning and designing facilities, layouts, and material handling system.

IEM 604 **Ergonomics and Occupational Safety**

Overview and introduction to ergonomics; introduction to physiology; man and the environment; biomechanics; occupational and industrial psychology; introduction to occupational medicine; human attention, vigilance and error; introduction to anthropometry; presentation and display of information; mental workload; respiratory protection; survival in extreme conditions introduction to occupational hygiene; introduction to epidemiology; analyzing work and work station design; manual handling; upper limb and back disorders.

IEM 605 **Engineering Applications of Operations Research**

Application of linear programming and non-linear programming queuing theory, development and application of planning and inventory models, networks, and graph techniques, stochastic processes, waiting lines, simulation, and sequencing and scheduling algorithms to problems encountered in industry and business.

ILD – Instructional Leadership

ILD 603 **Curriculum Alignment and Evaluation for School Administrators**

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 680 **Research in Education**

Designed to provide knowledge and skills required for students to plan and complete a thesis proposal. This course requires that students utilize a high level of library research and computer technology to locate relevant research and literature. Students must design a project related to one of the "core" courses, justify the problem statement(s), provide literature review and map out the methodology to implement the project utilizing APA format.

ILR – Information Literacy

ILR 260 **Information Literacy and Report Writing**

(Prerequisite: ENG 100/101)

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.

IOP – Industrial Organization

IOP 615 **Industrial and Organizational Psychology**

Graduate level introduction to industrial and organizational psychology with emphasis on selection, training, performance appraisal, work motivation, and organizational determinants of employee behavior and effectiveness.

IOP 630 **Research and Statistics I**

(Prerequisites: If taken after the sixth course in the program, the Prelim Exam must have been passed.)

A study of the methods, procedures, and techniques used in the conduct of empirical research on phenomena of interest in Industrial, Organization and Work Psychology or Ergonomics. Design of research will be covered including philosophy of science, forming research questions, ethics in psychological research, psychological constructs, operational definitions, and strategies for experimental, quasi-experimental, and survey research. Descriptive and inferential statistics will be covered including hypothesis testing, sampling distributions, confidence interval estimates, non-parametric statistics, and correlation and regression.

IOP 631 **Research and Statistics II**

(Prerequisite: IOP 630)

A continuation of the study of the methods, procedures, and techniques used in the conduct of empirical research on phenomena of interest in Industrial, Organization and Work Psychology or Ergonomics. Design of research will be covered including consideration of threats to internal and external validity and qualitative analysis. Emphases will be given to the use of SPSS in multiple regression, analysis of variance, factor analysis, and testing models of mediation and moderation. Statistical approaches to meta-analysis, causal modeling, and measuring change will be covered.

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IOP 635 Psychological Measurement (Prerequisite: IOP 631)

Provides graduate students in psychology and human behavior with an understanding of and ability to evaluate various psychometric theories and methods and apply them in practical situations. In addition, the student will be able to analyze, integrate and evaluate the classic articles in psychological measurement and apply them to dealing with current issues related to measurement in psychology.

IOP 640 Work Motivation (Prerequisite: IOP 615)

Provides the student the initial background necessary to begin dealing with the issues of motivation and behavior at work. It covers both contemporary and classic theories of work motivation including need, cognitive, and reinforcement theories. It examines the sources and consequences of job satisfaction. It also analyzes and evaluates goal setting, VIE theories, job enrichment, reward systems and worker participation. Finally, it evaluates current applications of motivational principles in business and industry and compares research approaches to the study of motivation in the workplace.

IOP 645 Training in Organizations (Prerequisites: IOP 610 or IOP 615)

A study of the theory and techniques used to design, conduct, and evaluate instructional programs. The basic phenomena of learning such as modern learning theory, principles of adult learning, and conditioning as well as the different approaches to training such as computer assisted instruction, simulation, behavior modification will be covered. Training in a multicultural context and training evaluation will be emphasized.

IOP 650 Organizational Development (Prerequisite: IOP 615)

Encompasses theory and research about facilitating change in individuals, groups, and organizations to improve their effectiveness (e.g., productivity, quality, service, employee satisfaction). The course focuses on understanding OD, how to diagnose an organization and then create an intervention to improve it. The course covers many organizational development theories, diagnostic techniques, and consulting skills needed to use the information to create change. Specific interventions will be examined in detail including structural interventions (e.g., organizational design, job design), interpersonal process interventions (e.g., process consultation, team building), and human resource interventions (e.g., performance management, career development). The course builds knowledge and provides practical application in the some of the techniques.

IOP 655 Attitude Theory and Measurement (Prerequisite: IOP 635)

Focuses on the attitudes, opinions, and beliefs important in organizational settings. Principles of questionnaire and rating scale development for attitude and opinion measurement will be covered. The determinants, consequences, and measurement of job satisfaction and related constructs such as involvement and commitment are included. The practical skills of designing, administering, analyzing, and reporting survey results of employee attitudes and behavior will be also covered.

IOP 660 Applied Measurement in I-O Psychology (Prerequisite: IOP 635)

Covers the application of psychometric principles in individual, team, and organizational assessment, career development and personnel psychology applied to work. Assessments of human attributes

(e.g. aptitudes, abilities, personality and vocational interests) and their role as behavioral determinants in organizations is emphasized. Methodological issues encountered in the assessment of psychological traits and types will be covered. Topics include work analysis, criterion development including performance measurement, measurement of knowledge, skills, abilities, and other characteristics related to successful work performance, and legal and ethical issues in employment.

IOP 665 Performance Appraisal and Feedback (Prerequisites: IOP 635 and IOP 615)

Centers on the methods of measuring and evaluating individuals as they perform organizational tasks and on taking action (administrative and/or developmental) with individuals based on such appraisals. The course focuses on both knowledge and skills. The knowledge base includes a thorough understanding of rating scale construction and use, as well as understanding of the relative advantages of different rating sources (e.g., supervisory vs. peer). Also relevant are the areas of measurement theory, data analysis, criterion theory and development, motivation theory, and the factors that underlie interpersonal perception and judgment. The skill base includes procedures for communicating performance evaluations to job incumbents and counseling them in appropriate means of improving their performance. Also, skill in designing a complete performance appraisal and feedback system that meets organizational needs while maintaining and/or enhancing worker motivation and/or performance is addressed.

IOP 690 Advanced Seminar in I/O Psychology

This seminar will address various advanced topics in I-O Psychology consistent with student interest and faculty availability. Topics may include Consumer Behavior, Compensation and Benefits, Industrial and Labor Relations, and Employment Regulation. As a seminar the instructor and students will select the most current research and application literature material on the topic and will then analyze and critically evaluate it for potential research and application. Students may also take courses in the Human Factors/Ergonomics program to meet this requirement.

IOP 695 Field Placement in I/O Psychology

(Prerequisites: Completion of Prelim and Competency Exams)
The student will be actively engaged in projects under the supervision of a qualified supervisor at the site and of an assigned faculty member. The projects will be aimed at fulfilling specific training objectives mutually agreed to by the student, supervisor, and faculty member with special emphasis given to the acquisition and application of skills. The student will accumulate 200 hours of applied experience in I-O Psychology over a period of from 2 to 6 months. During the period that the Field Placement is active the student will meet for 3 hours per month in group supervision experience with a faculty member. This group supervision will deal with ethical problems encountered by the student and will give the student an opportunity to report on the activities of the placement and discuss the knowledge, skill, and abilities being acquired within the placement assignment. At the end of the placement the student presents a written report on the placement to the faculty.

ITM – Information Technology Management

**ITM 310
Introduction to Information Technology**
An introduction to information technology infrastructure concepts and applications in an integrated information system environment. Focuses on

understanding the importance of IT for various types of IT applications within an organization. Topics will include: overview of hardware, software, data resources, telecommunications and networks. The course provides an overview of “what” Information Technology is and how to apply IT in various organizations.

ITM 320 Information Technology Management (Prerequisite: ITM 310)

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 Applications and Information Technology 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 Information Technology Desktop Support (Prerequisite: ITM 330)

As a follow-up to ITM 330, this course will introduce the critical role of desktop administration, application installation and desktop support. Topics include security, file backup and recovery, information sharing, user authentication, an introduction to website programming concepts using tools such as Microsoft Systems Management Software. The emphasis of this course is on installing, monitoring and the administration of desktop technologies within the client / server architecture for organizational use. Hands-on labs are included.

**ITM 410
Computer Network Technologies 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 Data Communications, Internet, and Local Area Networks

This course covers the network management principles, practices and technologies for managing networks, systems, applications and services. Review of the latest computer network technologies, such as ATM, Gigabit, Ethernet and Fiber Optic connections. Build on LAN basics from ITM 410, 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. Also covers integrated high-performance router and switch technologies.

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ITM 430

Network Management and Security

(Prerequisite: ITM 410 and ITM 420)

An overview of the management tools necessary to understand the LAN hardware and software for client server architecture technology. Focuses on the installation and management of the LAN 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 440

Database Systems Concepts and Data Modeling

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

Database Processing and Administration

(Prerequisite: ITM 440)

This course will provide students with the knowledge and skills necessary to install configure and administer 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 490A

Information Technology Project I

(Prerequisite: 9 of the 10 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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work, or "U" (for Unsatisfactory, "D" or below).

ITM 490B

Information Technology Project II

(Prerequisite: 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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work, or "U" (for Unsatisfactory, "D" or below).

LAS – Language Arts

LAS 100

Spanish I

An introduction to elementary Spanish conversation, reading and writing in a comfortable environment. Gives students insight into the Spanish-speaking world, including the United States.

LAS 101

Spanish for Native Speakers I

The first of a two-course sequence. Spanish for Native Speakers is designed for bilingual students seeking to become bi-literate. Reading and writing skills are stressed with special emphasis on improvement of written expression, vocabulary development and problems of grammar and orthography. This course seeks to prepare native speakers with little or no formal training in Spanish for more advanced courses.

LAS 200

Spanish II

(Prerequisite: LAS 100)

A presentation of intermediate Spanish conversation, reading and writing in a comfortable environment. Gives students insight into the Spanish-speaking world, including the United States.

LAS 201

Spanish for Native Speakers II

Spanish for Native Speakers II is the second of a two-course sequence designed for bilingual students seeking to become bi-literate. Reading, writing and critical thinking skills are stressed with special emphasis on improvement of written expression, vocabulary development and problems of grammar and orthography. This course seeks to prepare native speakers for college-level communication, comprehension and written expression.

LAS 300

Spanish III

(Prerequisite: LAS 200)

A presentation of advanced Spanish conversation, reading and writing in a cultural studies context. Gives students information about Spanish-speaking cultures in the Americas, particularly the United States. Topics may include history of local communities, labor and educational issues and issues of identity.

LAS 340A

Spanish in the Professional Work Place for English Speakers +

An introduction to Spanish grammar structures, vocabulary and information in cultural interaction. Gives English-speaking students an effective tool for communication with Spanish speakers in the work place.

LAS 341

Applications of Cross-cultural Communication in the Work Place +

An examination of the basic cultural differences generally encountered in the workplace. Gives students strong experience and clear perspectives on cross-cultural communication in the work place. Covers modes of teaching including theatrical representation, lectures, videos, guest speakers and oral presentation.

LAS 400

Guided Study in Spanish

(1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

LAW – Law

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

(Prerequisite: 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 311

Legal Research and Writing

A comprehensive overview of legal research using primary/secondary, federal and state legal authorities. Emphasizes use of both manual and computer-assisted legal research strategies for actual problem-solving applications. Introduces legal writing skills through class instruction and practical exercises to develop a systematic approach to concise legal writing.

LAW 400

Current Legal Issues

A study in the use of our legal system to resolve societal and individual problems. Reviews contemporary issues including minority rights, abortion, free speech and criminal justice.

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 Oral Argument

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

Introduction to Law and 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 605

Legal Issues in Business

A survey of contracts, sales, agencies, personal property, commercial paper, business organizations (partnerships, corporations, and related governmental regulations), real property, leasing estates, community property, business torts, business crimes, and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

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LED – Organizational Leadership

LED 400

Introduction to Leadership

This course provides the student with the opportunity to examine core issues in the practice of leadership. The class will identify differing theories and styles of collaborative, integrative organizational leadership and compare them to authoritarian or management by edit within the organizational context. An emphasis will be placed upon developing a personal, ethical leadership style that is applicable in the daily business of the 21st century. The differences in leadership between traits and behaviors will be addressed. Emphasis will be placed on learning to create a community of leadership throughout the organization as well as an understanding of fundamental leadership concepts.

LED 410

Leading in Diverse Groups and Teams

Diverse groups and teams present special challenges to the leader. This course will examine the application of leadership theory to groups that are diverse in gender, ethnicity, education, and functional expertise. Special emphasis will be placed upon the role of the leader in establishing effective collaboration among the members, and in assuring all members of the group have equal inclusion in the decision making process. Additionally, special attention will be given to the inequitable application of power that occurs in groups and teams.

LED 420

Adaptive Leadership in Change

Change is a constant and continuous 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. A focus of the class will be to encourage the development of strategies to enhance the buy-in to change among the members of the organization as a tool to improve the transition process. Students will develop skills in assessing organizational culture and learn to create the learning organization of the future.

LED 430

Conflict and Negotiation for Leaders

Negotiation is a focal skill for leaders in the organizational structure. 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 Organizational Function

The degree to which function responsibilities of an organization are integrated serves as a major contributor to the overall success of the organization. This course introduces the student to the major areas of responsibility for each of the functional areas of a modern organization. While not designed to make the student an expert in all functional areas, this course helps the student to develop an understanding of the role each function plays in the success of the organization, and teaches strategies for the leader to use to enhance the integration of the 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

As increasingly more work is done in groups, effective leadership needs a greater understanding of group phenomena. This course will explore

advanced topics in understanding groups and team formation, hidden agenda items of team members and strategies to navigate difficult behavior or challenging groups. This course will involve experiential learning of group dynamics, examining phenomena and the impact of leadership.

LED 460

Ethics and Decision Making in Leaders

The ability to make appropriate decisions is learned and develops over the entire life of the leader. Beginning with the fundamentals of definitions of ethical terms, students will apply ethical frameworks to case studies and hypothetical situations. This course examines the many components that influence decision-making by leaders, including cultural relativism, legal responsibilities, prescriptive approaches and universal principles. An emphasis will be placed on considering the potential impact of decisions on the organization and transparency in the decision making process.

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

This course should be taken toward the completion of the BSOL course work, as it allows the student to develop strategies and resources to assist 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. The use and comparative value of commercial websites, mass media, trade press and academic literature in the context of the leadership and business disciplines will be explored. Students will have the opportunity to explore current research, and emerging theories in their area of interest and expertise.

LED 490

Leadership Capstone Project

(Prerequisite: 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.

LED 601

Theories, Practices, and Ethics of Leadership

In this course, students begin to develop an understanding of the theories, practices, and ethics of leadership. Students identify and assess their own leadership philosophy then analyze the relationship between their leadership philosophy and selected theories of leadership. Students evaluate leadership theories, concepts and approaches. Students integrate ethical decision making processes and assess the potential impact of leadership strategies on organizations.

LED 602

Developing and Implementing 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

Organizational Leadership

The role of organizations and organizations' leadership in a society characterized by technological integration, geographic decentralization, and instant communication will be discussed. Topics to be covered include leadership theory, acquisition of power and influence, charisma, participative and transformational forms of leading. The course will examine organizations within the private and public sectors, and will draw upon diverse perspectives and ethical considerations.

LED 604

Change and Adaptation within Organizations

This course looks at today's business environment and the pervasiveness of change. Course topics will focus on continuous and discontinuous 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 on organizational culture will be examined. Students will strengthen their leadership skills and strategies in order to initiate and implement change in organizations through problem-solving experiences and forecasting exercises across a broad range of organizational contexts.

LED 605

Negotiation, Bargaining, and Conflict Resolution

This course focuses on 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 assess leadership skills used to navigate a conflict situation and utilize negotiation. Students will begin to detect conflicts as potential clues of organizational challenges.

LED 606

Information Management for Leaders

This course focuses on the strategic role of information technology in today's learning organizations. Emphasis is placed on the application of information technology strategies to strategic planning, client/customer analysis, rapid decision-making, and problem solving. Topics will include the use of information as an organization resource; integration of information into the vision, mission, goals, and assessment of practices of organizations; the use of advanced information technologies to implement change; and analysis of information to achieve competitive advantage. Emphasis will be placed on the technical skills needed in storing, updating, and retrieving information; building and using Web-based applications and business forecasting. Students will participate in a classroom/laboratory environment to facilitate application of theory to real world situations.

LED 608

Seminars in Leadership

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, 5th 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.

Course Descriptions

LED 609

Capstone Project Course

(Prerequisite: MNS 601 and five leadership courses)

Working in teams and/or as individuals under the guidance of the instructor, students clarify research topics and identify scholarly sources from which data is gathered in preparation for the project. Students choose from a thesis, applied business research, comparative study or case study. Students then gather data and/or analyze research and present their capstone project in both written and oral form to the client organization, if applicable, and to other students and faculty. The capstone project is the culmination of the student's learning and must be submitted in scholarly format to be completed. Completion of a research statistics course and a minimum of five leadership courses is required as prerequisite to this course. Grading is by "H" for honors, "S" for satisfactory and "U" for unsatisfactory.

LIT – Literature

LIT 100

Introduction to Literature +

(Prerequisites: ENG 100/101)

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 311

British Literature I

(Prerequisite: 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

(Prerequisite: 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 321

American Literature I

(Prerequisite: 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

(Prerequisite: 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 337

American Literature +

(Prerequisite: LIT 100)

An examination of literary heritage of the United States. Includes study of major works and movements in a variety of genres.

LIT 338

Shakespeare

(Prerequisites: LIT 100)

An examination of major works of William Shakespeare.

LIT 342

World Literature +

(Prerequisite: LIT 100)

An introduction to the literary arts of Africa, the Middle East, Asia, Latin America, the Caribbean and Native North America. Presents a variety of genres, as well as both classical and contemporary works.

LIT 345

Mythology

(Prerequisite: 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

(Prerequisite: LIT 100)

A survey of major classical and contemporary arguments about the nature of literature, literary expression, and literary experience.

LIT 430

Children's Literature and Literacy

(Prerequisite: LIT 100)

Provides students with the foundations necessary for teaching children to read and learn through reading. It emphasizes the role of literature in literacy development and learning across the curriculum from K-8. Students learn to identify the stages in reading development, to select appropriate literary texts for diverse learners at each stage, analyze children's literary texts and assess the developing literacy and language development of young learners.

LIT 443

World of the Short Story

(Prerequisite: 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

(Prerequisite: LIT100)

Focused study of a particular theme, genre, period, or author.

LIT 450

Studies in the Novel

(Prerequisite: LIT 100)

Focused study of a particular theme, genre, period, or author.

LIT 456

Studies in Drama

(Prerequisite: 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

(Prerequisite: 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.

MAT – Teaching

MAT 612

Technology as a Learning Tool for Teachers

This course focuses on ways to integrate technology as a tool for communication, inquiry, and construction for meaningful learning in K-16 and corporate classrooms. Students apply traditional learning theories to new technology-based methods and techniques, including lesson-based Web

projects, chat sessions, and virtual learning communities. Students attain a working knowledge of how to evaluate and operate selected software, design web pages and WebQuests, download files, use listservs, manage school servers, and utilize firewalls. Students wrestle with contemporary issues involving the protection of children on the Internet, copyright law, netiquette, censorship, and the future of the Internet.

MAT 640

Applications of Research for the Art of Teaching

This course is designed to provide classroom educators with the knowledge and skills required to understand, interpret, generate and evaluate research relevant to their lives as professional educators. The work of the classroom educator will be emphasized throughout the course as students produce a major educational writing project. This course will include relevant aspects of professional writing, while remaining focused on the practical needs of the classroom educator who wishes to join the larger professional community in their field of specialty. Must be taken as the last course in the MAT program.

MAT 641

Cultural Democracy: Contemporary, Local and Global Issues

The course content examines the ways in which individuals in institutional roles operate on culturally democratic policies and practices, including how formal and informal political forces influence culturally democratic programs and culturally relevant curriculum development and implementation. The course emphasizes successes in systemic multicultural competency development and examines the observable and hidden evidence of organizational transformation.

MAT 642

Program Design: Curriculum Theory, Design and Assessment

This course examines the underlying principles that have shaped outcome based learning; content based standards, accountability and need for education reform. The course will emphasize evaluation of school programs, student assessment and program design using the California Coordinated Compliance Review guidelines.

MAT 643

Models of Teaching, Theories, Applications and Practice

This course explores how a variety of teaching models and learning theories are applied in instructional contexts. Specific application of some models and theories will be discussed in class and presented in student-designed curriculum projects.

MAT 644

Foundations and Principles 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 is provided through student-designed analyses of curriculum.

MAT 645

Developing Fluency in Reading

Provides a research-based analysis of the phonology, morphology and orthography of English, with attention to teaching students at all grade levels to become proficient readers through recognizing sound-print relationships. Candidates will incorporate current approaches to phonemic awareness, explicit phonics instruction, recognition of high-frequency words and spelling patterns for both English language speakers and English language learners.

Course Descriptions

MAT 646

Comprehension Strategies and Procedures

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 and B

Language Arts Assessment and Instruction I and II

(Prerequisites: MAT 645, MAT 646)

A two-course series that develops the ability to assess the strengths and needs of students in reading, writing and oral expression 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. Candidates must complete a field experience requiring assessment and instruction of students, including non-readers and English language learners. Grades will be assigned at the end of the second course.

MAT 650

Teaching English Language 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 670

The Theory of Research-Based Best Practice Instruction: An Overview

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

Applied Best Practice Strategies in Classroom Instruction

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 672

Integrating Multimedia Interactive Technology in Best Practice Instruction

Students in this course will learn how to integrate, differentiate, align and individualize instruction using technology and multimedia technologies.

MAT 673

Differentiated Instruction and Target Teaching

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.

MCW – Creative Writing

MCW 600

Pedagogy of Creative Writing

This graduate level seminar 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 620

Writing Internship

MCW 620 will provide students with an opportunity to gain firsthand experience in teaching, publishing, tutoring, editing, and other writing-related activities. In MCW 620 the student will be actively engaged in projects under the supervision of a qualified supervisor at the site and of an assigned faculty member. The projects will be aimed at fulfilling specific objectives mutually agreed upon by the student, supervisor, and faculty member with special emphasis given to the acquisition and application of professional skills. The student will accumulate a minimum of fifty (50) hours of applied experience in MCW 620 over a period of from 2 to 6 months. During the period that the internship course is active (two months) the student will maintain regular online meeting hours with peers and the faculty member. The class assignments will promote discussion on the specific problems encountered by the student and will give the student an opportunity to report on the activities of the internship and discuss the knowledge, skill, and abilities being acquired within the internship assignment. At the end of the internship the student presents a written report on the experience.

MCW 630

Seminar in Fiction

Students will write and critique each other's original work in this advanced fiction workshop. In a workshop-style format, students will explicate and critique how the elements of fiction - details, action, structure, theme, language, setting, rhythm, narration and style - are utilized in published and student-generated works. Through reading and critical analysis, students will further define the genre, examine its many forms, and analyze the trends and patterns in literary fiction.

MCW 630A

Advanced Workshop in Fiction

In this intensive writing workshop, students will work closely with an established writer to further their development as a creative writer and critical thinker. Students will read classic and contemporary works of fiction in order to more fully understand concepts such as narrative structure, character development, point of view, tone, and theme. 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 MCW630B)

MCW 630B

Advanced Workshop in Fiction

In this intensive writing workshop, students will work closely with an established writer to further their development as a creative writer and critical thinker. Students will read classic and contemporary works of fiction in order to more fully understand concepts such as narrative structure, character development, point of view, tone, and theme. 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 MCW630A)

MCW 640A

Advanced Workshop in Poetry

This intensive workshop on the practice of poetry 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. (May not duplicate content of MCW640B)

MCW 640B

Advanced Workshop in Poetry

This intensive writing workshop on the practice of poetry 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. (May not duplicate content of MCW640A)

MCW 645

Seminar in Poetry

This seminar includes a study of the history and practice of poetry through an understanding of poetry forms. The focus is on defining poetry through close reading of a rich selection of both traditional and contemporary exemplars of the various forms, and on the reading, critical analysis and writing of poetry in workshop-style format.

MCW 650

Seminar in Creative Nonfiction

An advanced study of the forms of creative nonfiction, such as memoir, autobiography, nature writing, literary journalism, and the personal essay. Through reading, critical analysis and writing in a workshop-style format, students will further their understanding of the features of creative nonfiction, will strengthen their own writing in all genres, and will broaden their understanding of literature and various modes of literary writing.

MCW 650A

Advanced Workshop in Literary Nonfiction

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 MCW50B)

MCW 650B

Advanced Workshop in Literary Nonfiction

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 MCW650A)

MCW 660

Thesis I (Practicum)

Students in MCW 660 are required to work one-on-one with a faculty mentor in their particular field (fiction, nonfiction, screenwriting or poetry) to develop their thesis proposal and initial draft (a full-length, publishable-quality manuscript).

MCW 670

Thesis II (Revision)

In this capstone course, each student will submit a body of original work of publishable quality, appropriate in length to the chosen genre, with a preface in which the writer discusses his/her evolution as an artist and the evolution of the work. The student will work with a mentor in the development of this work.

MCW 680A

Advanced Workshop in Screenwriting

This intensive writing workshop is designed for

Course Descriptions

students to use professional screenwriting techniques in the creation of their own original screenplay. Building on skills learned in MCW680, students will take one of their own ideas and expand it into a short treatment, a detailed scene outline and, at minimum, 60 pages (one-half) of a full-length screenplay. Course assignments, readings and online discussions of both classic and contemporary films are devised to reinforce students' knowledge of three-act structure and provide them with new ways to best tell the idea of their choice. Peer review of works-in-progress will be used to provide writers a mode of creative support. Instructor feedback will offer new strategies on how to surmount possible stumbling blocks in the creative process. (May not duplicate content of MCW 680B)

MCW 680B

Advanced Workshop in Screenwriting

This intensive writing workshop is designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Building on skills learned in MCW 680, students will take one of their own ideas and expand it into a short treatment, a detailed scene outline and, at minimum, 60 pages (one-half) of a full-length screenplay. Course assignments, readings and online discussions of both classic and contemporary films are devised to reinforce students' knowledge of three-act structure and provide them with new ways to best tell the idea of their choice. Peer review of works-in-progress will be used to provide writers a mode of creative support. Instructor feedback will offer new strategies on how to surmount possible stumbling blocks in the creative process. (May not duplicate content of MCW680A)

MDC – Digital Cinema

MDC 650

Digital Film Production

This one-month online course explores the four stages of film production: development, pre-production, production, and postproduction. This overview of the digital and traditional components of film production provides students with the critical tools and terminology necessary to navigate the complexities inherent in the collaborative process of filmmaking. (Documents produced in this course are included as a part of the MFA-DC digital portfolio.)

MDC 651

Digital Cinematography

This two-month online course examines the history of film and digital cinematography, the comparative technical differences of the two methods, and the aesthetic aspects of cinematic practices. Students examine and evaluate cinematic techniques by watching select films and engaging in critical discourse on topics such as lighting, camera movement, camera angles, continuity, cutting, close-ups, and composition. Using digital and 35 mm. still cameras, students also apply cinematic and lighting techniques in controlled studies of digital and film image capabilities. (The results of studies are included as a part of the MFA-DC digital portfolio.)

MDC 652

Digital Video Editing

(Prerequisite: MDC 651)

This is a two-month online course that examines the history, aesthetics and theories of motion picture editing and the technical aspects of digital video editing. Students examine and evaluate editing techniques by watching select films and engaging in critical discourse on topics such as linkage, montage, rhythm, timing and continuity. Using still photographic images, students also apply editing techniques using digital video software to constructing short videos. (Video shorts are included as a part of the MFA-DC digital portfolio.)

MDC 680

Screenwriting

MDC 680 is an intensive writing workshop designed to enable students to complete the first 30 pages of a full-length feature screenplay. It will provide advanced study of the theory and practice of writing fiction material for production on film. (The screenplay excerpt is included as a part of the MFA-DC digital portfolio.)

MDC 683

Directing and Production Management

(Prerequisites: MDC 652)

Directing and Production Management is an onsite course where students receive practical production experience working in production teams. This one-month course is held at a National University Learning Center and must be taken concurrently with MDC 688 and 689. During the month students work in a collaborative environment using professional equipment to gain relevant production skills necessary to direct a digital motion picture. The course covers the pre-production and production aspects of directing as well as the necessary planning and logistical requirements of production management. Documents produced for this course are included as a part of the MFA digital portfolio. (An equipment rental fee applies to this course. For onsite residency details see the program catalog description.)

MDC 688

Digital Cinema Production

(Prerequisites: MDC652)

This intensive, onsite course is a pre-thesis practicum in the art and techniques of digital cinematography. This two-week course is held at a National University Learning Center and must be taken concurrently with MDC 683. Students work in production teams with digital cameras and lighting equipment in a variety of studio and exterior settings. During this course students apply such cinemagraphic techniques as camera movement, camera angles, continuity, and composition to shoot raw footage and make sound recordings that will be edited in the subsequent MDC 689 course. Footage shot during this course is included as a part of the MDC-DC digital portfolio. (An equipment rental fee applies to this course. For onsite residency details see the program catalog description.)

MDC 689

Digital Cinema Post-Production

(Prerequisites: MDC 652)

This is an intensive, onsite pre-thesis practicum course on the postproduction process of digital motion pictures. This two-week course is held at a National University Learning Center and must be taken concurrently with MDC 683. Students construct short motion picture sequences from footage shot in MDC 688 by applying editing and post-production techniques in a postproduction lab using digital video and audio editing software. Edited sequences are included as a part of the MFA-DC digital portfolio. (For onsite residency details see the program catalog description.)

MDC 691

Thesis Production

(Prerequisites: all other core courses in the program)

The MFA in Digital Cinema thesis consists of an original short subject digital motion picture, a critical evaluative summary of that project and the digital portfolio of previous work. While enrolled in this online course, an MFA candidate uses the online course interface, Internet and telephone conferencing to consult with the thesis advisor and plan, develop and create a digital cinema project. To be considered for graduation a candidate must submit the motion picture short, thesis evaluative summary and digital portfolio to a thesis committee within one year of the start of MDC 691. The thesis committee evaluates the digital portfolio and short subject project to determine whether the student has met the requirements for the MFA in

Digital Cinema as specified in the program outcomes. (For details see the program catalog description.)

MTE – Master of Education Teaching

MTE 600

Demonstrating Effective Teaching & Learning I: Assessment & Portfolio

MTE 601

Demonstrating Effective Teaching & Learning II: Assessment & Portfolio

MGT – Management

MGT 400

Ethics in Law, Business, and Management

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 409C

Principles of Management and Organization

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 422

Team Building, Interpersonal Dynamics, and Empowerment

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 development, organization, financing, and operation 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 and Operations 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 Entrepreneurship

A study of entrepreneurship with particular reference to creating and starting a new venture. Emphasis on historical development of entrepre-

Course Descriptions

neurship, 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**

This course is individual study under direction of instructor. It requires prior approval of appropriate academic department.

MGT 600 **Ethical Concerns in Business and Management**

An analysis of the values, ethics, and ideologies in American business and their applications to current issues in management and business within the contemporary socio-cultural setting, it focuses on corporate behavior and decision making. Through lecture, case study, debate, and readings, students develop an ethical outlook on a wide variety of workplace issues, such as discrimination, toxic wastes, advertising, product safety, and international operations.

MGT 602 **MGT 602S – Spanish Version** **Strategic Decision-Making in Global Business**

(A capstone course for MBA students. To enroll in MGT 602, MBA students must first complete at least 30 quarter units of the MBA program requirements, other than MGT 610C.)

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 GATT upon the strategic management of business enterprises. Explores global business opportunities provided through new technologies for both small firms and large corporations.

MGT 605 **Organizational Management and Leadership**

This course distinguishes the fundamental practices of sound management functions to the understanding of effective leadership. Organizations need both leadership and management understanding to function effectively in creating the learning organization. Students will learn to ana-

lyze and create plans for strategic management, and apply leadership concepts and approaches.

MGT 610C **MBA Project**

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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below). MGT 610C is two months in length.

MGT 620 **Global Business Environment**

An analysis of the global economic, political, and cultural patterns affecting international business, this course provides an overview of international trade 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 Organization 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 International Management**

This course is a study of the impressive gains registered by business in various non-American cultural and geographic settings (e.g., in Europe, Latin America, and Asia). It examines the reasons for these gains, the exportability, if any, of foreign management practices and skills, and the feasibility of adapting and combining different national management styles in the operations of domestic and multinational corporations.

MGT 640 **Operation Planning and Implementation**

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 and Regulations**

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 680 **Topics in International Business**

A graduate seminar in topics of emerging trends and areas of interest in international business, the topics might include marketing and doing business in Eastern Europe, implications and opportunities created by NAFTA, emerging markets for high-tech industries, and the progress of European market integration.

MGT 690 **Guided Study**

This is individual study under direction of instructor. It requires prior approval of appropriate academic department.

MKT – Marketing

MKT 402A **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** (Prerequisite: MKT 402A)

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 **Introduction to Global Marketing** (Prerequisite: MKT 402A)

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 integration, and international marketing.

MKT 434 **Introduction to Market Research** (Prerequisite: MKT 402A)

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 and Methodology**

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** (Prerequisite: MKT 402A)

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 **Introduction 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**

A survey of effective advertising techniques in multiple media (virtual, visual, radio, television) and advertising campaign allocation methods.

Course Descriptions

MKT 445 **e-Marketing**

An introduction to the mass, niche, and direct methods of marketing using a virtual platform including database, Internet, and interactive marketing techniques.

MKT 446 **Introduction to Services Marketing**

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**

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**

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.]
Prerequisite: MKT 402A]

MKT 480 **Marketing Capstone**

Prerequisite: MKT 402A and completion of 31.5 quarter units of upper-division core requirements.

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**

(Prerequisite: MKT 402A or 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 **MKT 631S – Spanish Version** **Global Marketing**

(Prerequisite: MKT 402A or 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 coordinat-

ing and controlling global operations. It also discusses the effect of trade agreements on international business.

MKT 633 **Sales Management**

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**

(Prerequisite: MKT 402A or 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 **Advertising Management and Marketing Communications**

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 660 **Strategic Operational Marketing**

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**

(Prerequisite: MKT 402A or 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 **Introduction to Quantitative Methods for Business**

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**

(Prerequisite: MNS 205)
A survey of the fundamentals of management science. Emphasizes the concepts and mathematical techniques most useful in business and finance.

MNS 601 **MNS 601 S-Spanish Version** **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 682 **Data Analysis for Decision Making**

In this course, the students are focused on the tools and methods for effective use of data in problem solving and making management decision. It emphasizes data management and proper ways to communicate the findings in an executive manner. This course covers probability, decision analysis, continuous distributions, hypothesis testing, forecasting, and regression. Exercises and examples are drawn from marketing, finance, and operations management. In addition, computer software will be used to demonstrate the use of the concepts and presentation techniques.

MSM – Multiple Subject Matter

MSM 301 **Teaching Elementary Physical Education**

A content course covering fundamental movements and movement concepts, fitness and movement forms. Also addresses issues of childhood growth and development, motor learning, nutrition, basic principles of movement and strategies of injury prevention.

MSM 499 **Multiple Subject Matter Capstone**

(Prerequisites: LIT 342 or SCI 335 or HIS 341)
This capstone course compares and analyzes how knowledge is produced across disciplinary boundaries by integrating the major areas of study in the Multiple Subject Matter program: language and literature, history and the social sciences, fine and performing arts, and sciences. Students produce a thematic unit that can be used in a particular K-8 curriculum; another course unit helps students prepare for the CSET exam. MSM 499 provides the scaffolding for students to complete the entire summative assessment project for the Multiple Subject Matter program.

MTH – Mathematics

MTH 012A **Beginning 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. (This course is remedial in nature and does not award collegiate credit)

MTH 012B **Beginning Algebra II**

Second of a two-course sequence extending skills and logical analysis begun in MTH012A. 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. (This course is remedial in nature and does not award collegiate credit)

MTH 204 **Mathematics for Business and Science**

(Prerequisite: MTH 012A & MTH 012B)
A review of basic mathematics principles for business, probability and statistics, physical, natural, and social sciences for non-mathematics majors. This course provides the necessary skills to be successful in MTH210, MTH215, SCI104 & SCI104A, SCI101 & SCI101A, SCI102, SOC100 and SOC260.

Course Descriptions

MTH 209A

Structure and Concepts of Mathematical Fundamentals I

(Prerequisites: Placement evaluation)

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

Introduction to Probability and Statistics

(Prerequisites: Placement Evaluation)

An introduction to 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 STATDISK 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. Teaches how to characterize data, select an appropriate model, solve for model parameters and use the model to predict. Discusses limitations, as well as the capabilities, of models as applied to understanding the real world and its inhabitants. Case studies are chosen to demonstrate useful applications. Graphing calculator is required.

MTH 215

College Algebra and Trigonometry

(Accelerated Course)

(Prerequisite: Placement Evaluation)

A continuation course in intermediate algebra. Examines higher degree polynomials, rational functions, trigonometry and matrix algebra needed for more specialized study in mathematics, computer science, engineering and other related fields. Computer usage is encouraged. This course satisfies computer science prerequisites. Graphing calculator is required.

MTH 216A

College Algebra and Trigonometry I

(Prerequisite: Placement Evaluation)

The first month of a comprehensive two-month treatment of algebra and trigonometry preliminary to more specialized study in mathematics, computer science, business, or other scientific fields requiring advanced mathematics. The course is a continuation of intermediate algebra and covers higher degree polynomials, rational functions transformations and the algebra of functions, matrix algebra and basic arithmetic of complex numbers. Graphing calculator is required.

MTH 216B

College Algebra and Trigonometry II

(Prerequisite: Placement Evaluation)

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 is required.

MTH 220

Calculus I

(Cross listed with CSC 208B)

(Prerequisite: MTH 215, or placement evaluation)

An introduction to limits and continuity. Examines differentiation and integration concepts with applications to related rates, curve sketching, engineering optimization problems and business applica-

tions. The fundamental theorem of calculus is presented with related techniques for numerical approximation. Looks at the ideas and contributions of Newton, Leibniz, Lagrange, Maria Agnesi and Riemann. Graphing calculator is required.

MTH 221

Calculus II

(Prerequisite: 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 Napier, Huygens and Pascal. Graphing calculator is required.

MTH 222

Calculus III

(Prerequisite: MTH 221)

A study of functions of several variables; extrema and Lagrange Multipliers as they apply to today's optimization-problems in engineering, business and ecology; Vector algebra and space geometry; and Kepler's Laws with application to satellite orbital velocity problems and the rendezvous phenomenon. Also examines integrated integrals and applications, the Jacobian transformation.

Highlights contributions by Mary Fairfax Somerville, Sonya Kovalevsky, d'Alembert, Laplace and Caroline Herschel. Graphing calculator is required.

MTH 223

Calculus IV

(Prerequisite: MTH 222)

A study of sequences, Taylor Polynomials, infinite series, 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. Also looks at undetermined coefficients and variation of parameter methodologies; the basis for solution space and applications to mechanical and electrical engineering. Provides an introduction to numerical solutions by Euler, Milne and Runge-Kutta. Highlights ideas and contributions of L'Hopital, Fourier, Srinivasa Ramanujan, Wronski and Sophie Germain. Graphing calculator is required.

MTH 301

Structure and Concepts of Mathematical Fundamentals II

(Prerequisite: MTH 209A)

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

Mathematics Practicum and Portfolio Project

MTH 311

Topics from Geometry

(Prerequisites: MTH 215)

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. Examines congruence and similarity of triangles, Pythagorean Theorem, the circle, construction of straight edge and compass and geometrical loci problems.

MTH 317

Mathematical Modeling

(Prerequisites: MTH 215 or MTH 216A/B and MTH 210)

A first course in mathematical modeling utilizing a variety of interesting, useful and diverse applications from the physical, biological, business, social and computer sciences. Discusses the limitations, as well as the capabilities, of mathematics as applied to understanding our world and its inhabitants. Teaches problem identification, models of solutions, model implementation, modification and maintenance using a case-study approach. Chooses case studies that are interesting, useful applications. Graphing calculator is required.

MTH 325

Discrete Structures and Logic Design

(Cross listed with CSC 206B)

(Prerequisites: MTH 215 or MTH 216A/B)

Discrete mathematics forms the theoretical foundation for much of today's advanced technology in computer systems communications, digital signal processing, neural networks, control systems and information theory. This course studies combinatorics and graph theory. Also 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 and Bernoulli. Graphing calculator is required.

MTH 410

Computer Technology in the Mathematics Classroom

(Prerequisite: MTH 215 or MTH 216A/B or MTH 209A)

An overview of the use of computer-based technology in mathematics educational environments. Evaluates graphing calculators and computer software such as LOGO, Geometric Supposer, Rocky's Boots, LOTUS, function plotters, MU Math, Calculus Pad and DERIVE to determine their value in illuminating concepts in the curriculum. Students compare generic or textbook software versus the process of writing programs. Discusses the impact of fast computations and graphics on the choice of topics in the mathematics curriculum. Addresses equity issues related to usage of computers and labs. Requires access to the National University computer lab.

MTH 411

Number Theory

(Prerequisite: MTH 215 or MTH 216A/B or MTH 209A)

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, Goldbach's conjecture and other unsolved problems of number theory. Emphasizes active student involvement in posing and testing conjectures, formulating counter examples, logical arguments and proofs.

MTH 412

History of Mathematics

(Prerequisites: MTH 215, MTH 216A/B, or MTH 209A)

An examination of the history of mathematics. Throughout history, mathematics has changed the way people view the world. This course examines currents in the development of mathematics 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. Readings and problems are taken from original as well as secondary sources.

MTH 416

Algebraic Structures

(Prerequisite: 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.

Course Descriptions

Also examines error correcting codes and issues of cryptography. Graphing calculator may be required.

MTH 417 **Foundations of Geometry**

(Prerequisites: MTH 216B and MTH 325)

A discussion of fundamental ideas and processes common to Euclidean and non-Euclidean Geometries, including projective, affine and metric geometry. Examines the interplay between inductive and deductive reasoning and formal and informal proof. Addresses uses in areas such as 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. Covers fundamental concepts of probability distributions, mathematical models relating independent and dependent random variables, hypothesis testing and experimental design. Study includes fundamental analysis of variance, various distributions and methods of regression, analysis and scaling. Popular software such as SPSS or Minitab may illustrate examples and concrete problems. Graphing calculator is required.

MTH 432 **Advanced Calculus**

(Prerequisite: MTH 223)

A look at sets, functions and the real numbers as an ordered set. Topics include the Completeness axiom, cardinality and Cantor's Theorem; sequences, subsequences, monotonicity and boundedness; the Bolzano-Weierstrass Theorem, LimSup and LimInf ; topology of \mathbb{R}^1 and \mathbb{R}^2 ; open sets and limit points. Also discusses compactness and the Heine-Borel Theorem; the properties of continuous functions, uniform continuity, the mean-value Theorem, inverse functions and differentiability; the Riemann integral and the Lebesgue Measure.

MTH 433 **Differential Equations**

(Prerequisite: MTH 223)

An analysis of the existence and uniqueness of solutions of ordinary differential equations with initial conditions. Examines linear systems of ordinary differential equations and the geometry of solutions of homogeneous linear ordinary differential equations. Discusses applications to electro-mechanical systems and the design of control systems. Graphing calculator is required.

MTH 435 **Linear Algebra**

(Prerequisites: MTH 325 and MTH 220)

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. Computer software demonstrates computational techniques with larger matrices. Graphing calculator or appropriate software may be required.

MTH 438 **Applied Mathematical Modeling**

(Prerequisites: MTH 325 and MTH 435)

A capstone course for the B.S. in Mathematics, this course culminates the mathematics major studies and should be taken at or near the end of the program. Addresses important problem areas such as political science, ecology, psychology, sociology, economics, anthropology, business and institutional planning using mathematical techniques from areas such as calculus, geometry, probability and

statistics, linear and matrix algebra and linear programming. Discusses principles and methods of constructing, analyzing, interpreting, evaluating and refining models. Compares mathematical models, including analytic and simulation, discrete and continuous and deterministic and stochastic. Graphing calculator is required.

MTH 440 **Numerical Analysis**

(Prerequisite: MTH 220)

An introduction to numerical computation employed so widely in industry and research. Discusses errors in numerical computation, truncation and discretization and machine storage restrictions. Examines 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. May utilize programmed algorithms. Graphing calculator is required.

MTH 441 **Abstract Algebra with Applications**

(Prerequisite: MTH 416)

This course continues and advances the work done in MTH 416 Algebraic Structures, discussing selected fundamental algebraic structures and their applications to computations. The main concepts of Sylow Theory of finite groups, Galois Theory, Lattices Theory, Coding Theory and Cryptography, Boolean Algebra and Switching Theory are developed. Finite permutation groups (Cayley's Theorem) and their applications in science and arts are studied.

MTH 442 **Functions of Complex Variables and its Applications**

(Prerequisite: MTH 416)

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. in Mathematics 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.

MTH 460 **Problem Solving Strategies**

(Prerequisites: MTH 416 and MTH 417)

Students will learn about the science and art of problem solving. The course will develop student's abilities to solve mathematics problems. 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 helps prospective mathematics teachers to acquire their professional skills in the teaching of mathematics in secondary school to teach and assess problem solving. The survey of most famous math problems will be given. Most popular problems from the secondary school mathematics course will be considered. The course includes the description of main approaches to solving standard and challenge math problems. Students will learn strategies most widely used: pattern recognition, working backwards, guess and test, experimentation or simulation, reduction expansion, organized listing and exhaustive listing, logical deduction, mathematics induction, divide and conquer, writ-

ing equations, producing fruitful sketches.

MTH 461 **Methods of Teaching Mathematics**

(Prerequisites MTH 301, MTH 325, MTH 412, MTH 460)

Designed as 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 teaching, main teaching strategies, methods and forms of organization of students learning, survey of concepts of basic mathematics, algebra, geometry, trigonometry, functions, discrete mathematics, probability, statistics, beginning calculus will be studied. Effective approaches to the teaching of main mathematics will be discussed. Graphics calculators, computer mathematics learning and tutorial software, different kinds of manipulation and their used in classroom also will be considered.

MTH 490 **Guided Study**

(1.5-4.5 quarter 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.

MUL – Multimedia

MUL 200 **Communication Tools**

(Prerequisites: ENG 100/101 and COM 100/COM 200)

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 100/101 and COM 100/COM 200)

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 100/101 and COM 100/COM 200)

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 **Web Presentation**

(Prerequisites: ENG 100/101 and COM 100/COM 200)

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, appro-

Course Descriptions

appropriate uses of motion in a web page, and digital asset management for optimal delivery of animated content. Software instruction is in Macromedia Flash.

MUL 265

Digital Audio and Video

(Prerequisites: ENG 100/101 and COM 100/COM 200)

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 100/101 and COM 100/COM 200)

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 300

Convergence Media

(Prerequisites: MUL 200 level requirements or equivalents)

An integration of digital communication tools and techniques used in today's workplace. Through intensive project practice, students learn how to create multimedia products for various business, education, and entertainment purposes. Software instruction includes Macromedia and Adobe authoring tools, and creative applications.

MUL 305

Applied Graphic Design

(Prerequisites: MUL 200 level requirements or equivalent)

Hands-on application of principles and techniques of graphic design for print and digital media. Covers advanced concepts in 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 310

Introduction to Video Gaming

(Prerequisites: ENG 100/101; COM 100 or COM 200)

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

(Prerequisite: MUL 310)

An in-depth review of video game development, with emphasis on game design theory and practice. Students learn fundamental principles and strategies of game design to transform a story or game vision into a virtual environment prototype that integrates player activity, interface, and graph-

ics. They become familiar with basic algorithms that control interactivity and representation, and learn about the various tools available to designers, such as prototyping software and game engines. Software instruction is in Anark and Genesis3D.

MUL 318

Video Game Production

(Prerequisite: MUL 315)

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

(Prerequisite: 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

(Prerequisite: 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 100/101 and 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

Desktop Publishing

(Prerequisite: ENG100/101 and COM100)

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, prepress 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 digital 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: MUL 200 level requirements or equivalents)

This course provides hands-on application of principles and techniques of web design for digital media. Provides an in-depth study of effective web page design and efficient site architecture. Covers projects in content development, navigation, and usability. Software instruction is in Dreamweaver.

MUL 355

Applied Web Presentation

(Prerequisites: MUL 200 level requirements or equivalents)

Provides hands-on in-depth application of web programming and web presentation. Students apply aesthetic and usability criteria to produce web presentations, "movies" and other animated components for placement into student projects. Covers applied technological constraints of web presentation and animation, appropriate uses of motion in a web page, and digital asset management for optimal delivery of animated content. Software instruction is in Macromedia Flash.

MUL 365

Applied Digital Audio and Video

(Prerequisites: MUL 200 level requirements or equivalents)

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 cueing, transitions, and the use of text elements. They also become familiar with the pivotal role of sound, including the art of layering sound, voice and music elements to foster a rich multimedia experience. Software instruction is in Adobe Premiere, Sonic Foundry Sound Forge and Acid Pro.

MUL 370

Digital Interactivity

(Prerequisites: MUL 200, MUL 205, MUL 245, MUL 255, MUL 265, MUL 275)

Provides a hands-on introduction to the basics of Web interactivity and its potential for e-business, entertainment and education. Students apply aesthetic and usability criteria to visual, textual and aural components integrated into interactive presentations, games and instructional media. Covers technological constraints of Web delivery, interactive design and composition and media integration techniques. Software instruction is in Macromedia Director.

MUL 375

Applied 3-D Modeling and Rendering

(Prerequisites: MUL 200 level requirements or equivalents)

Provides a hands-on application of 3-D graphics in still and animated formats. Students produce basic 3D elements and apply aesthetic and usability criteria to their projects in digital, animated sequence, video, and print media applications. Students compare 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.

Course Descriptions

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; MUL 381)

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 410

Authoring Corporate Training I

(Prerequisites: ENG 100/101 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

Authoring Corporate Training II

(Prerequisite: MUL 410)

Provides an overview of advanced techniques of instructional design and development for corporate training through e-learning and multimedia. Students develop and conduct in-depth needs assessment procedures to determine instructional content and delivery style of digital training modules they produce—13 organizing, editing and programming content for Web and CD-ROM delivery. Covers project management, message design and usability testing for performance. Software instruction is in Macromedia Authorware.

MUL 420

Multimedia Arts Portfolio Project

(Prerequisites: all general core courses; completed concentration courses)

In this two-month capstone course, students assemble a portfolio of their best work from previous Multimedia Arts courses and edit and/or improve those pieces. Suitable to show a prospective employer, the portfolio will include digital presentations—graphics, websites and animations—and printed samples, as well as multimedia documentation, such as creative briefs, proposals, flow charts, executive summaries and descriptive critiques.

MUL 430

Advanced 2-D Imaging

(Prerequisite: all general core courses; MUL 336)

An advanced course in computer-aided graphic manipulations as used in Web authoring. Students produce images in Web-standard formats, applying aesthetic and composition design principles. Covers strategies to overcome technological limitations of intent graphics; software add-ons and extensions to aid graphic design; and digital design project management theory and practice to produce graphics efficiently. Software instruction is in Adobe Photoshop and Illustrator.

MUL 431

Advanced Page Layout/Production

(Prerequisites: all general core courses; MUL 336; 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; MUL 431)

MUL 461 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

(Prerequisite: 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

Management of Web Projects

Advanced course in managing the development of Web-based products. Students use project management tools as they produce websites for e-business, entertainment and distance education. Covers product life cycle planning, risk analysis and client-oriented rapid development. Software instruction is in MS Project, Excel and Word.

MUL 450

Advanced Web Presentation

(Prerequisites: all general core courses; MUL 440)

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 and Video

(Prerequisite: all general core courses)

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

(Prerequisite: all general core courses; MUL 460)

A hands-on course on motion graphics for broadcast, video, and film; the course presents the current software tools used to build and deliver motion graphics. Students will 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. The course surveys works of professional animators, directors, and producers to demonstrate industry-standard techniques.

MUL 462

Digital Audio Creation

(Prerequisite: all general core courses; MUL 460; MUL 461)

An advanced course in computer-aided digital audio creation used in CD, 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 such as MIDI controllers. Covers file management and compression for specific delivery mediums. Software instruction is in Adobe Audition, Acid Pro, and Pro Tools.

MUL 463

Digital Video Production Project

(Prerequisite: 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

(Prerequisite: all general core courses; MUL 440; MUL 450)

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

Advanced Digital Interactivity Project

(Prerequisite: all general core courses; MUL 440; MUL 450; MUL 470)

Provides advanced training in the production of interactive products using computer-based authoring tools for e-business, entertainment, and education. Students conduct extensive reviews of interactive presentations, games, and instructional media and apply lessons learned to programming interactive models in real-time virtual environments. Covers advanced techniques to overcome the technological constraints of web and CD-ROM delivery; interactive design theory and practice; and methods of project management. Software instruction in Macromedia Studio and MS Project.

MUL 480

3-D Animation

(Prerequisites: all general core courses; MUL 381; MUL 385)

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.

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ery; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

MUL 381 **Video Game Art**

(Prerequisite: 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 485 **Character Animation**

(Prerequisite: MUL 480)

Provides a hands-on introduction to the basics of 3-D character animation. Students produce basic 3-D character animation and apply aesthetic and usability criteria for appropriate and effective use. Covers technological constraints of 3-D character animation; appropriate uses of animated 3-D characters to enhance message deliver; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

MUL 490 **Guided Study**

(Prerequisite: Faculty Determined) (1.5 – 4.5 quarter units)

Courses require individual study under direction of instructor. Furthermore, course requires prior approval of appropriate academic department.

MUL 495 **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 100A **Fundamentals of Music: Creation and Performance**

(Prerequisite: MUS 100)

A hands-on laboratory course. Students devote workshop time to creation and performance of music.

MUS 326 **Survey of American Music History**

A survey of the evolution of American music from the Colonial period to the present. Emphasizes political, social and economic developments as related to the evolution of American music. Styles of music may include colonial hymns and psalters, American Indian music, African slave music, minstrel/sentimental songs, spirituals, folk/country music, brass bands, ragtime, jazz, blues and contemporary music.

MUS 327 **World Music +**

(Prerequisites: ENG 100/101)

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 **Applications of Research for the Art of Teaching Capstone Project: Accomplished Professional Teacher-Leader Portfolio**

This course is designed to provide classroom educators with the knowledge and skills required to understand, interpret, generate and evaluate research relevant to their roles as professional educators. The National Board for Professional Teaching Standards provides a platform, a structure and the tools to examine all aspects of their work in relationship to research and development in the field. The NBPTS provides a national, voluntary system of certifying teachers who meet and exceed high and rigorous standards for the profession that define what accomplished teachers should know and be able to do. This course requires that teachers develop a professional portfolio that incorporates knowledge, understanding, application, interpretation, generation and evaluation of research which will be translated into providing evidence of having met the challenging NBPTS certificate standards as evidenced by performance-based assessments.

NBC 680 **Measuring and Informing Quality Teaching and Learning: Research, Standards, Portfolios and Assessments**

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. Students will examine the history of significant issues, policies, and topics related to quality teaching and they will have an opportunity to analyze the goals, consequences and impact of resulting reforms, innovations and benchmarks for performance excellence. Students will consider approaches, strategies, practices and programs that yield successful outcomes for diverse learners. The course will emphasize the understanding and use of the Core Propositions, the Certificate Standards, and the Assessment Process set forth by the National Board for Professional Teaching Standards as a tool and resource for learning about, examining, and enhancing the quality of teaching and learning, professional development and leadership skills that require knowledge of adult learning and that leads to desired student outcomes. Fundamental knowledge will be gained in preparation to be successful candidates in the National Board Certified Teacher Process.

NBC 681 **Membership in Learning Communities: Professional Contributions, Collegueship, Partnerships, and Continuous Growth**

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. Upon review, students will apply the knowledge and understandings in relationship to the NBCT Core Propositions and Certificate Standards that are aligned with accomplished practices reflecting their own membership in learning communities and in their work with adult learners. We will also explore and determine how commitment to democratic learning can be demonstrated through work with diverse students in the classroom, with families, the community and colleagues. We will consider the effects of democratic and supportive environments for learning, and how to advance students and our own decision-making and advocacy skills. Finally, we will identify and document specific examples of accomplishments as defined in the NBCT Portfolio Entry #4 related to professional development activities, interactions with colleagues and families and professional contributions outside of the classroom that have had the greatest influence and impact on student learning and educational excellence.

NBC 682 **Evidence of Student Learning: Entries and Documentation Based on Videotapes**

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. Students will focus on developing responses to the two entries that require video taped segments that capture their abilities to engage and interact with students effectively as they meet identified instructional goals and objectives, and second, to capture students engaged and interacting with each other in well planned lessons supported by effective instructional strategies that require demonstrations of learning. Students will review and explore research related to a variety of "best practices" that result in student engagement, brain compatibility and content-specific approaches that making curriculum accessible to all student populations. Teachers will videotape segments of their teaching that mirror each of the two Entry requirements outlined in their certificate area, and in a collaborative mode, feedback will be provided specific to attainment of the standards and achievement of clear, consistent and convincing evidence of achieving student learning outcomes.

NBC 683 **Evidence of Student Learning: Entries and Documentation Based on Student Work Samples and Knowledge of Subject Matter**

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. One essential source of evidence about a teacher's practice is student work and in this course we will look at what students are asked to do, how the teacher interprets the responses, what the teacher does with the information, and what might occur next as a result. Students will analyze, describe and reflect upon their instructional practices, lesson designs and assessment strategies related to the requirements that are outlined in the NBCT Portfolio Entries that rely on student work samples as evidence of accomplished practice. Teachers will examine individual and class work as a source for drawing conclusions about their instruction, use of assessments, interpretation of data and next steps that ensure increased achievement. In addition, an overview of the NBCT Assessment Center exercises will be provided and teachers will engage in subject matter examination based on standards and alignment with child development and learning theory. Students will explore and provide written responses to on-demand prompts as outlined in the NBCT tutorial and as generated by colleagues.

NSG – Nursing

NSG 200 **Foundations of Nursing Practice**

(Prerequisite: C or better in NSG 211T and "S" in NSG 211A)

Utilizing the nursing process framework, this course focuses on meeting basic human needs through planning and implementing nursing care to effectively contribute to achievement of health goals of the patient. 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 NSG 200A is required unless approved by the Department Chair.

NSG 200A **Foundations of Nursing Practice Clinical Laboratory**

(Prerequisite: C or better in NSG 211T and "S" in NSG 211A)

Using the language of nursing, students will

Course Descriptions

devise basic plans of care for patients. Practical application of beginning knowledge and skills required for nursing care of patients with commonly occurring health problems is demonstrated in both laboratory and clinical settings. Through simulation and patient interaction, use of therapeutic skills of communication will be analyzed. Concurrent enrollment in NSG 200 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 205

Nursing Process I: Medical-Surgical Nursing I (Prerequisites: C or better in NSG 200 and "S" in NSG 200A)

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 nursing care for individuals with specific health care needs/problems. In addition, the student is provided with an orientation to coordination of patient care. Concurrent enrollment in NSG 205A is required unless approved by the Department Chair.

NSG 205A

Nursing Process I: Medical-Surgical Nursing I Clinical Laboratory

(Prerequisites: C or better in NSG 200 and "S" in NSG 200A)

Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring medical-surgical problems is demonstrated in both laboratory 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 Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 211T

Health Assessment

(3.0 quarter units)

(Prerequisites: Admission to nursing program and completion of required general education preparation with a minimum GPS 2.75).

This course covers holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and laboratory and diagnostic procedures throughout the lifespan of clients. Concurrent enrollment in NSG 211A is required unless approved by the Department Chair.

NSG 211A

Health Assessment Clinical Laboratory

(1.5 quarter units)

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 laboratory and diagnostic procedures throughout the lifespan of clients. Concurrent enrollment in NSG 211T is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 300

Making the Transition to the Role of the Professional Nurse

This course provides an exploration of the role of the professional nurse for the independent duty corpsman (IDC). It compares the role of the professional nurse with other health care roles. There is focus on nursing assessment, nursing diagnosis, nursing intervention, and evaluation. The course includes a required clinical practicum.

NSG 301

Practicing the Role of the Professional Nurse

This course provides an overview of the practicing role of the professional nurse. There is focus on assuming responsibility for the nursing care of complex clients in an acute care setting. The course includes a required clinical practicum.

NSG 310

Professional Nursing Values

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

Nursing Process II: Childbearing Family Nursing

(Prerequisites: C or better in NSG 205 and "S" in NSG 205A)

Continuing the study of life processes, 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 unless approved by the Department Chair.

NSG 314A

Nursing Process II: Childbearing Family Nursing Clinical Laboratory

(Prerequisites: C or better in NSG 205 and "S" in NSG 205A)

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 Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 315

Nursing Process III: Pediatric Nursing

(Prerequisites: C or better in NSG 314 and "S" in 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

Nursing Process III: Pediatric Nursing Clinical Laboratory

(Prerequisites: C or better in NSG 314 and "S" in 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 Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 320

Nursing Process IV: Medical-Surgical Nursing II

(Prerequisites: C or better in NSG 315 and "S" in NSG 315A)

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

Nursing Process IV: Medical-Surgical Nursing II Clinical Laboratory

(Prerequisites: C or better in NSG 315 and "S" in NSG 315A)

Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring acute/critical medical-surgical problems is demonstrated in both laboratory and clinical settings. Concurrent enrollment in NSG 320 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 322

Introduction to Biomedical Statistics

An introduction to statistical procedures commonly used in the analysis of nursing research data, this course teaches the utilization of computers and statistical software in the analysis of data.

NSG 325

Nursing Process V: Psychosocial Nursing

(Prerequisites: C or better in NSG 320 and "S" in NSG 320A)

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 unless approved by the Department Chair.

NSG 325A

Nursing Process V: Psychosocial Nursing Clinical Laboratory

(Prerequisites: C or better in NSG 320 and "S" in NSG 320A)

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 laboratory and clinical settings. Concurrent enrollment in NSG 325 is required unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 340

Nursing Leadership and Management

(Prerequisite: C or better in NSG 325 and "S" in NSG 325A)

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

Nursing Leadership and Management Clinical Laboratory

(1.5 quarter unit)

(Prerequisite: C or better in NSG 325 and "S" in NSG 325A)

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 unless approved by the Department Chair. Clinical Laboratory is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 403

Theoretical Models and Conceptual Frameworks

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as a Basis for Nursing Practice

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

In this course students will synthesize pharmacological concepts. An overview of the history of drugs will be presented along with current issues in drug legislation, design, testing, manufacturing, and marketing. Utilizing drug terminology, 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 that minimize adverse effects and maximize therapeutic effects for patients, including the role of the nurse in pharmacological research.

NSG 410

Nursing in the Community: Population Focused Practice

(Prerequisite: 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

Nursing in the Community: Frameworks for Practice

(Prerequisite: NSG 412)

A study of providing nursing care to families in the community. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum.

NSG 412

Nursing in the Community: Health Care Delivery

(Prerequisites: Completion of all 300-level nursing courses)

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 422

Introduction to Nursing Research

(Prerequisite: NSG 322 and completion of all 300-level nursing courses)

This course will introduce students to quantitative and qualitative research in nursing by reviewing and evaluating current research studies which use descriptive, correlational, experimental and selected qualitative designs. Throughout the course, an emphasis will be placed on the philosophical underpinnings of the quantitative and qualitative research paradigms. Students will also have the opportunity to critique pertinent research for utilization in nursing practice.

NSG 440

Issues in Professional Nursing

(Prerequisites: completion of all other required nursing courses)

A capstone course that explores the historical roots and current catalysts of complex issues of nursing education, practice and scholarship. Also analyzes multiple interpretations of selected issues and strategies for resolving issues.

ODV – Organizational Development

ODV 410

Organizational Development, Career Systems, and Training and Development

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

Introduction 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 and Practice of Organizational Development

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 Management, Technology, and Organizational Communication

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 and Development

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 Seminar in Current Issues/Trends in Applied Organizational Development

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

Advanced Studies in Organizational Behavior in a Diverse Society

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 400

Introduction 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

Public Administration and 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 and Community 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 Sector and Public Administration

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

Public Sector Financial Management and Budgeting

Upon completion of this course, students will be able to describe the theory of public sector financial management; explain the financial management concepts of public sector funding; describe and evaluate a budget a typical public sector departmental budget; explain the political aspects of fiscal administration in the public sector; evaluate the affects of politics in decision-making in public sector the financial management; and discuss the ethical implications of public sector financial management, budgeting and accounting.

PAD 406

Senior Research Project

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,

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students present their project to chair, other faculty and peers in an open forum. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below). Accelerated study is not permitted with this course. PADXXX 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 "K" 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. No grade of "I" can be given for this course.

PAD 620

Foundations of Public Administration

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 in Public Administration

A practical study of graphical methods and statistical procedures specifically aimed at presenting, interpreting and solving problems related to public administration. (This course cannot be substituted where MS 601 is required.)

PAD 630

Government Community Relations

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 issues.

PAD 631

Urban Planning and 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

Financial Management and Grant Administration

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 633

Media Relations

A study of the process for developing a strategy and designing a plan of action for working with the media. Discusses approaches for generating publicity, enhancing fundraising, building membership, developing relationships, changing public policy and handling crises. Focuses on the needs of society and strategic communications plans that promote social and public policy change.

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

Seminar in Public-Private Financing Partnerships

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 involved in taking a real estate project from conceptualization through construction.

PAD 643

Bargaining and Negotiation in the Public Sector

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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below). PAD 644 is two months in length. A student has to have completed six MPA core courses before taking this course.

PED – School Psychology

PED 604

Orientation and Field Experience in School Psychology

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.

PED 637

School Psychology Action Research

(Prerequisite: ILD 680)

This course is designed to provide the knowledge and skills required to understand, interpret, generate and evaluate research relevant to school psychology. The work of the school psychologist will be emphasized throughout the course as students

produce a major action research and writing project. This course will 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. Maximum length of time is 12 months. (Note. Grading is by H (honors), S (satisfactory), or U (unsatisfactory). Class size is 5.

PED 665

Test and Measurements

(Prerequisite: PED 604)

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

Graduate Seminar in Human Neuropsychology

(Prerequisite: PED 604)

Explores the theories and analysis of brain function, structure, and brain behavior relationships.

PED 667

Graduate Seminar in Child and Adolescent Psychopathology

(Prerequisite: PED 604)

Examines the developmental, biological, psychosocial, and cultural variables in the etiology of behavioral disorders. Students will become familiar with characteristics, classification and diagnosis of behavioral disorders that are encountered in school settings.

PED 668A

Behavioral Research: Design and Analysis

(Prerequisite: Advancement to Candidacy, PED 667 and PED 670)

Focuses on behavioral principles and their applications to diverse populations. Students will investigate the philosophy of behaviorism, experimental and applied behavior analysis.

PED 668B

Basic Behavioral Analytic Principles

(Prerequisite: Advancement to Candidacy and PED 668A)

Provides a philosophy of behaviorism as well as experimental and applied behavior analysis. This class is a continuation of 668A and continues to focus on behavioral principles and the applications to diverse populations.

PED 669A

Advanced Applied Behavior Analysis: Application of Behavioral Principles in School Settings

(Prerequisite: Advancement to Candidacy, PED 668A and PED 668B)

Examines functional assessment procedures. Emphasis is placed on providing students with an understanding of both procedural and conceptual issues surrounding intervention for children with severe behavior problems following functional assessments.

PED 669B

Advanced Applied Behavior Analysis: Application of Behavioral Principles in the Technology of Teaching

(Prerequisites: PED 668A, PED 668B and PED 669A)

Examines advanced issues related to designing and evaluating behavioral assessment and instructional interventions in school and educational systems. Students will examine assessment instruments developed to support functional academic assessments.

PED 670

Graduate Seminar in Social Psychology

(Prerequisite: Advancement to Candidacy and PED 668B)

Focuses on how individuals are affected by, an

Course Descriptions

turn affect social processes. Topics include social cognition; social influences on beliefs, attitudes, and identity; conformity and persuasion; culture and gender; small group influences and processes; prejudice, aggression and conflict; interpersonal attraction and love. Application of relevant theory and research to educational concern and settings is made.

PED 671

Assessment of Cognitive Abilities

(Prerequisites: Advancement to Candidacy PED 670, PED 680, PED 683, PED 668A, PED 668B.) Intensive practice in administration, interpretation and communication of results of assessment for mental ability. Emphasis is placed on the many aspects of interviewing, behavioral observation, interpretation, and integrating results into case studies.

PED 672

Advanced Psycho-educational Assessment

(Prerequisite: PED 671) Introduces students to the administration, interpretation, and communication of psycho-educational tests. Emphasis is placed on assessing the visual, auditory, language and sensory disorders. Focus is on achievement and process measures, as well as the development of curriculum-based assessment. Focus will be placed on interviewing and behavioral observation.

PED 673

Emotional/Behavioral Assessment

The third course in a sequence of five assessment courses. In this course behavioral assessment is contrasted with traditional academic and trait-oriented assessment and is designed to introduce and then strengthen student knowledge and understanding of Applied Behavior Analysis. Practical uses of behavioral assessment in applied context with children and adults are emphasized.

PED 674

Preschool / Low Incidence Assessment

(Prerequisite: PED 673) Emphasizes eligibility for special education that includes assessment of preschool children, diagnosis of disabling conditions, recommendations for remedial techniques and IEP development. The course is also designed to provide an introduction to the assessment of low incidence populations. Exceptionalities explored include Visually Impaired, Deaf and Hard of Hearing, Autistic Spectrum Disorders, Physically Impaired, Traumatic Brain Injured and Dual Sensory Impaired.

PED 675

Alternative Assessment for Multicultural Populations

(Prerequisite: PED 674) This is an advanced course that focuses on selection, educational implications, use of alternative assessment techniques, eligibility for special education, diagnosis of disabling conditions, recommendations for remedial techniques and IEP development. Students will discuss the role of primary language and soci-cultural variables on cognitive/educational development, the implications of psycho-educational assessment on least restrictive placement and integrating assessment materials for the purpose of writing psychological test reports.

PED 678

Practicum in School Psychology

(Prerequisites: PED 671, PED 672, PED 673, PED 674, and PED 675) The purpose of the school-based practicum is to provide students with an orientation to school and community professional as well as to clarify the role of the school psychologist. The student will have the opportunity to observe school psychologists conduct psycho-educational assessments, develop behavioral interventions, participate in

child study team meetings, and provide feedback to parents. Students are expected to gain experience working with children in a multitude of settings, including preschool, elementary, middle and senior high school as well as special education centers. Students are placed in a school setting and attend a university-based seminar.

PED 680

Roles, Issues and Ethics in School Psychology

(Prerequisite: Advancement to Candidacy) Introduction to professional, ethical, legal, theoretical, and practical aspects of School Psychology. Students will examine the roles and responsibilities of school psychologists, 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.

PED 683

Program Evaluation

(Prerequisites: Advancement to Candidacy PED 680) Provides an overview of current empirically-based programs addressing student needs such as reading difficulties, school safety, anger management and self-mutilative behavior reduction. Includes evaluation of site or district wellness and academic interventions.

PED 685

Best Practices Seminar in School Psychology

(Prerequisites: A record of a passing score on the CBEST and approval of internship site Placement Specialist. 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. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course.

PED 687

School Psychology Internship I

PED 688

School Psychology Internship II

PED 689

School Psychology Internship III

PED 690

School Psychology Internship IV

(Prerequisites: students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor) Students are placed in a school setting and expected to perform a variety of school psychology related activities for a minimum of 1200 hours.

PED 694

Thesis

(Prerequisite: ILD 680) Provides supervised experience culminating in the completion of a thesis project that was designed in ILD 680. Maximum length of time is 12 months. Class size is 5. (Note. Grading is by H (honors), S (satisfactory), or U (unsatisfactory).)

PHL – Philosophy

PHL 100

Introduction to Philosophy

(Prerequisites: ENG 100/101) A study of the variety of ways of thinking about such fundamental issues as knowledge and belief, human nature, the nature of reality, the existence of supernatural being(s) and the relationship between self, mind and the body. Develops philosophical thinking skills and awareness of world philosophies.

PHL 238

Critical Thinking in Everyday Life

(Prerequisites: ENG 100/101) An introduction to the skills needed to rationally and critically evaluate common forms of illogical reasoning, verbal sleights of hand and the use of language to distort and confuse. Emphasizes critical thinking in real-world applications involving advertising, politics, claims of the paranormal and controversial issues like abortion. Also covers the basics of deductive and inductive reasoning.

PHL 320

Comparative Religion +

(Prerequisites: ENG 100/101) A survey of major world religions in cross-cultural and historical perspective. Explores several traditions, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Islam and Christianity. Also discusses the distinction between church, sect and cult; the experience of conversion; religious rituals, ceremonies and rites of passage; and the construction of legitimacy for contemporary new religions. May involve work in oral history.

PHL 336

Philosophy of Science

(Prerequisites: ENG 100/101) 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 339

Study of a Major Philosopher

(Prerequisites: ENG 100/101) An in-depth analysis of the writings of a major figure in the history of philosophical thought, with particular emphasis to be determined by the instructor in the context of the specific thinker chosen.

PHL 375

Environmental Ethics

(Prerequisite: ENG 100/101) An exploration of the justification for moral and legal concerns with natural objects (including non-human animals). Examines humanitarian, ecocentric and utilitarian perspectives. Issues include animal rights, animal experimentation, factory farming, species extinction, habitat loss, pollution, conservation, industrialization and population control as well as Western cultural assumptions of worth and personhood.

PHL 437

Ethics

(Prerequisites: ENG 100/101) An examination of theories of value, ideological differences and conflicts and practical applications to clarify ethical differences. Emphasizes the dilemmas of personal and professional responsibility within a real-world context of business and workplace circumstances.

PLA – Paralegal Studies

PLA 301

Legal Theory and Ethics

Note: This is a mandatory first course for all new students in all programs. Introduction to the nature of the law and the legal system and an overview of areas of legal practice. Focus on legal problem solving, case analysis, fact pattern analysis, selected topical surveys of law, and legal ethics and professional responsibility for the legal assistant.

PLA 302

Computers and the Law

This course will teach computer technology as a tool to assist the legal professional in the practice

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of law. The class utilizes lecture, group discussion, and hands-on computer usage. Using the latest software for time and billing, case management, docketing control, and litigation support, students will tackle legal projects with assignments in the computer lab. Students will learn how to effectively evaluate vendor products as well as design and manage a litigation database project. Also covered are telecommunications and computer-assisted research, such as Lexis, Westlaw, and CD-ROM databases. Ethical considerations, such as software piracy, misuse of software and databases, security, and the protection of client data are reviewed.

PLA 303 Law Office Administration

A study of the organization and functioning of the law firm. Topics include behavioral aspects; financial planning and management; problem-solving techniques and promoting change; personnel administration, including job descriptions, hiring practices, orientation and training techniques; and salary administration and productivity measurement.

PLA 305 Property

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 306 Torts

A survey of 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; as well as the torts of nuisance, defamation, invasion of privacy torts; and the defenses to each of these torts. Also, concepts of products liability and vicarious liability will be addressed.

PLA 308 Contracts

A study of basic contract principles, including formation, validity, defenses to formation, rights of third parties, performance, breach, remedies, and damages. Case analysis and application of principles are emphasized. Selected code sections from Article 2 of the Uniform Commercial Code and the Restatement Second of Contracts are also covered.

PLA 309 Directed Research and Writing A

In this course, students will develop legal research skills by completing focused exercises in the use of case reporters, digests, annotated codes, Shepard's, A.L.R., legal encyclopedias, periodicals, and treatises. Students are also exposed to the latest methods of computerized research. Furthermore, students will practice writing skills by drafting various types of documents. In addition, students will learn case analysis by practicing the art of reading court opinions. They will also learn legal citation. Special emphasis is placed on English grammar, punctuation, writing mechanics, spelling, and composition.

PLA 310 Directed Research and Writing B

Prerequisites: Students must be in the second year of the Bachelor of Science Degree or Legal Assistant Certificate Program and have completed Legal Theory and Ethics, Property, Torts, Contracts, and Directed Research and Writing A; or be a Paralegal Specialist Certificate (24-unit program) graduate; or be in the Criminal Law Specialization Program.

This is an advanced course in legal research and writing. Students develop and practice research

strategies by integrating manual and computer-assisted legal research. Students review research in printed sources (reporters, digests, annotated codes, Shepard's, A.L.R., legal encyclopedias, periodicals, and treatises). Further, students are challenged to complete research projects with a view to practice book research, to incorporate computer research, and to develop strategies in approaching legal research problems. Students communicate the results of their research in the form of memoranda.

PLA 311 Internship

A course designed to provide students with on-the-job experience. Students are placed in private law firms, government agencies, and corporate law departments. Placements are available in a wide area of legal specializations. Ninety hours of fieldwork and 15 hours of class sessions are required. Students who are unable to enroll in the credit course may apply for consideration as a non-credit intern. The School will assist those students with finding internship positions, but class sessions and supervision of the commitment are not provided.

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 and 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" copy-right laws.

PLA 317 Immigration Practice*

This course introduces students to the law regarding citizenship, naturalization, and immigrant and nonimmigrant 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 and Judgments

This course is designed to familiarize the legal assistant with 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. The second part includes an examination of pre-judgment (provisional) remedies (attachment, claim and delivery, and receiverships), and procedures for the enforcement of judgments (writ of execution, wage garnishment, specific exemptions, and other enforcement tools).

PLA 324 English for Professionals

This course is designed to teach legal professionals to write well. It is an advanced course in Standard American English and composition. Students work through focused exercises in grammar, punctuation, and writing mechanics. They complete assignments designed to build vocabulary and teach correct usage. Students write-crafting sentences, developing paragraphs, and drafting entire discourses. This is an upper-division general-education course. It is a required core course for all paralegal students enrolled in any of the three programs. Students may test-out of this course requirement.

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, and Estate Planning*

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 421 Family Law II

Prerequisite: PLA 407
This course covers advanced issues of family law including marital settlement agreements, domestic violence, 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 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 425 Litigation I

Prerequisite: Bachelor of Science Degree and Legal Assistant Certificate students must complete 18 Quarter Units of Core Courses.
This course focuses on civil procedure in both state and federal courts. Topics covered include jurisdiction, venue, parties, third parties, pleadings and motions, and analysis of civil-litigation strategies. The role of the paralegal in discovery is stressed

Course Descriptions

and the course includes discussion of various forms of discovery, including depositions, interrogatories, and demands to produce documents. Students will discuss privileges, including the attorney-client privilege and the attorney-work-product privilege. Trial-setting and related matters are also discussed.

PLA 426 Litigation II

Prerequisite: PLA 425

This course focuses on the trial process in civil litigation, with a special emphasis on the law of evidence. The course includes a brief review of the civil-procedure process leading up to trial. Students will 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. Settlement and negotiation strategies, trial briefs, motions in limine, and other related documents will be covered. The course also includes a brief overview of the law of judgments and the process of appeals.

PLA 427 Probate and Estate Planning I

Prerequisite: PLA404

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 429 Corporations I

This course covers formation and structure of corporations (analysis and preparation of initial and amended articles of incorporation, satisfaction-of-filing requirements, drafting of by-laws, minutes of first meetings, initial stock-issuance documents, and waivers and notices of meetings); and documents relating to internal management of corporation affairs (analysis of employment agreements, stock options, buy and sell agreements, stock restriction agreements, resolutions authorizing cash and stock dividends and stock splits, and preparation of resolutions and certificates relating to liquidations and dissolutions).

PLA 430

Corporations II

Prerequisite: PLA 429

This course covers regulation of sale of securities (analysis of the requirement of the forms and supporting materials for the registration of securities for California, preparation of California exemption forms, and an overview of the 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 Prerequisite: PLA 305)

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

Prerequisite: 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 433

Criminal Law I

This course introduces students to criminal law. Topics covered include the criminal law system and the paralegal; components of a crime; elements of crimes; inchoate crimes; defenses; intake; and drafting the complaint.

PLA 434

Criminal Law II

This course covers criminal procedure. Topics covered include search and seizure; confessions and pretrial identification procedures; pretrial: from the initial appearance to seeking extradition; pretrial: grand jury to pretrial conference; trial: rights, procedure, tasks; sentencing; punishment; and review.

PME – Project Management

PME 601

Planning, Performing, and Controlling Projects

This course introduces the in-depth theory and practice involved in the design and management of projects. It guides students through a systematic approach to project evolution-concept, study, design and implementation. This course also covers more than fifty case studies taken from real companies illustrating successful and poor implementation of project management. In addition, the latest developments in the field such as intricate framework of organizational behavior and structure, global project management, the project management maturity model, "six sigma", and conflict resolution modes will be covered.

PME 602

Managing Engineering Competencies and Skills

This course focuses on human resource aspect, in particular, 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 the intricacies of matrix management will be studied.

PME 603

Product Management

This course focuses on project management aspects related to product management. This course covers 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. Product management utilizes the familiar marketing plan as the unifying framework for its lessons, and takes a "hands-on" project approach toward preparing graduates to assume the position of product management.

PME 604

Project Financing and Associated Financial Management

This course focuses on financial management related to management of projects. This course discusses 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, accounts receivables and inventory and global finance management.

POL – Political Science

POL 201

American Government and Politics

(Prerequisites: ENG 100/101)

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 100/101)

A global survey of the processes of social and political awareness, mobilization and the development of participation by minorities and other colonized populations. The course emphasizes the sources of political instability in Africa, the Middle East, the Caribbean, Latin America, the United Kingdom and the central European nations.

POL 490

Guided Study

(1.5-4.5 quarter units)

Individual study under direction of instructor.

Requires prior approval of appropriate academic department.

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

The 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, polit-

Course Descriptions

ical parties, interest groups, public opinion and political ideology and political economy. Students are encouraged to pursue topics of particular interest.

PSY – Psychology

See also courses listed under CHD (Chemical Dependency) and HUB (Human Behavior).

PSY 100

Introduction to Psychology

A survey of the field of psychology as it relates to an understanding of human behavior.

PSY 301

Child Development

(Prerequisites: ENG 100/101)

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 340A

Effective Counseling Techniques I

(Prerequisites: ENG 100/101 and PSY 100)

An introduction to basic counseling techniques, such as nonjudgmental listening, reflection, feedback, goal setting and basic solution skills. Examines concepts of transference and counter transference and emphasizes therapist attributes such as empathy, congruence, acceptance, genuineness and respect. Includes theory and practice within scope of the course. Grading is on a satisfactory/unsatisfactory basis.

PSY 340B

Effective Counseling Techniques II

(Prerequisite: 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 on a satisfactory/unsatisfactory basis.

PSY 426

History of Psychology

(Prerequisites: ENG 100/101 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 100/101 and PSY 100)

A study of the role of biological structures and processes in normal and pathological psychological functioning. Topics include attention, memory, mood, emotions, inhibitory and impulse control, sexuality, intellectual development, thought disorder and social behavior.

PSY 428

Developmental Psychology

(Prerequisites: ENG 100/101 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

Introduction to Personality Theory

(Prerequisites: ENG 100/101 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

Introduction to Psychopathology

(Prerequisites: ENG 100/101 and PSY 100)

The study of social-cultural views of normalcy/deviance and theoretical and clinical views of healthy/pathological psychological functioning. Examines classification and research in psychopathology within psychology and psychiatry.

PSY 431

Theories and Techniques of Psychological Testing

(Prerequisites: ENG 100/101 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 100/101 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 100/101 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: Philosophy, Methods, Ethics

(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 Psychological Research

(Prerequisites: ENG 100/101, PSY 100 and MTH 210)

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 Applications 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 100/101 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

Introduction 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 460

Introduction to Addictive Disorders

(Prerequisites: ENG 100/101 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 461

Group Counseling with Addictive Disorders

(Prerequisites: PSY 460)

An examination of the theoretical framework for facilitating group counseling with clients with addictive disorders. Studies multicultural differences related to working with clients in a group context. Each student is given the opportunity to co-facilitate a group in class at least once during the course.

PSY 462

Etiology and Treatment of Chemical Dependency

(Prerequisites: PSY 460 and PSY 461)

An in-depth theoretical and practical framework regarding etiology, diagnosis, assessment and treatment of chemical dependency. Discusses cross-cultural issues.

PSY 463

Etiology and Treatment of Eating Disorders

(Prerequisites: PSY 460 and PSY 461)

An in-depth theoretical and practical framework regarding etiology, diagnosis, assessment and treatment of eating disorders. Discusses cross-cultural issues.

Course Descriptions

PSY 464

Etiology and Treatment of Sexual Addiction

(Prerequisites: PSY 460 and PSY 461)

An in-depth theoretical and practical framework regarding etiology, diagnosis, assessment and treatment of sexual addiction. Discusses cross-cultural issues.

PSY 465

Counseling the Addictive Family System

(Prerequisites: PSY 460 and PSY 461)

An overview of family systems theories and an in-depth understanding of how to apply those theories to the addictive family system. Discusses cross-cultural.

PSY 480

Senior Project

(Two-month, 4.5-unit course)

(Prerequisite: Completion of all other core courses) An overview of family systems theories and an in-depth understanding of how to apply those theories to the addictive family system. Discusses cross-cultural.

PSY 491

Guided Study for Honors Students

(Two-month, 4.5 quarter units)

(Prerequisites: Completion of core courses with a GPA of 3.75 or higher, and the approval of the Department)

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 by "H" (for Honors, "B" or better work), "S" (for marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

PSY 619

Research: Paradigms and Critiques

(3 quarter units)

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 623A

Individual Psychotherapy and Clinical Assessment I

PSY 623B

Individual Psychotherapy and Clinical Assessment II

(Prerequisite: 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

Assessment Techniques for Marriage and Family Therapists

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 626

Human Sexuality in Psychotherapy

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 and Ethical Issues in Marriage/Family Therapy

An examination of the professional laws and ethics pertaining to the practice psychotherapy and the content of these legal and ethical codes, the meaning of these tenets and the underlying principles involved.

PSY 628

Principles of Psychotherapy III: Group Approaches

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 629A

Developmental Contexts in Psychotherapy: 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 631A

Practicum I: Marital and Family Therapy

A focus on integrating and applying the full range of theoretical models used in individual, couples and family 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.

PSY 631B

Practicum II: Marital and Family Therapy

(Prerequisite: PSY 631A)

A two-part field practicum in which students work as MFT 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 200 hours of psychotherapy experience that includes 150 hours of face-to-face work with clients during a six-month period. Regular course work continues during this period. The academic seminar meets two 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. onsite psychotherapy and supervision hours can be used as partial fulfillment of MFT licensing hours. Grading is on a satisfactory/unsatisfactory basis. This six-month seminar may meet in the late afternoon outside of regular class hours.

PSY 632A

Couples/Family Therapy A

Part one of a two part sequence. Part one of the sequence is designed to provide a comprehensive look at the theories, strategies, techniques, problems and critical issues involved in working with families. This course will provide an historical overview and a focus on theoretical approaches to the treatment of families. Teaching strategies for this course will include lectures, demonstrations,

discussions, videotapes and role plays..

PSY 632B

Couples/Family Therapy B

(Prerequisite: PSY 632A)

Part two of a two part sequence. Part two of the sequence is designed to provide a comprehensive look at the theories, strategies, techniques, problems and critical issues involved in working with couples. This course will provide a historical overview of the major perspectives in the treatment of couples, a survey of recent research on marriage and marital therapy, and a focus on major approaches to the treatment of both married and unmarried couples. Teaching strategies for this course will include lectures, demonstrations, discussions, videotapes and role plays

PSY 635

Developmental Contexts in Psychotherapy: 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

Principle of Psychotherapy II: Child and Adolescent

An examination of theories, techniques and empirical findings essential to the treatment of children and adolescents. Emphasizes the developmental, cultural and family parameters necessary to conduct successful treatment. Students gain experience with a variety of diagnostic and treatment techniques tailored to the particular age and developmental levels of children and adolescents through in-class experiential activities.

PSY 637

Principles of Psychotherapy V: Cultural Competencies

An exploration the role of culture in psychotherapy. Emphasizes the development of a culture-centered approach to psychotherapy by integrating multicultural awareness, knowledge and skills into assessment, diagnosis and treatment.

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 652

Psychopharmacology

A study of the effects, patterns of use and delivery of psychopharmacological products. 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 between psychotherapy and psychopharmacology. Students learn to recognize signs and symptoms that might be amenable to medication. Problems such as Schizophrenic disorders, mood disorders, organic mental syndromes, substance use disorders, sexual issues, eating disorders and emergencies are discussed. The course curriculum also includes areas such as when to refer a patient to a physician, basics on how medications work, who would be involved in the referral, where to look for a physician co-therapist and what outcomes can be expected.

Course Descriptions

PSY 690

Guided Study

(1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

SCI – Natural Sciences

SCI 100

Survey of Bioscience

A survey course of the basic principles of the life sciences. Examines cellular, organismal, population and community biology based on the unifying concept of evolution.

SCI 100A

Survey of Bioscience Laboratory

(1.5 quarter units) (Prerequisite: SCI 100)

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.

SCI 101

General Chemistry

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.

SCI 101A

General Chemistry Laboratory

(1.5 quarter units)

(Prerequisites: MTH 204 and SCI 101)

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.

SCI 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.

SCI 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.

SCI 103A

Fundamentals of Geology Laboratory

(1.5 quarter units)

(Prerequisite: SCI 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.

SCI 104

General Physics

(Prerequisite: Satisfactory completion [C grade or better] of high school algebra or equivalent, MTH 204)

Non-calculus based general physics course for earth and life science majors. Study of force, laws of motion, hear, fluid mechanics, electricity, magnetism, light (optics) and modern physics.

SCI 104A

General Physics Laboratory

(1.5 quarter units)

(Prerequisites: Satisfactory completion of high school algebra or equivalent and MTH 204, SCI 104)

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.

SCI 201

Human Anatomy and Physiology I

This course is concerned with the Anatomy and Physiology of the Human Body. Areas for study include cells and tissues, some of our organs (skin and body membranes; the skeletal, muscular and nervous systems), the special senses (eye, ear, balance, taste and smell), 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.

SCI 201A

Human Anatomy and Physiology Laboratory I

(1.5 quarter units)

(Prerequisite: SCI 201)

This is a laboratory course in Human Anatomy and Physiology that provides hands-on use of many instruments used in research and medical practices. The amazing progress that Cellular and Molecular Biology have experienced is mainly due to the development of biochemical and biophysical laboratory techniques that have played a central role in our understanding of how things work at the cellular, tissue, and organ level. Through performing a number of different experiments, students will gain a practical understanding and appreciation of the structure and function of the Human Body. Students conduct fetal pig dissections in order to better understand the mammalian anatomy, in particular, the cardiovascular and urogenital systems. Cells, tissues and organs will be compared and contrasted. Digestion, energy requirements, and how enzymes operate will be examined.

SCI 202

Human Anatomy and Physiology II

This course on human anatomy and physiology focuses on the endocrine system; blood; the cardiovascular system; the lymphatic system and body defenses; the respiratory system; the digestive system and body metabolism; the urinary system; the reproductive system and their functional relation to each other. The aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

SCI 202A

Human Anatomy and Physiology Laboratory II

(1.5 quarter units)

(Prerequisite: SCI 202)

This is a laboratory course in Human Anatomy and Physiology that provides hands-on uses of many instruments used in research and medical practices. The course is necessary as evidence in the amazing progress that Cellular and Molecular Biology have experienced is mainly due to the development of biochemical and biophysical laboratory techniques that have played a central role in our understanding of how things work at the cellular, tissue, and organ level. Through performing a number of different experiments, students will gain a practical understand and appreciation of the structure and function of the Human Body. Students will not dissect in this course, although by examining a live chick embryo students will observe the heart contracting and circulating blood. This course will also focus on mitosis, meio-

sis, embryonic and fetal development; the practice of aseptic techniques, gram staining and interpreting antibiotic susceptibility tests. Additional investigations include homeostasis in the lungs, liver and kidneys, examinations of bones, brains and chromosomes, and different types of inheritance through the testing of vision, hearing and taste and smell.

SCI 203

Introduction to Microbiology

This course will introduce the students to the vast and unseen world of microorganisms, including both pathogenic and nonpathogenic forms. A basic understanding of the kingdoms of life, cell structure, prokaryotic and eukaryotic cells, cellular metabolism and methods of reproduction is necessary before focusing on the organisms of clinical interest. Topics include: pathogenicity, toxicity and the role of the opportunistic pathogen in humans, including bacteria, fungi, protozoan, viruses, parasites, and prions. The epidemiology of the most common disease-causing organisms will be compared, with an emphasis on understanding the method of pathogenicity and mode of transmission so as to prevent and control infection. The fundamentals of the immune response to infection will be included, as well as a retrospective on the emergence of HIV and an awareness of newly emerging disease threats such as Ebola and SARS.

SCI 203A

Introduction to Microbiology Laboratory

(1.5 quarter units)

(Prerequisite: SCI 203)

This course will introduce the students to laboratory safety and procedures for handling biological specimens. The methods of identification of microorganisms, both microscopic and by diagnostic media, will be emphasized. Students will work with a selection of the most common medically significant microorganisms including bacteria, protists, fungi and parasites. This course emphasizes techniques essential to microbiology including aseptic technique, isolation of a single colony by quadrant streak method, preparation of a pure culture, inoculation and interpretation of select diagnostic tests. In addition, preparation of stained slides and wet mounts, microscopic observations, and the determination of antibiotic susceptibility will be learned. Students will culture and study the normal flora of the throat, skin, and surface of everyday items. An introduction to anaerobic bacteria and culturing techniques will be included. Students will gain an understanding of the difference between sterile conditions and disinfection. This two-month course is a combination of lecture and laboratory activities.

SCI 219

Plants and People +

A study of food, fiber, forage, fuel and drug crops of major economic significance. Emphasizes ethnobotany, including basic principles of botany, geographic distribution, commercial value and marketable products.

SCI 300

Geography: Mapping the World

A course emphasizing both human cultural and physical geography and the intimate interconnectedness of the physical, biological and human realms on earth. Explains the relationships between the surface features of the earth, climate, plants, animals and human cultures (politics, languages, economic opportunities, urban vs. rural concerns, migrations and other social factors). Focuses on students' immediacy in interacting with the real (measurable and map able) world in which they live. Includes a field-lab component.

SCI 301

Earth and Planetary Sciences

A study of the astronomical, geological and oceanographic sciences. Emphasizes the physical structures and processes that have formed (and are

Course Descriptions

continuing to shape) the stars, planets and other objects of our solar system and the universe.

SCI 303

Introduction to Geographic Information Systems and Remote Sensing in Natural Resources

This course is designed to demonstrate interdisciplinary features in Geographic Information Systems. It will introduce the students to the fundamental concepts of sound geographic analysis in a GIS. Aspects of the class include geography, cartography, and computer science. These aspects will be incorporated in analytical uses of GIS software 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. Emphasis will be on natural resource data bases and applications.

SCI 322

Oceanography

An examination of the interactions between oceanographic, geological and astronomical processes on the physical and living components of the world's oceans. The course explores the interactions between the ocean and the atmosphere and how these interactions affect currents, weather and biological activity. The course curricula also explores how marine biological organisms and biological processes modify the oceanic and global environment.

SCI 330

Ecology

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.

SCI 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.

SCI 336

Natural Resources, Conservation, Economics, and Policy

This course is designed to provide an overview of the distribution and uses of world natural resources and the application of economic concepts to the management of specific renewable resources. Included will be a review of specific resources such as soil, water, grasslands, forests, marine habitats, fish and game populations and energy resources.

SCI 337

Environmental Law, Policy, and Sustainability

This course is designed to give the student an understanding of the science disciplines which investigates the relationship of laws, national and world policy generation and human society's promotion of a sustainable society.

SCI 400

History of Science

(Prerequisite: One 4.5 quarter unit 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 405

Cell and Molecular Biology

Introduction to basic biological principles including the chemical basis of life, cell structure and function, energy transformations, cell division, genetics and the origin of life.

SCI 405A

Cell and Molecular Biology Laboratory

(1.5 quarter units)

This laboratory course will complement the student's knowledge of cell and molecular 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.

SCI 408

Introduction to Genetics and Heredity

Principles of heredity, with emphasis on the relationship of genetics to the health, welfare, behavior and society of humankind. Application of genetics to the origin, adaptations and evolution of species.

SCI 411

Biodiversity

A survey of the form and function of diverse life forms (past and present) on earth. Describes representative members of the various kingdoms within the framework of evolutionary ecology and conservation. May also discuss current issues in habitat loss, extinctions, preservation of tropical rain forests and coral reefs, resource values for humans and restoration ecology.

SCI 412

General Zoology

A comparative approach to the study of animal life: organization, structure, physiology, reproduction, evolution and behavior of invertebrates and vertebrates.

SCI 412A

General Zoology Laboratory

(1.5 quarter units)

(Prerequisite: SCI 412)

This laboratory course will complement the student's knowledge of zoology 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.

SCI 420

Animal Behavior

A descriptive introduction to the field of animal behavior. Will emphasize broad-based behavioral concepts that integrate the work of biologists, psychologists and anthropologists.

SCI 450

Natural History of California: A Field Course

A unique field experience for those students interested in a more comprehensive introduction to the scientific study of the Southwestern ecosystems of the U.S. This course consists of field trips, with sites specifically selected for each academic center within the University.

SCI 480

Studies in Field Biology

A field-based study in paleontology, terrestrial or freshwater ecology, marine biology, deforestation, habitat protection, endangered species, environmental education, or other aspects of field biology under the individual direction of the faculty. Topics and sites are specifically designed for teachers in career development programs or for those students traveling throughout different ecosystems. Flexibility in units and subject matter are at the essence of this course. Units can be taken separately or cumulatively (this course can be repeated depending upon the needs of individual students).

SCI 490

Guided Study

(1.5-4.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

SCI 491A

Senior Seminars and Capstone Project in Environmental Studies I

This capstone course provides the student an opportunity to examine environmental issues in a focus area, selected from a menu of eight (8) options. The upper division Seminar options, each structured for seven (7) 4.5 hours sessions will compare and analyze the different approaches modes of inquiry historical perspectives and methodologies associated with each environmental issue/ problem will be reviewed. Having completed the seminars, students will select (with approval of the instructor) a topic within one of the completed options for further research. Students will be expected to conduct original research, producing a "capstone" paper based on a practical "hands-on" project, either field-based or agency-based.

SCI 491B

Senior Seminars and Capstone Project in Environmental Studies II

This capstone course provides the student an opportunity to examine environmental issues in a focus area, selected from a menu of eight (8) options. The upper division Seminar options, each structured for seven (7) 4.5 hours sessions will compare and analyze the different approaches modes of inquiry historical perspectives and methodologies associated with each environmental issue/ problem will be reviewed. Having completed the seminars, students will select (with approval of the instructor) a topic within one of the completed options for further research. Students will be expected to conduct original research, producing a "capstone" paper based on a practical "hands-on" project, either field-based or agency-based. The seminar topic chosen in SCI491B should be different than the one selected in SCI491A.

SCL – Supply Chain Logistics

SCL 601

Supply Chain Management Fundamentals

The supply chain involves the processes between three or more companies to bring product and related information from source of raw supply to the final consumer. In this course, students will be introduced to the difference between logistics and supply chain management, how relationships are built, information technology that will implement the supply chain, and the competitive advantages that can occur. This course will look at the dynamics and conflicting objectives of supply chain partners, and discuss how to integrate these to improve individual company performance and market share.

SCL 602

Supply Chain Management - Strategies, Design and Implementation

This course builds on many critical issues pertinent to Supply Chain Management including inventory management; logistics network design, distribution systems, and customer value, to more advanced discussions of strategic alliances, the value of information in the supply chain, information technology and decisions support systems, and international issues in supply chain management. It also discuss the state-of-the-art models: Managing and Designing the Supply Chain introduces state-of-the-art models, concepts, and solution methods important in the design, control, operation, and management of supply chain systems. A number of case study analyses will be covered to reinforce the concepts.

SCL 603

eLogistics Management Fundamentals

eLogistics is the process of getting goods and services from the source of supply or origin, to the final consumer. In this course we will look at the complex activities that make up this process, such as transportation, inventory control, warehousing,

Course Descriptions

international logistics, and supply chain management, and how they are inter-related. The course will show how information systems connect all these activities, with the goal of providing the best customer service at the least cost.

SCL 604

Advanced Supply Chain eLogistics Management

This course covers the advanced concepts in supply chain logistics management including Information Networks, Enterprise Resource Planning and Decision Support Systems. This assures that students are fully trained on the uses of these technologies and better prepared to manage these systems upon entering the industry. This course also provides extensive integration of spreadsheet-based solution methods, for example: Use of Excel Solver to solve linear programming problems and reciprocal cost allocation problems, Use of Excel regression to solve linear regression problems, Use of spreadsheets to perform sensitivity analysis in cost-volume-profit analysis and to prepare process cost reports.

SCL 605

Technology Assessment and Integration for Supply Chain Management and eLogistics

This course is an in-depth study of information systems technology through systems integration and distributed computing, to maximize efficiencies to meet organizational goals in supply chain management and eLogistics. The course provides a comprehensive, thoroughly up-to-date treatment of IS design, analysis, and implementation, with a practical focus on client server computing and the integration of legacy systems with newer applications to meet changing business needs in supply chain management and eLogistics.

SEN 410

Introduction to Software Engineering and Professional Ethics

This is an introductory course for students enrolled in or considering the Bachelor of Science in Software Engineering. Students are introduced to computer hardware, software and ethics. A general knowledge of software engineering and computer programming is introduced.

SEN 420

Introduction to Software Processes and Management

A broad perspective of software engineering and widely-used techniques for developing sophisticated software systems. Overview of requirements through system evolution and develops the Software Development Life Cycle (SDLC). Students work in a team environment to develop software requirements documentation.

SEN 421

Introduction to the Unified Process and Modeling Language (UML)

(Prerequisite: CSC 242)

Introduction to the Unified Process and Modeling Language. Incorporates the Rational Unified Process (RUP) and Unified Modeling Language (UML) and Rational Rose.

SEN 425

Software Architecture and Development

(Prerequisite: CSC 330C)

Introduction to the concepts and practices of software and component interaction. Defines architectural abstraction and differentiation from implementation, algorithmic and data representation. Reinforces integrity and independence of architecture reusability.

SEN 445

Database and Applications Development

(Prerequisite: CSC 422C)

Introduces and explains techniques for database and Internet applications. Includes applications for Active Server Pages (ASP) and database integration utilizing the Structured Query Language (SQL).

SEN 450

Human Computer Interface Engineering

(Prerequisite: CSC 427)

An examination of the Graphical User Interface (GUI) design, development and evaluation. Discussion of interface technology, design methods and interface evaluation. Students will develop prototype systems and present final projects in written and oral communication.

SEN 460

Software Quality and Testing

(Prerequisite: CSC 330C)

This course introduces the quality standard for software testing procedures for structured and unstructured environments. Continuous quality framework, based on Deming's spiral model for continuous improvement, and details as applied to software testing.

SEN 465

Introduction to UNIX/LINUX

Introduction to the history and fundamentals of the UNIX/LINUX Operating System. Includes the history of Linux and open source code, files and directories, shell commands, K Desktop Environment and GNU Network Object Model Environment (GNOME).

SEN 486A

Software Engineering Project I

This is the first Capstone Project Course towards the degree requirements. Students will apply the concepts and knowledge acquired in previous coursework towards the completion of a final project. Students will be working in teams of 3-5 students and developing the Operational Concept Document (OCD), Software Requirements Specification (SRS) and the Software Development Plan (SDD) for their final Project.

SEN 486B

Software Engineering Project II

(Prerequisite: SEN 486A)

This is the second Capstone Project Course towards the degree requirements. Students will continue to apply the concepts and knowledge acquired in previous coursework towards the completion of a final project. Students will be developing the System Prototype, Software Test Plan (STP) and the User's Manual (UM) in preparation for their Final Project Report and Presentation.

SEN 620

Principles of Software Engineering

A survey of principles of modern software engineering; development and maintenance of a software product and its supporting documents, software lifecycle and various models of development.

SEN 621

Software Tools and Processes

Prepares students with the broad understanding of the software design and development tools and processes needed to construct software in a systematic manner. Lab work involves assignments to illustrate these concepts, tools and processes.

SEN 625

Basic Software Architecture

Software architecture and its components and relationships, functionality, specifications, properties, interfaces and data models are examined during this course.

SEN 630

Applied Software Architecture

An in-depth study of software architecture. Defines and discusses object-oriented programming, design, modeling and programming at an advanced level. Discusses the use of UML to model architectures. Introduces a standard implementation of a distributed, object-oriented middleware (e.g., CORBA, J2EE, Microsoft .NET, etc.). Students design and implement an architecture using software.

SEN 635

Software Testing Strategies and Metrics

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 645

Designing Database Applications

An introduction to object-oriented modeling and design techniques for database applications. Discusses the benefits attributed to object-oriented techniques such as lower costs, shorter time to develop and better quality systems. Students are required to design and document a prototype database system using object-oriented modeling and relational database techniques.

SEN 650

Human Computer Interface

This course prepares students to develop software user interfaces by providing a background in human computer interaction concepts. Includes procedures that form the basis of effective human computer interactions that meet human cognitive capabilities and organizational practices and processes. Design guidelines, principles and methodologies for constructing, managing, installing and maintaining interactive systems that optimize user productivity are explored. Students will also complete a project related interface requirements specification.

SEN 651

User Interfaces and Software Engineering

A survey of current developments and tools for creation and run-time management of user interfaces. Students discuss HCI user expectations and needs and design an effective interface through the use of an interface requirements specification that includes object specification, navigation control, graphics and multi-media. The students complete a project that consists of development and evaluation of a user interface.

SEN 655

Applications Software Development

A survey of the technologies required for software development of current applications, such as internet and client/server. The Internet and the Web have revolutionized the way people communicate and organizations do business. This course will introduce students to the establishment, configuration and maintenance of intranet and internet website. Software development in this area includes network programming, remote method invocations, server-side and client-side programming, multi-threading, advanced GUI application development and on-line database processing.

SEN 660

Software Quality Engineering

(Prerequisite: all software engineering core courses)

Emphasizes quality engineering approaches for software project management, planning, estimating, design, development and distribution. Understanding of Capacity Maturity Models, ISO 9001 and IEEE 12207 Standards is also emphasized. Based on their operational concepts document, students develop a well-defined software plan.

SEN 686A

Software Engineering Project I

(Prerequisite: SEN 660)

Study of the software lifecycle. Emphasizes software development and testing, logical organization of software project, appropriate documentation and development and completion of the SRS and SDD. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

Course Descriptions

SEN 686B

Software Engineering Project II

(Prerequisite: SEN 686A) Two-month course, meets once a week.

Continuation of SEN 686A with development and completion of a software user's manual and software test plan. Students implement and present their completed projects. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

SMG – Sports Management

SMG 430

Introduction to Sports Management

The foundation and orientation course for the Sports Management Concentration this course is a survey of the principles of management applied to the administration of sports enterprises: planning, controlling, organizing, staffing and directing of the various activities necessary for effective functioning. Examples of such activities include: golf course management, tennis club management, fitness center management, tournament management, etc.

SMG 432

Principles of Leisure Services Management

This course examines 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 analyze operating problems and propose solutions to enhance their knowledge and outlook on leisure facilities and operational management.

SMG 433

Sports Financial Management

An examination of the basic financial and accounting problems facing the operation of a sports enterprise, the course concentrates on the unique characteristics of sports organizations and programs, and provides the student with the skills necessary to effectively manage values, resources, and revenue streams. Students will develop skill in financial analysis and an appreciation of the financial decision-making process in the administration of sports enterprises.

SMG 434

Principles and Problems of Coaching

The study of vital sociopsychological aspects of coaching, the primary focus of this course is on individual sports – golf, tennis, fitness, but also includes team sports – football, soccer, basketball, etc. Includes philosophy of coaching, sports administration, psychology of sport, physiology, and ethics. Emphasis is given to the technical, tactical, physical, and psychological components of players and coach-player relationships.

SMG 435

Legal Aspects of Sports Administration

This course covers federal, state and organizational regulations impacting the sports industry. Focus is placed on contract law, tort liability, agency law, labor law, copyright, license and intellectual property law as applied to sports. The legal relationship of athletes as individuals and as members of a team to sports industry management will be discussed. General legal aspects of E.E.O., affirmative action and diversity in the workforce effecting employees of the sports enterprise will also be covered.

SMG 436

Sports Marketing and Promotions

This course introduces students to the 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.

SOC – Sociology

SOC 100

Principles of Sociology +

(Prerequisites: ENG 100/101)

A critical introduction to the basic concepts in sociology and a basic examination of major theoretical perspectives including functionalism, symbolic interactionism and conflict theory. Students learn how to formulate research topics in sociology and evaluate various research methodologies. Topics for exploration include education, religion, race relations, gender identity, the social construction of the family, deviance and social problems.

SOC 260

Cultural Anthropology

(Prerequisites: ENG 100/101)

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 Dynamics in the Workplace

As the workplace changes under the impact of new technologies and alterations in the compositions of the workforce, we need to rethink the nature of cultural dynamics. This course not only seeks to define the relationship of the workplace to the community, but also examines the historical development and contemporary relevance of social, artistic and economic matters crucial to a healthy perspective for employers and employees.

SOC 325

Contemporary Popular Culture

(Prerequisites: ENG 100/101)

A critical examination of contemporary popular culture in sociological perspective. Introduces students to the crucial debates in the field of cultural sociology, including a critique of the distinction between 'high' and 'low' forms of culture, the social distinction between work and leisure time, the impact of travel and tourism on indigenous cultures, the influence of society on individual patterns of consumption and personal taste and the sociology of everyday life. Discusses such topics as the mass media, sports, leisure activities, fashion, youth culture, science fiction, rock music, talk shows, soap operas, Internet chat rooms, personal ads, home shopping and folklore. Students have the opportunity to incorporate their own popular cultural preferences as topics for papers, presentations and class projects.

SOC 328

Intercultural Thinking and Creativity

(Prerequisites: ENG 100/101)

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

Social Issues in Health and Illness

(Prerequisites: SOC 100 and ILR 260)

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 332

Contemporary American Society

(Prerequisites: ENG 100/101)

An exploration of the relationship between television and society in a cultural and historical context. In particular, students analyze the impact of television on society and explore the ways in which television has changed how individuals view the world and receive information. Considers how contemporary visual culture has transformed society and discusses such issues as the social functions of advertising; social and corporate processes of television programming; the interrelationship between television, democracy and political participation; and current developments in technology.

SOC 336

American Film and Society +

(Prerequisites: ENG 100/101)

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 344

Marriage, Sex and the Family

(Prerequisites: ENG 100/101)

Over the past 30 years, ideas about marriage, sex and the family seemingly have changed. But have they? Using a sociological perspective, this course examines the institution of marriage and identifies family structures through an overview of the current topics affecting family life and a discussion of sex, marriage and family in historical and cross-cultural context. Covers topics including kinship ties, the sexual revolution, changing gender roles, remaining childless, alternative forms of family, divorce, family violence, the economy and the family and an aging population.

SOC 365

Classical Social Theory

(Prerequisites: SOC 100 and ILR 260)

Beginning with the Enlightenment and extending into the 20th century, this course examines the foundational theories that have engaged major social theorists. It analyzes the nature and types of classical social theory; it explores the historical, economic, political, intellectual, and biographical contexts within which they developed; and it appraises the extent to which they continue to inform current sociological research and thinking and the ways in which they differ.

SOC 375

Contemporary Social Theory

(Prerequisites: SOC 100 and ILR 260)

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

(Prerequisite: SOC 100, MTH 210, and ILR 260)

Designed to present students with the key methods of sociological research. Research methodologies guide the defining, collecting, organizing, and interpretation of data. We will systematically study

Course Descriptions

major sociological research designs and methods including survey, qualitative technique, secondary data analysis, network analysis, and experiment. All methods have strengths and weaknesses and we will explore the kinds of conclusions that can be drawn from each method. Finally, students will develop the critical ability to understand the problems faced by contemporary researchers and how they dealt with (but not necessarily solved) these problems.

SOC 430 **Culture, Technology and Society**

(Prerequisites: ENG 100/101)
A survey of the social, cultural and historical development of technology. Examines the creation and social impact of such technological innovations as the printing press, the telegraph, the telephone, railroads, steam engines, internal combustion engines, automobiles, earthmoving equipment, radio, television, computers, nuclear power, satellite communications, facsimile machines, cellular phones, fiber optics and the Internet, among others. Emphasizes the effect of technological changes on work, education, consumption, politics, the environment and especially the effect of technology on race, class and gender.

SOC 443 **Sociology of Deviance**

(Prerequisites: SOC 100 and ILR 260)
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 100/101)
A critical examination of historical and contemporary social conditions. Using various sociological perspectives, namely functionalism, conflict theory and an interactionist perspective, students explore the ways in which social problems are defined, learn how to evaluate policies designed to alleviate social problems and analyze the unintended consequences of social policies when issues of race, class, gender and other differences are not adequately taken into consideration.

SOC 449 **Sociology of Law**

(Prerequisites: SOC 100 and ILR 260)
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: SOC 100 and ILR 260)
A course about organizations and their behavior. The study of social structure is central to sociology and the study of formal organizations is funda-

mental 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: SOC 100 and ILR 260)
About social interaction, that is, the behavior and cognitive processes which occur when people interact in groups. We will consider the individual as a social actor and the development of a person's self-image or identity as well as the social influences on individual behavior, including the process of socialization. Students will engage in detailed analysis of social interaction and explore the processes which occur in groups, including conformity, productivity and leadership. Finally, the course considers the links between the individual and society and phenomena such as status attainment, social influences on health, and deviant behavior. Central to each of these processes are the unique qualities of human communication via the medium of language and the social construction of meaning.

SOC 490 **Guided Study**

(1.5-4.5 quarter units)
Individual study under direction of instructor. Requires prior approval of appropriate academic department.

SOC 499 **Capstone Seminar**

(Prerequisites: SOC 100, ILR 260 and ENG 240 or equivalent)
Taken near the end of the student's degree program after completion of the 40.5 units of core required courses for the major, and after completion of six or more of the elective courses.) This two-month capstone seminar gives students the opportunity to demonstrate their mastery of the principles, theories, and methods of sociology learned in courses required in the major. Students will develop a portfolio of their work consisting of revised papers from previous courses and new essays that will demonstrate the student's sociological imagination, knowledge of theory and methods, and will exemplify extensive research, critical thought, and intellectual engagement. Students will communicate the results of the portfolio through written and oral presentation. Completing the portfolio allows students to reflect on their academic careers and the relationship of their education to their occupational future, to revise earlier course work so that it represents their best efforts, and to create an impressive final project of which they can be duly proud.

SOC 500 **Understanding Cultural Pluralism**

in American Society +
(Prerequisite: ENG 100/101)
An analysis of the emergence of cultural pluralism in American society and the valuing of diversity as a socio-cultural imperative. Explores historical and cross-cultural perspectives on the issues of race, ethnicity, gender, migration and community development. Also examines the implications of the demographics in the United States and the concepts of inclusiveness and cross-cultural competencies needed to understand diversity in a global context.

SOC 540 **Power and Social Change**

(Prerequisites: ENG 100/101)
A critical examination of theories of power, includ-

ing 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**

(Prerequisites: ENG 100/101 and SOC 100)
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.

SSE – Safety and Security **Engineering**

SSE 602 **Design and Evaluation of a Modern Safety Program**

This course provides a comprehensive coverage of occupational safety and health field including concepts such as: technological changes that have introduced new hazards in the workplace; proliferation of health and safety legislation and corresponding regulations; health care and workers' compensation costs; a growing interest in ethics and corporate responsibility; professionalization of health and safety occupations; increased pressure from labor organizations and employees in general to increase work place safety; rapidly mounting costs associated with product safety and other types of litigation; and increasing incidents of workplace violence. This course introduces the engineering concepts through case study analysis and provides hands on experience in developing a modern safety program.

SSE 603 **Introduction to Security Engineering**

This course introduces to security and loss prevention as well as an overview of the security field including risk assessment, physical security, personnel security and information security areas. It provides students with a solid introduction to security principles and focuses on security concepts and management in a post-9/11 world including expanded coverage of terrorism and homeland security. It introduces students to the new concerns and challenges facing contemporary security managers and describes and discusses threats and prevention strategies to more than 20 specific security applications in real world examples.

SSE 604 **Security Engineering - Planning and Design**

This course provides a comprehensive coverage of security planning in both new and existing facilities. This course offers real-world concepts, principles, and processes for building security and safety design—including assessing a client's needs and working with physical security consultants.

- Specific areas will include:
- Security Design Concepts
- Security Evaluation and Planning
- Building Hardening
- Security Technology
- Biochemical and Radiological Protection
- Security and Emergency Operations
- Putting Security into Practice

Course Descriptions

SSE 605

Chemical Process Safety Engineering

This course covers chemical process safety and provides an overview of safety evaluation of a chemical and mechanical engineering plants. This course emphasis on fundamentals is intended to help both the student and the practicing scientist to understand the safety concepts and to apply them in an appropriate manner. This course introduces 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

This course introduces the computer security issue for every type of system, from traditional centralized systems to distributed networks and the Internet. The students will be taught on the state-of-the-art in networking; cryptography; program and operating system security; administration; legal, privacy, and ethical issues, and much more. This course combines core computer science concepts related to operating systems, networks, data bases, and programming, with accessible discussions of the use of cryptography and protocols. This course demonstrates each important area from a developer's or user's point of view, 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; methods 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

Science of Explosives and biological threat materials

This course introduces to forensic detection of explosives, the detection of hidden explosives in airfreight, luggage, vehicles, and on suspects. The course also covers biological threat materials and their assessment and control. In addition, this course covers the environmental detection of explosives, detecting on-site explosives in soil and water of contaminated areas and the detection of landmines. Specific topics to be covered include the following:

- Classifications of explosives
- Explanations of the basic terms related to the detection of explosives
- Vapor detection methods
- Probing radiation methods
- Tagging of explosives
- Systems integration and performance testing
- Detection of explosives in contaminated areas
- Detection of landmines
- Biological threat materials, assessment and control

SSE 609

Planning and Response for Terrorism

This course introduces the comprehensive and integrated principles behind chemical, biological, radiological, and cyber-terrorism and explosives and the appropriate response procedures for each of these terrorism and tactical violence incidents. This course also covers Incident Management System and a Quick Reference Guide for Hazard Zones, Incident Threat Response, SBCCOM Guidelines, and NIOSH Interim Recommendations.

SSE 610A

Safety and Security Engineering Capstone Course

This project course focuses on the application of

safety and security engineering methods and processes learned through this program. The students are to select research topics under the guidance of instructor and conduct research and write a detailed report. 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 both written and oral form to the client organization, if applicable, and to other students and faculty. The duration of this course is one month.

SSE 610B

Safety and Security Engineering Capstone Course

This is a continuation of SSE 610A project course focuses on the application of safety and security engineering methods and processes learned through this program. The students are to select research topics under the guidance of instructor and conduct research and write a detailed report. 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 both written and oral form to the client organization, if applicable, and to other students and faculty. Two-month course, meets once a week.

SSE 611

Emergency Management

The course 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. It also covers the changes in emergency management since the events of September 11, 2001.

SSE 612

Disaster Management and Preparedness

This course offers training on disaster response and management in the face of natural and man-made catastrophe. The course provides training on methodological approaches to be adopted during a disaster. Specific topics covered include risks identification, Governmental regulations, structural preparedness, coordinating with local assets, pre-planning for a disaster, effective communications, selecting the right people and training for success.

SYE – Systems Engineering

SYE 600

Introduction to Systems Engineering and the Systems Design Process

This is an introductory course which provides a detailed overview of systems, systems engineering, and systems design. The student will learn about the nature of systems, both natural and manmade, and the engineering process of human-made systems. The main emphasis is on systems design and the four phase design process: conceptual design, preliminary design, detail design, and evaluation and testing. Other important systems concepts such as life cycle engineering and feasibility and requirements analysis are introduced.

SYE 601

Systems Analysis and Design Evaluation

This course provides 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

This course provides 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

This course presents the ideas of complex systems, system behavior, and system of systems. It 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. Students must have access to computer hardware that meets NU SOET standards to run the software.

TAL – Teaching the Adult Learner

TAL 200

Understanding the Adult Learner

An introduction to development in adulthood, including research in the field: knowledge, issues, concerns, and research about the unique characteristics of adult learners and understanding of the literature contributing to adult learning.

TAL 201

New Course Development

Intended to provide persons who have had little or no prior teacher education preparation with the knowledge and skills necessary to develop new courses for adult learners in diverse learning settings with specific focus on development of course outlines, syllabi, lesson plans and assessment of learning.

TAL 202

Learning Environments

Intended to introduce persons who have had little or no prior teacher education preparation to diverse learning environments. The wide range of attributes among adult learners and their teachers will be studied and explored. Students will share with each other a description of the diverse learning settings in which they intend to teach and then exchange suggestions about how best to create an environment in which learning can occur.

TAL 203

Technical Reading Skills

Designed to provide persons who have had little or no prior teacher education preparation with research-based instructional methodologies and strategies in the basic processes of literacy and literacy instruction for adult learners in diverse learning settings to be able to read project directions and technical manuals.

TAL 204

Principles of Science and Math

Designed to provide persons who have had little or no prior teacher education preparation with content, methods, and Materials for teaching basic principles of science and math to adult learners in diverse learning settings.

TAX – Taxation

TAX 601

Tax Research and Decision Making

(Prerequisite: ACC 201)

This course is an examination of the primary sources of income tax law; the statutes and administrative and judicial interpretations; inquiry into

Course Descriptions

the interrelation of primary sources. Practical exercises in the use of research tools in locating, comprehending and interpreting primary source materials are used. Emphasis is placed on adequate and correct technical writing and composition.

TAX 602

Federal Tax Procedure

(Prerequisite: ACC 201)

This course is an analysis of federal tax procedure at the administrative level and in litigation: legal and practical aspects of Treasury regulations; administrative rulings; closing and compromise agreements; deficiency and jeopardy assessments; waivers; refund claims; mitigation of effects of limitations; jurisdiction; pretrial and appellate processes; tax collection; civil penalties; criminal prosecutions; and the rights and privileges of the taxpayer. Tax preparers' ethics, obligations and penalties are also highlighted.

TAX 603A

Federal Income Taxation Theory for Individuals

(Prerequisite: ACC 201)

This course is an introduction to federal taxation with emphasis on theoretical concepts. Special emphasis is placed on problems of individual taxpayers including deductions, exemptions, credits, basis, depreciation and income.

TAX 603B

Technological and Practical Aspects of Federal Taxation for Individuals

(Prerequisite: TAX 603A)

This course is a practical application of Federal individual theory to actual workshop problems and tax returns using major tax computer software. Emphasis is on tax return forms and their correct preparation. Advanced topics highlighted.

TAX 605A

Federal Taxation of Partners and Partnerships

(Prerequisite: ACC 201)

This course is an introduction to Federal taxation with emphasis on theoretical concepts. Special focus is placed on analysis of tax problems of organizing and operating partnerships with special emphasis on the treatment of distributions, withdrawals of a partner, partnership dissolution and sales or exchanges of partnership interests.

TAX 605B

Federal Taxation Theory of Corporations and Shareholders

(Prerequisite: ACC 201)

An introduction to Federal taxation with emphasis on theoretical concepts, special emphasis is on transactions between corporations and shareholders, transfers to the corporation, capital structure, dividends and other distributions and corporate liquidations.

TAX 605C

Technological and Practical Aspects of Federal Taxation for Partnerships and Corporations

(Prerequisite: TAX 605A and TAX 605B)

A practical application of Federal partnership and corporation theory to actual workshop problems and returns using a major taxation software program, this course places special emphasis on forms and their correct preparation. Advanced topics are highlighted.

TAX 608A

Estate, Gift and Trust Taxation

(Prerequisite: ACC 201)

Statutory materials applicable to Federal estate, gift and trust taxes and the preparation of appropriate tax forms are examined.

TAX 611

Taxation of Exempt Organizations

(Prerequisite: ACC 201)

This course is an examination of U. S. taxation of tax-exempt organizations, including a broad range of nonprofit institutions; all conducting a wide

variety of pursuits intended to serve the public good.

TAX 612

Retirement Plans and Deferred Compensation

(Prerequisite: ACC 201)

An introduction to funded employee retirement plans including pension and profit sharing and thrift plans; stock bonus plans; self-employment retirement plans and individual retirement accounts with emphasis on fixed contribution plans, the course examines basic concepts of plans and trusts; participation and vesting requirements; hours of service and break-in-service rules; discrimination in benefits or contributions; deductions for employer contributions; limitations on benefits and contributions; taxability of distributions; fiduciary responsibility and reporting and disclosure requirements.

TAX 614

Taxation of International Transactions

(Prerequisite: ACC 201)

This course examines U.S. taxation of foreign persons, income sourcing, allocation of deductions, residency, foreign governments, transfers between commonly controlled persons, income tax treaties, U. S. citizens abroad, controlled foreign corporations, boycotts, foreign tax credits, foreign tax credit limitation, foreign currency transactions, effectively connected income, withholding, disposition of U.S. real property, U.S. possession source income, foreign sales corporations, foreign holding companies, foreign reorganizations.

TAX 619

Master's Project

(Prerequisite: 27 quarter units of program coursework, including TAX 601)

This course is a project in which students work under the guidance of their 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 by "H" (for Honors "B" or better work), "S" (for Marginal, "C" level work) or "U" (Unsatisfactory, "D" or below).

TAX 690

Guided Study

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

TED – Teacher Education

TED 200

Schools: Children and Their Teachers (3 qu)

This course is designed to introduce students to the school environment. The wide range of attributes among children and their teachers will be studied and explored. Through a case study, students will examine a specific school and gather information about its people and their roles. Students will share their individual case studies in class in order to broaden perspectives regarding the various dynamics of school environments.

TED 201

Supporting Positive Behavior (3 quarter units)

This course is designed to introduce students to effective strategies that support positive behavior in children. Students will gain an understanding of and be able to systematically apply basic behavioral techniques. They will learn to analyze individual and cultural differences that may impact effectiveness. Through role plays, simulations, and case studies, students will develop the skills necessary in establishing and maintaining positive learning environments.

TED 202

Reading Lab: From Content to Teaching (3 qu)

This course is designed to provide paraprofessionals enrolled in a general education program with research based instructional methodologies and strategies in the basic processes of literacy and literacy instruction based on the Hawai'i content and performance standards for reading in an integrated elementary classroom (K-5/6).

TED 203

Writing Lab: From Content to Teaching (3 qu)

This course is designed to provide paraprofessionals enrolled in a general education program with research based instructional methodologies and strategies in the basic processes of writing. These basic processes include grammar, syntax, composition and report writing and are based on Hawai'i content and performance standards for teaching writing in an integrated elementary classrooms (K-5/6).

TED 204

Science Lab: From Content to Teaching (3 qu)

This course is designed to provide paraprofessionals enrolled in a general education program with research based instructional methodologies and strategies to assist in teaching Hawai'i content and performance standards for science in integrated elementary classrooms (K-5/6).

TED 205

Math Lab: From Content to Teaching (3 qu)

This course is designed to provide paraprofessionals enrolled in a general education program with research based instructional methodologies and strategies to assist in teaching Hawai'i content and performance standards for mathematics in integrated elementary classrooms (K-5/6).

TED 206

Technology in the Classroom (3 qu)

This course provides a broad overview of the use of technology as a teaching tool and mind tool in a K-5/6 classroom environment. The course is designed to provide paraprofessionals enrolled in a general education program with basic knowledge of how to use computer-based technology to assist with planning and designing a developmentally appropriate computer-based environment and to integrate the meaningful use of technology into lessons to support the diverse needs of K-5/6 learners. As part of the course requirements, are required to complete five hours of observing and assisting in a public school elementary classroom as directed by the instructor.

TED 207

Content Assessment (3 qu)

This course is designed to assist students in having a better understanding of norm-referenced standardized test measures for content mastery. Evidence of content mastery for students seeking a state teaching license or preliminary teaching credential is required in all states under the No Child Left Behind (NCLB) legislation. Preparation for the Praxis I and II, CSET, and MSAT for elementary teacher candidacy are included. Assistance will include a review of core content, memory skills, and test taking skills. Practice testing and an analysis of findings will conclude the course.

TED 605

The Diverse Classroom

TED 605 presents the complexity of today's classroom through cultural diversity, student development, curriculum planning, including curriculum development, design, implementation and evaluation.

TED 610

Introduction to the Intern Teaching Experience

(Prerequisite: Admission to the Intern Program) (4.5 quarter units)

Designed to orient Interns to the program.

Course Descriptions

Schedules will be developed for observation and assessment of instruction. Creating and maintaining effective environments for student learning will be the major curricular focus. Interns will be assessing their own classroom environments and creating more effective possibilities. Emergency or survival pedagogical skills will be covered as Interns bring to class concerns from their developing learning environments.

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 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 political perspectives within the context of the United States and Californian society and schooling.

TED 621A

Language Development Methods in Elementary School

(Prerequisites: TED 615, BTE students only: BTE 612)

This course is 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. Social, cultural, political, legal, psychological, general pedagogic and specific methodological factors affecting the first and second language development are considered. Application of these theories, strategies and techniques of second language learning across content areas in diverse educational environment in elementary school is addressed.

TED 621B

Reading and Language Arts Methods for Elementary Schools

(Prerequisites: TED 615 and TED 621A)

This course provides Multiple Subject Candidates with research-based methods and strategies for designing and implementing a balanced and comprehensive program of systematic instruction in reading, writing and related language arts aligned with the state adopted English Language Arts Academic Content Standards for Students and the Reading/Language Arts Framework. Course content is organized into four Reading Instruction Competence Assessment (RICA) domains.

TED 622A

Curriculum and Instruction I: History, Social Science, Physical Education, Visual and Performing Arts

(Prerequisite: TED 615 and TED 621A)

TED 622A focuses on 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

Curriculum and Instruction II: Mathematics and Science

(Prerequisites: TED 615 and TED 621A)

TED 622B focuses on 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

Language Development Methods for Secondary and Middle Schools

(Prerequisite: TED 615)

This course is designed for single-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. Social, cultural, political, legal, psychological, general pedagogic and specific methodological factors affecting the first and second language development are considered. Application of these theories, strategies and techniques of second language learning across content areas in diverse educational environment in elementary school is addressed.

TED 624

Content Area Literacy for Secondary and Middle Schools

(Prerequisites: TED 615 and 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 625A

Curriculum Development for Secondary and Middle Schools

(Prerequisites: TED 615 and TED 623)

This course integrates the California K-12 academic content standards with effective curriculum development principles for diverse learners. Through guided field activities, teacher candidates will access student background information for the purpose of designing and reflecting upon long and short term planning that enables engaged student learning and provides access to the curriculum for all learners.

TED 625B

Instruction and Classroom Management for Secondary and Middle Schools

(Prerequisites: TED 615, TED 623 and TED 625A)

This course builds on the curricular principles established in TED 625A by incorporating within a well-designed lesson plan, instructional strategies and related classroom management principles. The class also provides strategies for dealing with unproductive student behavior.

TED 628A

Intern Practicum I

TED 628B

Intern Practicum II

TED 628C

Intern Practicum III

TED 628D

Intern Practicum IV

TED 628A-D is a comprehensive 12 unit, 36 week program. TED 628A is a 3 unit, nine-week course into which an Intern enrolls upon application for the C-19 letter or Intern Credential. TED 628B is a 3 unit nine-week course into which an Intern enrolls upon successful completion of TED 628A. TED 628C is a 3 unit nine-week course into which an Intern enrolls upon successful completion of TED 628B. TED 628D is a 3 unit nine-week course into which an Intern enrolls upon successful completion of TED 628C. The Intern Practicum, TED 628A,B,C and D, comprises the four, nine-week terms that support teaching for the Intern who is NOT covered by the intern grant. The Intern Practicum, TED 628 A-D is designed to support the intern's employment by individualizing the practicum schedule. Interns at their job sites are given teaching support by both university and

school district personnel. Each intern will be assigned a Site Support Provider in cooperation with the employing school district and a University Academic Center. Support will be provided for a term of two semesters, nine months, or one school year. The Intern Practicum begins with the application of the Intern Credential. Assessment occurs through the electronic-portfolio process and is done in the TED 629I course, The Intern Seminar. The Intern also enrolls in the TED 610 course, Introduction to Intern Teaching.

TED 629

Student Teaching Seminar

(3 quarter units)

TED 629 integrates theory and practical approaches to situations experienced by candidates during their Student Teaching experience. Content areas include: (1) School Culture and Classroom Learning Environment, (2) Classroom Management, (3) Lesson Design, Implementation and Reflection and (4) Legal and Ethical Issues Related to the Teaching Profession.

TED 629I

Intern Teaching Seminar

(Prerequisite: Admission to the Intern Program)

(3 quarter units)

This course is designed to develop the assessment program for Interns. Interns will be developing assessment portfolios. Objectives will be set for the program; activities will be designed to meet the objectives; assessment tasks will be planned to evaluate the meeting of the objectives; and documentation of the process will be collected and organized. The documentation will be organized and presented at the close of the seminar.

TED 630A

Beginning Student Teaching

(Note: Does not grant graduate level credit)

TED 630A comprises the first month of the full-day, full-time, semester-long Student Teaching experience, in which candidates are placed with certified field supervisors. Candidates must successfully complete four components in their supervised Beginning Student Teaching: (1) school-site and classroom orientation including school personnel interviews, (2) onsite classroom observations, (3) lesson plan design, implementation and reflection within the context of fulfilling (4) professional responsibilities. Candidates also attend TED 629 Student Teaching Seminar, which integrates theory and practical approaches to situations experienced by candidates during TED 630A. Note: The grade assigned for the course will be either satisfactory or unsatisfactory.

TED 630B, TED 630C, TED 630D

Student Teaching

(Prerequisite: TED 630A)

(Note: Does not grant graduate level credit)

Student Teaching TED 630B, C, D comprises the second, third and fourth months of the full-day, full-time semester-long Student Teaching experience. Candidates are placed with certified teacher supervisors and are required to successfully complete four components: (1) Classroom responsibilities, (2) lesson plan design and presentation and (3) off-site classroom observations, each component within the context of fulfilling (4) professional responsibilities. Multiple-subject candidates spend eight weeks in both a K-2 and a 3-6 classroom (non-traditional programs may vary). One of the two assignments is with a certified Field Supervisor. Single-subject candidates experience teaching a minimum of four academic periods a day in two grade levels; a minimum of three of four periods must be in their designated academic area. Candidates complete TED 629 Student Teaching Seminar (as begun in TED 630A), which integrates theory and practical approaches to real-life situations experienced by candidates during TED 630 B, C, D. Note: The grade assigned for the course will be either satisfactory or unsatisfactory.

Course Descriptions

TED 638

Spanish for the Mathematics and Science Classroom

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 recommended for BTE students.

TED 639

Spanish for the Humanities Classroom

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.

TED 640B

Student Teaching II (6 quarter units)

A continuance 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.

TED 649

Classroom Management & the Student Teaching Seminar

Focuses upon the merger of coursework knowledge and teaching practice. The student teaching seminar addresses that merger as it relates to the management of a classroom and the development of appropriate student behavior. Classroom rules and rewards and consequences are developed and practiced. Conflict resolution skills are taught and practiced. Problems and issues that are met within the student teaching experience are brought to the seminar, discussed, and solutions are practiced. Assessment of teaching development in the entire program and during student teaching are assessed through the completion of the e-portfolio.

TED 650

Physical Development

The first in four courses to complete the Early Childhood supporting field for the Master of Arts degree in Teaching. Designed to communicate the freshness and viability of real, fully dimensional children and the idea that development is, above all, a human process. The physical dimension of development is the primary focus of this course. Scientifically derived information synthesizes classic and recent findings for the developmental principles of the young child. The influence of cultural and social factors on the development of the young child is integral to the study.

TED 651

Psycho-Social Development in Early Childhood

The psycho-social dimension of development is the primary focus of this course. Helps students appreciate the connections of psycho-social dimension

with the cognitive and physical dimensions of child development. Weaves the developmental domains into a holistic view of a child, which provides a useful foundation upon which effective teaching of the young child can be based.

TED 652

Early Childhood Cognitive Development

Explores the nature of developmental change as it pertains to cognitive development in early childhood. A brief history of developmental change, current issues in developmental study, methods of studying children and adolescents. Ideas from Jean Piaget to Howard Gardner will also be investigated.

TED 653

Teaching the Young Child

The fourth and final course in the Early Childhood curricular sequence, designed for prospective teachers of young children to guide their facilitation of healthy development of young children. Goals are to review theories of the early childhood education field; to get information and support for early childhood education; to observe teaching of young children; and to develop effective teaching techniques for young children.

TED 655

Assessment in the Middle School Classroom

A comprehensive approach to assessment practices that foster cohesiveness in classroom management while being grounded in middle-level philosophy, curriculum and instruction. Includes a knowledge of appropriate student outcomes as correlated to adolescent development; exploration of state curricular documents and other professional associations in education; development of plans to ensure educational equity and implementation in curriculum content and educational practices; examinations of the roles of historical, legal, social, political, economic and multicultural/multilingual perspectives on assessment; and examination of different learning style in a performance-based, authentic assessment curriculum.

TED 656

Contemporary Trends and Models in Middle School Education

Offers an examination of contemporary schooling policies and teaching practices in relationship to the most current issues, theories and research in education. A major focus of the class shall consider the historical and philosophical mission and development of middle level education. Also offers a diversity of institutional approaches in order to reach learners from diverse cultural backgrounds with various learning styles.

TED 657

Psychology and the Middle School

Focuses on curriculum-based advisement for the middle school student. University students learn how common traits and individual differences that characterize multiple intelligence in children and adolescents affect individual development. Students also study how economic and gender issues can impact the development of adolescent self-esteem and self-efficacy. A strong discussion of conflict resolution in middle school is also considered. This course shall also offer a diversity of instructional approaches in order to reach learners from diverse cultural backgrounds with various learning styles.

TED 658

Leadership and the Middle School

Promotes principles of leadership that focus on stakeholder cohesiveness within the middle school and the planning of curriculum and instruction based on knowledge of appropriate student outcomes. A clear understanding of early adolescent development as it relates to state curricular and other professional association objectives is one significant outcome of this course. Educational equity for people of all cultures and the implementation

of such curriculum content and educational practices shall be demonstrated while the roles of historical, legal, social, political, economic and multicultural/multilingual perspectives are considered in depth.

TED 660

The Bilingual Bi-Cognitive Child

A survey of research, theory and practices related to the learning and development of the bilingual child. Applies theories on culture, cognition, bilingualism, biculturalization and psychological dynamics of a positive self-esteem and academic development.

TED 661

Socio-linguistics

An examination of the development of language within a socio-cultural context. Studies the significant role of language in culture transmission and social/political control. Emphasizes the role of code-mixing and code-switching as a communication system in a multilingual, multicultural society.

TED 662

Comparative Linguistics

An analysis of the structure, phonology and morphology of language. Compares and contrasts the structure of different languages and addresses the linguistic problems in the transfer of errors from L1 to L2. Emphasizes the strategies for teaching English Language Development.

TED 665

Cognition, Language and Culture

Research, theory and practices related to the learning and development of the bilingual bi-cognitive child. Explores theories of cultures, cognition, bilingualism, acculturation and psychological dynamics of a positive self-esteem and academic development.

TED 666

The Cultural Foundations of Linguistics

Focuses on the development of language within the social, cultural and psychological context of language learning. Looks at the roles of language in cultural transmission and social/political control, the role of code-mixing and switching as a communication system in a multilingual, multicultural society and the role of the teacher in the delivery of instruction to second-language learners.

TED 667

Diversity and Change: A Critical Pedagogy

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. Provides students the opportunity to develop ideas, define concepts and expand thinking in the broad social, historical, cultural and political context of teaching and learning.

TED 668

Survey of Children's Multicultural Literature

A survey of children's multicultural literature, emphasizing effective strategies for fostering understanding of cultural diversity, tolerance, and prejudice reduction, social justice. Encourages development of critical skills in assessing literature

THR – Theater

THR 200

Theater Arts

An examination of theater as a dramatic medium capable of expressing every sort of human conflict, emotion and aspiration. Deals with tragedy, comedy, satire, historical plays, musicals, theatre of the absurd and improvisational techniques. Also introduces ways to implement popular and successful performance and improvisational exercises in the elementary/secondary classroom.

Course Descriptions

TMG – Technology Management

TMG 601

Data Mining Tools: Managing Technology for Competitive Advantage

Conceptual foundations of issues and principles that underpin data-mining technologies critical to the business success. Several data-mining software products are discussed and sample studies are provided for specific industries.

TMG 602

Emerging Trends in E-Business Implementation Management

An examination of real-world management methods that is adaptive, dynamic and flexible in an E-Business environment.

TMG 603

Information Security Risk Analysis

An analysis of vulnerabilities and threats facing organization's information and systems. Provides an in-depth discussion of the cost-effective risk analysis techniques such as PARA (Practical Applications of Risk Analysis) and FRAP (Facilitated Risk Analysis Process).

TMG 604

Competitive Intelligence Techniques and Methodologies.

An in-depth analysis of the Web-based competitive intelligence (CI) techniques and methodologies covering CI strategies across a wide range of business functions at today's top companies.

TMG 620

Principles of Technology Management

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 635

Strategic Management of Technology and 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 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 640

Managing Technological 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.

TMG 650

Master's Research Project

(Prerequisite: completion of MNS 601 in addition to at least 27 quarter units of program requirements with a GPA of 3.0 or better) Two-month course, meets once a week.

The student produces an original research project (applied research). The topics are initiated by the student and include emerging trends and important areas of interest in technology issues. The project requires approval from a student advisory committee. The class meets one session per week for two months. An additional month may be added for editorial purposes. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D", or below).

TMG 655

Management of R&D and Innovation Processes

This course presents specific system concepts, methodologies, and tools to strategically plan technology developments, to effectively manage core competencies, and to integrate these technologies into existing or future products in order to remain competitive in the world economy. It casts the Research and Development (R&D) Manager into strategic development process used in the front end of the business to provide future survival and growth for the organization as the lifecycle of existing products and/or services matures to obsolescence. Also introduced are the techniques used to stimulate and manage innovation in the workplace.

WCM – Wireless Communications

WCM 301

Linear Systems and Signals

Course focuses on mathematical models of continuous-time and discrete-time signals and linear systems and includes time-domain and frequency domain concepts, Fourier series and Fourier transform, basic filtering concepts, the Laplace transform, and applications to communication systems.

WCM 302

Probability and Random Processes in Engineering

Introduction to the concepts of probability, random variables, functions of random variables, random sequences and random processes, and elements of estimation theory.

WCM 601

Analog and Digital Communications Fundamentals

Course focuses on basic analog and digital principles and their application to the analysis and design of real-world communication systems.

WCM 602

Wireless Communications: Principles and Practice

(Prerequisite: WCM 601)

This course covers the topics in wireless communication systems, analysis of modern wireless communication system infrastructures, the cellular concept and system design fundamentals, mobile radio propagation, multiple access techniques for wireless communications, wireless networking.

WCM 603

Wireless Networking: Architectures, Protocols and Standards

(Prerequisite: WCM 602)

This course addresses the important issues of wireless networking, including architectures, protocols and standards. It describes concepts, technology and applications of wireless networking as used in current and next generation wireless networks. It also considers the engineering aspects of network functions and designs, mobility management, wireless enterprise networks, GSM, network signaling, WAP, mobile IP and 3G systems.

WCM 604

Coding and Modulation for Wireless Communications

(Prerequisite: 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

Information, Privacy and Security in Wireless Systems

(Prerequisite: WCM 602)

Analysis of the security and privacy issues associated with wireless systems. Cost/risk trade-offs. Technical, physical, and administrative methods of providing security. Control of access through technical and physical means. Identification and authentication. Encryption, including the Data Encryption Standard (DES) and public key systems. Management of encryption systems, including key protection and distribution. Discussion of practices and case studies related to the ethical aspects in the telecommunication industries.

WCM 606

CDMA: Wireless Standards and Applications

(Prerequisite: WCM 602)

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

Third-Generation (3G) Wireless Networks

(Prerequisite: WCM 602)

Third-generation standards, evolution of TDMA-based 2G systems to 3G systems; CDMA2000 system architecture; third generation European standards; wireless data in CDMA; wireless local loop; Wireless application protocol (WAP), WLAN, and Bluetooth technologies.

WCM 608

Engineering Software for Wireless System Development

(Prerequisite: WCM 602)

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

Communication Systems Modeling with Wireless Applications

(Prerequisite: WCM 602)

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 610

Next-Generation Wireless Infrastructures and Standards

(Prerequisite: WCM 602)

Course examines the visions of wireless communications applications in the 21st century: 4G mobile systems, wireless migration to packet networks, development of international standards, standardization of broadband wireless access, continuing evolution of CDMA, WCDMA radio access technology, wireless ATM networks, and new systems for PCS via satellite.

WCM 611A

Master's Research Project I

(Prerequisite: All core requirements)

(Prerequisites: Completion of a minimum of eight out of ten courses, WCM 601 through WCM 610) This course is the first part of the Master's Research project. It focuses on the research and

Course Descriptions

selection of an appropriate topic on one of the research or applications in the field of wireless communication systems. Student project teams research the topic of the project and complete the project proposal and timelines for project completions. Grading is by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

WCM 611B

Master's Research Project II

(Prerequisite: 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 by "H" (for Honors, "B" or better work), "S" (for Marginal, "C" level work), or "U" (Unsatisfactory, "D" or below).

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Convenient Locations

SAN DIEGO COUNTY

- VN National University System**
Administrative Headquarters
11355 North Torrey Pines Road
La Jolla, CA 92037-1011
(858) 642-8000
- VH National University**
Academic Headquarters
11255 North Torrey Pines Road
La Jolla, CA 92037-1011
(858) 642-8800
- VT National University Library at**
Spectrum Business Park
9393 Lightwave Avenue
San Diego, CA 92123-1447
(858) 541-7900
- VP Spectrum Business Park Campus**
9388 Lightwave Avenue
San Diego, CA 92123-1426
(858) 541-7700
- VJ South Bay Campus**
660 Bay Boulevard, Suite 110
Chula Vista, CA 91910-5200
(619) 563-7415
- VA Mission Valley Campus**
4121 Camino del Rio South
San Diego, CA 92108-4103
(619) 563-7241
- VO La Mesa Campus**
7787 Alvarado Road
La Mesa, CA 91941-3643
(619) 337-7500
- NB Carlsbad Campus**
705 Palomar Airport Road, Suite 150
Carlsbad, CA 92009-1029
(760) 268-1500
- NR Rancho Bernardo Campus**
16875 West Bernardo Drive,
Suite 150
San Diego, CA 92127-1675
(858) 521-3900

MILITARY LEARNING CENTERS

- V2 Marine Corps Air Station**
Miami Learning Center
Building 5305
San Diego, CA 92145
(619) 563-7355
- V3 Naval Air Station North Island**
Learning Center
Building 650
San Diego, CA 92135-7024
(619) 563-7478
- V5 Naval Base San Diego**
Learning Center
Building 151
San Diego, CA 92136-5000
(619) 563-7474
- V6 Fleet Anti-Submarine Warfare Training**
Learning Center
Building 7
San Diego, CA 92147-5090
(619) 563-7488
- VF Naval Amphibious Base Coronado**
Learning Center
Building 650
San Diego, CA 92135-7024
(619) 563-7478
- VM Marine Corps Recruit Depot**
Learning Center
Building 111
San Diego, CA 92140-5000
(619) 563-7482
- V8 Naval Submarine Base**
Admissions Office
Building 138, 140 Sylvester Road
San Diego, CA 92106-3521
(619) 563-7490
- V4 Naval Hospital Admissions Office**
Building 26, Room 115
San Diego, CA 92134-5000
(619) 563-7470
- VV Marine Corps Base Camp Pendleton**
Learning Center
Building 1331
Camp Pendleton, CA 92055-5020
(760) 268-1533
- PN Twentynine Palms Learning Center**
Marine Air Ground Task Force
Training Center
Building 1526, P.O. Box 6051
Twentynine Palms, CA 92278-1118
(760) 830-6887

- GL Naval Base Bremerton**
Admissions Office
2255 Gale Avenue
Building B53, Room 106
Bremerton, WA 98314
(360) 476-8428

SAN BERNARDINO COUNTY

- OS San Bernardino Campus**
804 East Brier Drive
San Bernardino, CA 92408-2815
(909) 806-3300
- OT Ontario Campus**
3800 Concourse, Suite 150
Ontario, CA 91764-5904
(909) 919-7600

LOS ANGELES COUNTY

- LA Los Angeles Campus**
5245 Pacific Concourse Drive,
Suite 100
Los Angeles, CA 90045-6905
(310) 662-2100
- LS San Fernando Campus**
14724 Ventura Boulevard,
Suite 801
Sherman Oaks, CA 91403-3501
(818) 817-2450

VENTURA COUNTY

- CV Camarillo Campus**
761 East Dolly Drive, Suite 120
Camarillo, CA 93010-0767
(805) 437-3000

ORANGE COUNTY

- OB Orange Campus**
765 The City Drive South, Suite 207
Orange, CA 92668-4742
(714) 429-5300
- OP Costa Mesa Campus**
3390 Harbor Boulevard
Costa Mesa, CA 92626-1502
(714) 429-5100

KERN COUNTY

- FK Bakersfield Campus**
4560 California Avenue, Suite 300
Bakersfield, CA 93309-1150
(661) 864-2360

FRESNO COUNTY

- FS Fresno Campus**
20 River Park Place West
Fresno, CA 93720-1551
(559) 256-4900

SANTA CLARA COUNTY

- JS San Jose Campus**
3031 Tech Way, 100 Plaza East
San Jose, CA 95128-2541
(408) 236-1100

SAN JOAQUIN COUNTY

- SQ Stockton Campus**
3520 Brookside Road
Stockton, CA 95219-2319
(209) 475-1400

SACRAMENTO COUNTY

- ST Sacramento Campus**
9320 Tech Center Drive
Sacramento, CA 95826-2558
(916) 855-4100

SHASTA COUNTY

- SR Redding Campus**
2195 Linkspur Lane, Suite 200
Redding, CA 96002-0629
(530) 226-4000

HAWAII

- HI Hawaii Admissions Office**
629 Pohokaina Street, Suite 202
Honolulu, HI 96813-5021
(808) 599-3597

NEVADA

- GN National University Nevada**
2850 West Horizon Ridge Parkway,
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