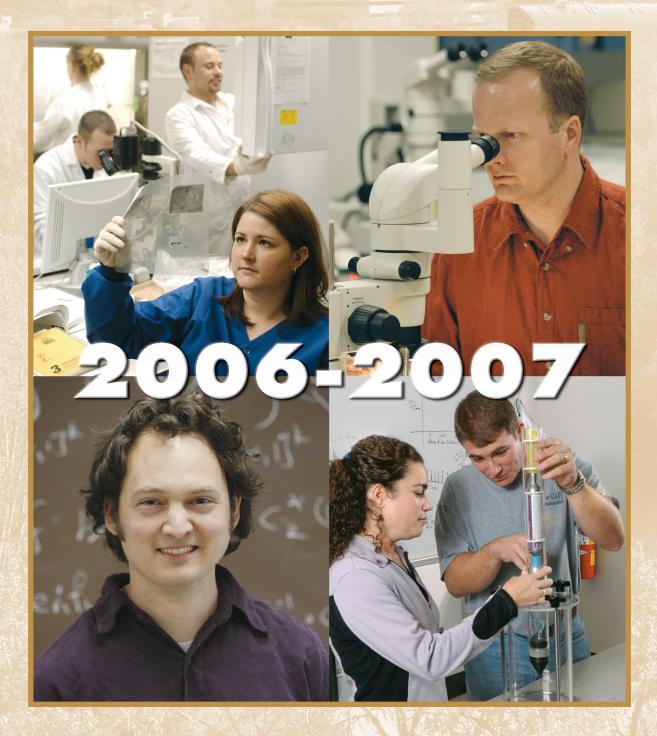
## BOISE STATE UNIVERSITY

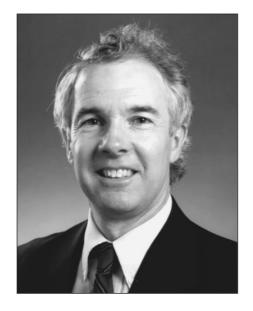


GRADUATE CATALOG

#### Welcome from the Graduate Dean

To all prospective and continuing graduate students, welcome to Boise State University.

The University is a resource for the State of Idaho and for you, the students, who enroll in its programs. Graduate education at Boise State is the essence of intellectual stimulation and the excitement of expanding talents and abilities.



Boise State is the home of internationally recognized scholars and research activities, award-winning faculty, championship athletic teams, and a student body that is growing in number, diversity, and international scope.

Boise State is located within the largest metropolitan area of Idaho and attracts more than one million people annually to its cultural, entertainment, and sporting events. The campus, bordered by the Boise River greenbelt, is beautifully maintained and provides a relaxed environment.

The Graduate College at Boise State University represents 70 master's degree programs, 11 graduate certificates, and four doctoral programs. It is my pleasure to assist in the administration and delivery of those programs.

If you choose Boise State for graduate education, you will be the beneficiary of many years of effort by faculty and staff. These dedicated individuals have created a tradition of program excellence, superior academic performance, strong advocacy for student success, and an environment of collegiality.

I am pleased that you are considering or have chosen to join our university community.

My very best wishes for your success,

John R. (Jack) Pelton

Dean of the Graduate College

## BOISE STATE UNIVERSITY GRADUATE ADMISSION APPLICATION

To be completed by students holding a bachelor's or higher degree. Please type or print clearly in ink. All entries must be answered. Those that do not apply, mark N.A. International students may <u>not</u> use this form. Please contact the International Admissions Office at 208-426-1757.

1.	Semester you plan to enroll:							
	Degree Objective from list on back.	(Fall, Spring, Sumn			(Year)			DO NOT WRITE IN THIS COLUMN
	Full Legal Name	oneck only one and el	niei neie					ID
Э.	Last Name		First Name			Middle Name		
	Previous Names		_ Preferred F	First Name_				Fee
4.	Student ID (if a previous applicant) _							Plan
5.	Social Security Number							
6.	Date of Birth:							Action Reason
7.	Permanent Address							Residency
		Address		City	State	Zip Code		School Attended
8.	Mailing Address	Address		City	State	Zip Code		School Attended
9.	E-mail Address							Graduation Date
10.	Telephone Number: (	)						
	Gender: ☐ Male ☐ Female	/	<del></del>					
	Will you have been a legal resident o	f the State of Idaho for	the 12 mont	hs prior to tl	he start of the s	emester che	cked in	#1? □ Yes □ No
	(Please refer to the Graduate Catalo							
	If NO, state of legal residence		_ If NO, date	e continuou	s residence in l	daho began		
13.	Citizenship(US or other)	If not a US citizen, ple	ease include	a copy of y	our Resident A	lien Card.		
14.	Ethnic Origin (check one):	☐ American Indian	☐ Asian	□ Black	☐ Hispanic	□ White	□Id	o not care to respond
15.	Have you previously applied to Boise	e State University?	□ Yes □	No				
16.	Have you previously enrolled at Bois	se State University?	□ Yes □	No If	Yes, when?			
17.	Colleges or Universities (including B cancellation of registration and dism			all institution	ons attended is	considered	fraud ar	nd subjects applicant to
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18.	College or University Degrees held:	Collogo	or I Injugrajtu		Ma	ior Fiold		Date Received
	Type (B.A., B.S., etc.)	College	or University		IVIa	jor Field		Date Received
refu dire	ertify that the statements in this appli undable \$55 application fee, and have ectly to Graduate Admission and Deg titution that granted my highest degre missal from the University.	official transcripts se gree Services; or if I a	nt directly from the contract of the contract	om <u>each</u> po general gra	st-high school industry in study, I	institution at must submi	tended t an off	other than Boise State
Ful	I Legal Signature of Applicant							
						Date		

RETURN TO: Graduate Admission and Degree Services, Boise State University, Math/Geoscience 141, 1910 University Drive, Boise, ID 83725.

Telephone (208) 426-3903 or 426-4204. Toll-free nationwide 1-800-824-7017. Fax (208) 426-2789

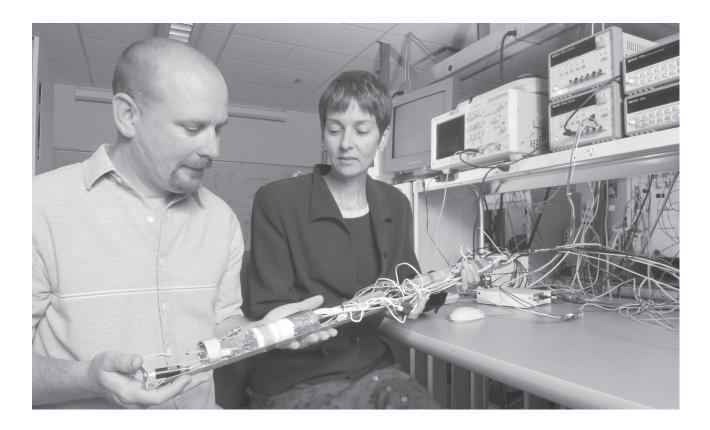
#### **DEGREE OBJECTIVES**

C	ollege of Arts and Sciences		MA in Education, Reading
	PhD in Geophysics		MA in Special Education
	PhD in Geosciences		Master of Education in Special Education
	MA in Art Education	C	ollege of Engineering
	Master of Fine Arts, Visual Arts		PhD in Electrical and Computer Engineering
	MA in Biology		MS in Civil Engineering
	MS in Biology		MEngr in Civil Engineering
	MS in Raptor Biology		MS in Computer Science
	Master of Fine Arts in Creative Writing		MS in Computer Engineering
	MA in English		MEngr in Computer Engineering
	MA in English, English Education		MS in Electrical Engineering
	MA in English, Rhetoric and Composition		MEngr in Electrical Engineering
	MA in Technical Communication		MS in Instructional and Performance Technology
	☐ Certificate in Technical Communication		MS in Mechanical Engineering
	MS in Earth Science		MEngr in Mechanical Engineering
	MS in Geology		
	☐ Certificate in Geographical Information Analysis	C	ollege of Health Sciences
	MS in Geophysics		Master of Health Science, Environmental Health
	MS in Mathematics		Master of Health Science, General Research
	MS in Mathematics Education		Master of Health Science, Health Policy
	Master of Music, Music Education		Master of Health Science, Health Promotion
	Master of Music, Performance		Master of Health Science, Health Services Leadership
	Master of Music, Pedagogy		☐ Certificate in Health Services Leadership
C	ollege of Business and Economics		ollege of Social Sciences
	MO in Assessments	aı	nd Public Affairs
ш	MS in Accountancy		
	MS in Accountancy, Taxation		MA in Communication
	· · · · · · · · · · · · · · · · · · ·		MA in Criminal Justice Administration
	MS in Accountancy, Taxation		MA in Criminal Justice Administration MA in History
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# Graduate Catalog

2006-2007





The graduate catalog describes the graduate programs offered by Boise State University and the policies, procedures, and requirements that govern those programs. Other pertinent university publications are the *Boise State University Schedule of Classes*, the *Boise State University Student Handbook*, and the *Boise State University Policy Manual*. All of these publications are available online at www.boisestate.edu. Prospective students are also encouraged to contact the graduate program coordinator of the program of interest for additional information.

#### **Policy Statement Concerning Catalog Contents**

The purpose of the Boise State Catalog is to provide current, articulate and accurate information about Boise State University for guidance of prospective students, for faculty and administrative officers, for students currently enrolled, and for other education or allied agencies.

Catalogs, bulletins, course and fee schedules, etc., are not to be considered as binding contracts between Boise State University and students. The university and its divisions reserve the right at any time, without advance notice, to: (a) withdraw or cancel classes, courses, and programs; (b) change fee schedules; (c) change the academic calendar; (d) change admission and registration requirements; (e) change the regulations and requirements governing instruction in, and graduation from, the university and its various divisions; and (f) change any other regulations affecting students. Changes shall go into force whenever the proper authorities so determine, and shall apply not only to prospective students but also to those who are degree-seeking at the time in the university. When economic and other conditions permit, the university tries to provide advance notice of such changes. In particular, when an instructional program is to be withdrawn, the university will make every reasonable effort to ensure that students who are within two years of completing the graduation requirements, and who are making normal progress toward the completion of those requirements, will have the opportunity to complete the program, which is to be withdrawn.

It is the policy of Boise State University to provide equal educational and employment opportunities, services, and benefits to students and employees without regard to race, color, national origin, sex, creed, age or handicap in accordance with Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972. Sections 799A and 845 of the Public Health Act, and Sections 503 and 504 of the Rehabilitation Act of 1973, where applicable, as enforced by the U.S. Department of Health, Education, and Welfare.

NOTE: The courses contained in this catalog do not preclude or limit the university in its offerings for any semester or session nor do they restrict the university to the time block (semester) represented by the approved academic calendar.

Boise State University attempts to respond to the educational needs and wants of any and all students when expressed. Requests for courses to be offered whenever they are desired will be favorably received providing that a minimum of 12 qualified students enrolls in the class and a competent faculty member is available to teach the course.

### **Table of Contents**

Welcome from the Graduate Dean Inside fr Graduate Admission Application Form Inside fr Academic Calendar	ont cove
Graduate Degrees and Certificate Programs Offered. Graduate Program Coordinators	
Graduate College Staff and Contacts	
An Introduction to Boise State University	
Course Terminology, Numbering, and Codes	
University-Wide Courses	
University Policies	
Graduate Admission Regulations	
Graduate Academic Regulations	
Regulations for Graduate Certificate Programs	
Regulations for Master's Programs	
Regulations for Doctor of Philosophy Programs	
Registration Policies, Procedures, and Grades	35
University Services	
Tuition and Fees	
Financial Aid for Graduate Students	
Student Housing	
Directory of Student Services	
Division of Extended Studies	52
Colleges and Departments	_
College of Arts and Sciences	
Art	
Biology	
English	
Mathematics	
Music	
College of Business and Economics	
Accountancy Business Administration	
Networking, Operations, and Information Systems	
College of Education	
Bilingual Education	
Counselor Education	
Curriculum, Instruction and Foundational Studies	
Early Childhood Studies	
Educational Technology	
Kinesiology	
LiteracySpecial Education	
College of Engineering	
Civil Engineering	
Computer Science	
Electrical and Computer Engineering	
Instructional & Performance Technology	
Materials Science and Engineering	
Mechanical Engineering	105



College of Health Sciences	168
Master of Health Science	168
<b>College of Social Sciences and Public</b>	<b>Affairs</b> 176
Communication	176
Criminal Justice Administration	178
History	181
Public Policy and Administration	
Social Work	
Interdisciplinary Programs	194
Hydrologic Sciences	
Interdisciplinary Studies	
Materials Science and Engineering	
Addiction Studies	
Gerontological Studies	
Additional Graduate Courses	204
Boise State University Graduate Faculty	
Adjunct Graduate Faculty	
Index	
Campus Map	
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#### **SUMMER SESSION 2006**

#### For Registration Information see the Summer Schedule of Classes

	To Regionation mornation see the Sammer Senetate of Stasses
February	6, MondayOrientation, Advising, and Registration Program for new, returning, and transfer students for Summer 2006. 6, MondayRegistration begins for Summer 2006.
	o, MondayRegistration begins for Summer 2006.
April	1, SaturdayRecommended last date to mail 2005-06 "Free Application for Federal Student Aid" (FAFSA) for consideration for financial aid for Summer 2006.
	25, Tuesday Orientation, Advising, and Registration Program for new, returning, and transfer students for Summer 2006.
May	11, ThursdayFee payment deadline for first 3-week and first 8-week sessions. Unpaid accounts will be assessed a \$50 penalty. Students who do not plan to attend must cancel/drop classes by this date.
	29, Monday Memorial Day Holiday (no classes - University offices closed).
June	1, ThursdayFee-payment deadline for 10-week, second 3-week, first 5-week, and second 8-week sessions. Unpaid accounts will be assessed a \$50 penalty. Students who do not plan to attend must cancel/drop classes by this date.
	8, ThursdayLast day to file undergraduate "Application for Graduation" for degrees and certificates to be awarded in August.
	8, ThursdayLast day to submit "Completion of Graduate Degree" and "Completion of Graduate Certificate" forms to the Graduate Admissions Office for graduate degrees and certificates to be awarded in August.
	22, ThursdayFee payment deadline for third 3-week session. Unpaid accounts will be assessed a \$50 penalty. Students who do not plan to attend must cancel/drop classes by this date.
	26, MondayLast day for final oral dissertation, thesis, or project defense for August graduation.
July	4, TuesdayIndependence Day Holiday (no classes - University offices closed).
	5, WednesdayLast day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate degrees to be awarded in December.
	5, WednesdayLast day to add assessment, challenge a course, independent study, internship, graduate independent study or directed research, or practicum.
	6, ThursdayFee-payment deadline for second 5-week session. Unpaid accounts will be assessed a \$50 penalty. Students who do not plan to attend must cancel/drop classes by this date.
	10, MondayLast day to submit final signed copies of dissertation, thesis, or project to Graduate Dean's Office for August graduation.
	13, ThursdayFee-payment deadline for fourth 3-week session. Unpaid accounts will be assessed a \$50 penalty. Students who do not plan to attend must cancel/drop classes by this date.

	Summer 2006 Deadlines by Session					
SESSION	START DATE	LAST DATE TO ADD WITHOUT INSTRUCTOR PERMISSION	LAST DATE TO REGISTER LAST DATE TO ADD OR DROP WITHOUT A 'W' AND RECEIVE A REFUND (less \$25.00 processing fee) LAST DATE TO CHANGE OR AUDIT TO CREDIT	LAST DATE TO DROP OR COMPLETELY WITHDRAW	END DATE	
1st 3 wk 2nd 3 wk 3rd 3 wk 4th 3 wk	May 15 June 5 June 26 July 17	May 15 June 5 June 26 July 17	May 16 June 6 June 27 July 18	May 22 June 12 July 3 July 24	June 4 June 25 July 16 August 6	
4 wk	June 12	June 12	June 14	June 21	July 9	
1 st 5 wk 2nd 5 wk	June 5 July 10	June 6 July 11	June 7 July 12	June 16 July 21	July 9 August 13	
1st 8 wk 2nd 8 wk	May 15 June 5	May 17 June 7	May 19 June 9	June 6 June 26	July 9 July 30	
10 wk	June 5	June 7	June 13	June 30	August 13	

#### **FALL SEMESTER 2006**

#### For Registration Information see the Fall Schedule of Classes

February

15, Wednesday....... Free Application for Federal Student Aid (FAFSA) priority filing deadline for entering freshmen and transfer students. Students who will begin enrollment at BSU during the Fall 2006 semester should transmit the FAFSA, including any required signature pages, by February 15, 2006. New and transfer students who meet this deadline will automatically be considered for most need-based scholarships and tuition waivers, and will receive priority consideration for certain grant, loan, and work-study programs.

15, Wednesday....... Scholarship deadlines: Last day to have all admission materials received in the Admissions Office for new and transfer

...Scholarship deadlines: Last day to have all admission materials received in the Admissions Office for new and transfer students who want to be considered for scholarships for the 2006-07 year. Last day for the BSU Supplemental Scholarship Application to be received in the Financial Aid Office to be considered for special 2006-07 merit and need-based scholarships. Last day for the Brown Scholarship application to be received in the Honors College. The Boise State Financial Aid website contains a listing of departments that require a separate scholarship application.

March	15, Wednesday	Free Application for Federal Student Aid (FAFSA) priority filing deadline for continuing students. Deadline for submitting Supplemental Scholarship Application. Students attending BSU spring semester 2006 and who plan to continue attendance during the 2006-07 academic year should transmit the FAFSA or renewal FAFSA, including any required signature pages, by March 15, 2006. Students who meet this deadline will receive priority consideration for certain scholarship, grant, loan, and work-study programs.
April	3, Monday	Registration for continuing students begins for Fall 2006 (by appointment).
•	•	Transfer Catalyst Orientation, Advising, and Registration Program. (by reservation)
	22, Saturday	Freshman Adventure Orientation, Advising, and Registration Program. (by reservation)
	28, Friday	Express Orientation, Advising, and Registration Program. (by reservation)
	29, Saturday	Freshman Adventure Orientation, Advising, and Registration Program. (by reservation)
June	1, Thursday	Priority deadline for international student application materials to be received for fall semester consideration.
		Orientation, Advising, and Registration Programs for new, returning, and transfer students (by reservation).
	13-15 Tues-Thurs	Online Orientation, Advising, Registration for new, returning and transfer students (by reservation).
	26-28, Mon-Wed	Orientation, Advising, and Registration Programs for new, returning, and transfer students (by reservation).
July	11-13 Tues-Thurs	Online Orientation, Advising, Registration for new, returning and transfer students (by reservation).
•		Last day for undergraduate, degree-seeking applicants for fall semester to have all admission materials received by the Admissions Office. Students who miss this deadline will be considered for nondegree-seeking (part-time) status only.
	12, Wednesday	Last day for graduate, degree-seeking applicants for fall semester to have all admission materials received by the Graduate Admissions Office. Applications received after this date might not be processed in time to admit students to degree programs.
	17-20, Mon-Thurs	Orientation, Advising, and Registration Program for new, returning, and transfer students (by reservation).
August		Online Orientation, Advising, Registration for new, returning and transfer students (by reservation).
August		Orientation, Advising, and Registration Program for new, returning and transfer students (by reservation).
		Faculty orientation/meetings.
		Fee-payment deadline for registered students. Unpaid accounts will be assessed a \$50 penalty. Students who do not plan to attend must cancel/drop classes by this date.
	18, Friday	Residence Halls open (Noon).
	21, Monday	Classes begin. Academic advising available throughout the semester.
	25, Friday	Weekend University classes begin.
	25, Friday	Last day for faculty initiated drops for nonattendance during the first week of the semester to be turned in to the Registrar's Office.
		Last day to file undergraduate "Application for Graduation" for degrees and certificates to be awarded in December.
	25, Friday	Last day to submit "Completion of Graduate Degree" and "Completion of Graduate Certificate" forms to the Graduate Admissions Office for graduate degrees and certificates to be awarded in December.
September	1, Friday	Last day to register; add classes; add dissertation, thesis, or project credit; add graduate independent study or directed research; or change from credit to audit or audit to credit. Pell Grant eligibility determined by number of credits registered on this date.
	1, Friday	Last day to waive student health insurance.
	•	Labor Day Holiday (no classes - University offices closed).
		Last day to submit "Residency Information Form" with documentation to Registrar's Office to declare Idaho residency.
	22, Friday	Last day to file application with department for final master's or doctoral written exam.
October	•	Last day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate degrees to be awarded in May.
	•	Last day to drop classes or completely withdraw.
	•	Last day to add assessment, a challenge course, internship, undergraduate independent study, or readings and conference.
		Columbus Day (classes in session).
	,	Final day for written comprehensive exam for graduate degrees for December graduation.
	20, Friday	Last day for final oral dissertation, thesis, or project defense for December graduation.
November	•	Veterans Day (classes in session).
	10, Friday	Last day to submit final signed copies of dissertation, thesis, or project to Graduate Dean's Office for December graduation.
	20-26, Mon-Sun	Thanksgiving Holiday (no classes - University offices closed November 23-26).
December	8, Friday	Classroom instruction ends.
	10, Sunday	Weekend University classes end.
	11-14, Mon-Thurs	Final semester examinations (exam schedule listed in Fall Schedule of Classes and on BroncoWeb).
	15, Friday	Residence Halls close (Noon).
	•	Commencement.
	20, Wednesday	Grade reports due to Registrar's Office by Noon.

Fall 2006 Deadlines by Session					
SESSION	START DATE	LAST DATE TO ADD WITHOUT INSTRUCTOR PERMISSION	LAST DATE TO REGISTER LAST DATE TO ADD OR DROP WITHOUT A 'W' AND RECEIVE A REFUND (less \$25.00 processing fee) LAST DATE TO CHANGE OR AUDIT TO CREDIT	LAST DATE TO DROP OR COMPLETELY WITHDRAW	END DATE
Regular	August 21	August 25	September 1	October 2	December 14
1st 4 wk 2nd 4 wk 3rd 4 wk 4th 4 wk*	August 21 September 18 October 16 November 13	August 21 September 18 October 16 November 13	August 23 September 20 October 18 November 15	August 30 September 27 October 25 November 22	September 15 October 13 November 10 December 8
1st 5 wk 2nd 5 wk 3rd 5 wk	August 21 September 25 October 30	August 22 September 26 October 31	August 23 September 27 November 1	September 1 October 6 November 10	September 22 October 27 December 8
1st 8 wk 2nd 8 wk**	August 21 October 16	August 23 October 18	August 25 October 20	September 12 November 6	October 13 December 8
1st 10 wk 2nd 10 wk	August 21 September 25	August 23 September 27	August 29 October 3	September 18 October 20	October 27 December 8
12 wk Mtn Home	August 21	August 24	August 30	September 24	November 10
Mtn Home  *This session is four	calendar weeks long with	three weeks of in class inst	August 30 ruction due to the Thanksgiving Week Break. struction due to the Thanksgiving Week Break		September 24

#### **SPRING SEMESTER 2007**

For Registration	Information	ann tha	Cowing	Cahad	la a	f Classo

		For Registration Information see the Spring Schedule of Classes
October	1, Sunday	
	15, Sunday	Priority deadline for international student application materials to be received for spring semester consideration.
	23, Monday	Registration for continuing students begins for spring semester (by appointment).
November	30, Thursday	Last day for undergraduate, degree-seeking applicants for spring semester to have all admission materials received by the Admissions Office. Students who miss this deadline will be considered for nondegree-seeking (part-time) status only.
	30, Thursday	Last day for graduate, degree-seeking applicants for spring semester to have all admission materials received by the Graduate Admissions Office. Applications received after this date might not be processed
	27.20 Man Thurs	in time to admit students to degree programsOrientation, Advising, and Registration Programs for new, returning, and transfer students (by reservation).
January		Orientation, Advising, and Registration Programs for new, returning, and transfer students (by reservation). Faculty meetings.
	11, Thursday	
	13, Saturday	Residence Halls open (Noon).
	15, Monday	Dr. Martin Luther King, Jr./Idaho Human Rights Day Holiday (no classes - University offices closed).
	16, Tuesday	
	19, Friday	
	22, Monday	Last day to file undergraduate "Application for Graduation" for degrees and certificates to be awarded in May.
	22, Monday	Last day to submit "Completion of Graduate Degree" and "Completion of Graduate Certificate" forms to the
		Graduate Admissions Office for graduate degrees and certificates to be awarded in May.
January	22, Monday	Last day for faculty initiated drops for nonattendance during the first week of the semester to be turned in to the Registrar's Office.
	29, Monday	Last day to register; add classes; add dissertation, thesis, or project credit; add graduate independent study or directed research; or change from credit to audit or audit to credit. Pell Grant eligibility determined by number of credits registered on this date.
	29, Monday	Last day to waive student health insurance.
	30, Tuesday	Last day to submit "Residency Information Form" with documentation to Registrar's Office to declare Idaho residency.
February	9. Friday	Last day to file application with department for final master's or doctoral written exam.
,	, .	
	27, Tuesday	Last day to drop classes or completely withdraw.
	27, Tuesday	Last day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate degrees to be awarded in August.
	27, Tuesday	Last day to add assessment, a challenge course, internship, undergraduate independent study, or readings and conference.
March	17. Saturday	Last day for written comprehensive exam for graduate degrees for May graduation.
		Spring Vacation

April	6, FridayLast day for final oral dissertation, thesis, or project defense for May graduation.  13, FridayLast day to submit final signed copies of dissertation, thesis, or project to Graduate Dean's Office for May graduation.
May	4, Friday
	<b>7-10, Mon-ThursFinal semester examinations (exam schedule listed in Spring Directory of Classes and on BroncoWeb).</b> 11, FridayResidence Halls close (Noon).
	12, Saturday

		T T	,		
SESSION	START DATE	LAST DATE TO ADD WITHOUT INSTRUCTOR PERMISSION	LAST DATE TO REGISTER  LAST DATE TO ADD OR DROP WITHOUT A 'W' AND  RECEIVE A REFUND (less \$25.00 processing fee)  LAST DATE TO CHANGE OR AUDIT TO CREDIT	LAST DATE TO DROP OR COMPLETELY WITHDRAW	END DATE
Regular	January 16	January 22	January 29	February 27	May 10
1st 4 wk	January 16	January 16	January 18	January 25	February 9
2nd 4 wk	February 12	February 12	February 14	February 22	March 9
3rd 4 wk*	March 12	March 12	March 14	March 21	April 6
4th 4 wk	April 9	April 9	April 11	April 18	May 4
1st 5 wk	January 16	January 17	January 18	January 29	February 16
2nd 5 wk	February 20	February 21	February 22	March 5	March 23
3rd 5 wk	April 2	April 3	April 4	April 13	May 4
1st 8 wk	January 16	January 18	January 22	February 6	March 9
2nd 8 wk**	March 12	March 14	March 16	April 2	May 4
1st 10 wk	January 16	January 18	January 24	February 12	March 23
2nd 10 wk	February 20	February 22	February 28	March 19	May 4
1st 12 wk Mtn Home 2nd 12 wk Mtn Home	January 8 April 9	January 11 April 12	January 18 April 18	February 9 May 10	April 2 June 29

<sup>\*\*</sup>This session is eight calendar weeks long with seven weeks of in class instruction due to the week-long Spring Break.

#### **SUMMER SESSION 2007**

June	7, ThursdayLast day to submit "Completion of Graduate Degree" and "Completion of Graduate Certificate" forms to the Graduate Admissions Office for graduate degrees and certificates to be awarded in August.
	25, MondayLast day for final oral dissertation, thesis, or project defense for August graduation.
July	4, WednesdayIndependence Day Holiday (no classes - University offices closed).
	5, ThursdayLast day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate degrees to be awarded in December.
	5, ThursdayLast day to add assessment, challenge a course, independent study, internship, graduate independent study or directed research, or practicum.
	9, MondayLast day to submit final signed copies of dissertation, thesis, or project to Graduate Dean's Office for August graduation.

Summer 2007 Deadlines by Session					
SESSION	START DATE	LAST DATE TO ADD WITHOUT INSTRUCTOR PERMISSION	LAST DATE TO REGISTER LAST DATE TO ADD OR DROP WITHOUT A 'W' AND RECEIVE A REFUND (less \$25.00 processing fee) LAST DATE TO CHANGE OR AUDIT TO CREDIT	LAST DATE TO DROP OR COMPLETELY WITHDRAW	END DATE
1st 3 wk 2nd 3 wk 3rd 3 wk 4th 3 wk	May 14 June 4 June 25 July 16	May 14 June 4 June 25 July 16	May 15 June 5 June 26 July 17	May 21 June 11 July 2 July 23	June 5 June 24 July 15 August 5
4 wk	June 11	June 11	June 13	June 20	July 8
1st 5 wk 2nd 5 wk	June 4 July 9	June 5 July 10	June 6 July 11	June 15 July 20	July 8 August 12
1st 8 wk 2nd 8 wk	May 14 June 4	May 16 June 6	May 18 June 8	June 5 June 25	July 8 July 29
10 wk	June 4	June 6	June 12	June 29	August 12

## **Graduate Degrees and Certificate Programs**

	Graduo	ate Degrees and Certificate Programs Offered	
Department	Degree	Program	Graduate Program Coordinator
College of Arts and Sciences	S		
Art	M.A.	Master of Arts in Art Education	Kathleen Keys, Ph.D.
	M.F.A.	Master of Fine Arts, Visual Arts	Cheryl Shurtleff-Young, M.A.
Biology	M.A.	Master of Arts in Biology	Ian Robertson, Ph.D.
	M.S.	Master of Science in Biology	Ian Robertson, Ph.D.
	M.S.	Master of Science in Raptor Biology	Ian Robertson, Ph.D.
English	M.F.A.	Master of Fine Arts in Creative Writing	Mitchell Wieland, M.F.A.
	M.A.	Master of Arts in English	Matthew Hansen, Ph.D.
	M.A.	Master of Arts in English, English Education	Matthew Hansen, Ph.D.
	M.A.	Master of Arts in English, Rhetoric and Composition	Matthew Hansen, Ph.D.
	M.A.	Master of Arts in Technical Communication	Mike Markel, Ph.D.
	Certificate	Technical Communication	Mike Markel, Ph.D.
Geosciences	Ph.D.	Doctor of Philosophy in Geophysics	Partha Routh, Ph.D.
	Ph.D.	Doctor of Philosophy in Geosciences	James McNamara, Ph.D.
	M.S.	Master of Science in Earth Science	David Wilkins, Ph.D.
	M.S.	Master of Science in Geology	James McNamara, Ph.D.
	M.S.	Master of Science in Geophysics	Partha Routh, Ph.D.
	M.S.	Master of Science in Hydrologic Sciences	James McNamara, Ph.D.
	Certificate	Geographical Information Analysis	David Wilkins, Ph.D.
Mathematics	M.S.	Master of Science in Mathematics	Uwe Kaiser, Ph.D.
	M.S.	Master of Science in Mathematics Education	Sharon Walen, Ph.D.
Music	M.M.	Master of Music, Music Education	Jeanne M. Belfy, Ph.D.
	M.M.	Master of Music, Pedagogy	Jeanne M. Belfy, Ph.D.
	M.M.	Master of Music, Performance	Jeanne M. Belfy, Ph.D.
Interdisciplinary Studies	M.A.	Master of Arts in Interdisciplinary Studies	Daryl Jones, Ph.D.
Minimum of two departments	M.S.	Master of Science in Interdisciplinary Studies	Daryl Jones, Ph.D.
College of Business and Eco	nomics		
Accountancy	M.S.	Master of Science in Accountancy	Kirk Smith, Ph.D.
•	M.S.	Master of Science in Accountancy, Taxation	Kirk Smith, Ph.D.
Graduate Studies	M.B.A.	Master of Business Administration	Kirk Smith, Ph.D.
	M.B.A.	Executive Master of Business Administration	Kirk Smith, Ph.D.
Networking, Operations, and	M.S.	Master of Science in Management Information Systems	Kirk Smith, Ph.D.
Information Systems	M.M.I.S.	Master in Management Information Systems	Kirk Smith, Ph.D.
	Certificate	Supply Chain Management	Kirk Smith, Ph.D.
College of Education			
Bilingual Education	M.Ed.	Master of Education in Bilingual Education	Claudia Peralta Nash, Ph.D.
	M.Ed.	Master of Education in English as a Second Language	Claudia Peralta Nash, Ph.D.
Counselor Education	M.A.	Master of Arts in Counseling	Bobbie Birdsall, Ph.D.
Counselor Education/ Health Sciences	Certificate	Addiction Studies	Ken Coll, Ph.D.

Graduate Degrees and Certificate Programs Offered (continued)			
Department	Degree	Program	Graduate Program Coordinato
Counselor Education/ Health Sciences/Social Work	Certificate	Gerontological Studies	Theodore McDonald, Ph.D.
Curriculum, Instruction &	Ed.D.	Doctor of Education in Curriculum and Instruction	Jonathan Brendefur, Ph.D.
Foundational Studies	M.A.	Master of Arts in Education, Curriculum and Instruction	Ted Singletary, Ph.D.
	M.A.	Master of Arts in Education, Curriculum and Instruction, Physical Education Pedagogy Option	Kenneth Bell, Ph.D.
	M.Ed.	Master of Education in Educational Leadership	Kathleen Budge, Ed.D.
	Certificate	Secondary/K-12 Teaching	Ted Singletary, Ph.D.
Early Childhood Studies	M.A.	Master of Arts in Education, Early Childhood Studies	Carrie Mori, Ph.D.
	M.Ed.	Master of Education in Early Childhood Studies	Carrie Mori, Ph.D.
Educational Technology	M.S.	Master of Science in Education, Educational Technology	Lisa Dawley, Ph.D.
	Certificate	Online Teaching	Lisa Dawley, Ph.D.
	Certificate	School Technology Coordination	Lisa Dawley, Ph.D.
	Certificate	Technology Integration Specialist	Lisa Dawley, Ph.D.
Kinesiology	M.S.	Master of Science in Exercise and Sport Studies, Behavioral Studies	Chad Harris, Ph.D.
	M.S.	Master of Science in Exercise and Sport Studies, Biophysical Studies	Chad Harris, Ph.D.
	M.S.	Master of Science in Exercise and Sport Studies, Socio-historical Studies	Chad Harris, Ph.D.
	M.P.E.	Master of Physical Education in Athletic Administration (ISU)	Chad Harris, Ph.D.
Literacy	M.A.	Master of Arts in Education, Reading	Stan Steiner, Ph.D.
Special Education	M.A.	Master of Arts in Special Education	Melinda Lindsey, Ph.D.
	M.Ed.	Master of Education in Special Education	Melinda Lindsey, Ph.D.
Additional Education Programs	M.A. M.S. M.A. M.S. M.M.	College of Arts & Sciences  Master of Arts in Art Education  Master of Science in Earth Science  Master of Arts in English, English Education  Master of Science in Mathematics Education  Master of Music, Music Education	Kathleen Keys, Ph.D. David Wilkins, Ph.D. Matthew Hansen, Ph.D. Sharon Walen, Ph.D. Jeanne M. Belfy, Ph.D.
	M.S.W.	College of Social Sciences and Public Affairs Master of Social Work	William Whitaker, Ph.D.
College of Engineering			
Civil Engineering	M.S.	Master of Science in Civil Engineering	George Murgel, Ph.D.
	M.Engr.	Master of Engineering in Civil Engineering	George Murgel, Ph.D.
Computer Science	M.S.	Master of Science in Computer Science	Alex Feldman, Ph.D.
Electrical and Computer Engineering	Ph.D.	Doctor of Philosophy in Electrical and Computer Engineering	R. Jacob Baker, Ph.D.
	M.S.	Master of Science in Computer Engineering	Scott Smith, Ph.D.
	M.Engr.	Master of Engineering in Computer Engineering	Scott Smith, Ph.D.
	M.S.	Master of Science in Electrical Engineering	R. Jacob Baker, Ph.D.
	M.Engr.	Master of Engineering in Electrical Engineering	R. Jacob Baker, Ph.D.
Instructional & Performance Technology	M.S.	Master of Science in Instructional & Performance Technology	Donald Stepich, Ph.D.

### **Graduate Degrees and Certificate Programs**

Graduate Degrees and Certificate Programs Offered (continued)				
Department	Degree	Program	Graduate Program Coordinator	
Materials Science and	M.S.	Master of Science in Materials Science & Engineering	Daryl Butt, Ph.D.	
Engineering/Biology/ Chemistry/Physics	M.Engr.	Master of Engineering in Materials Science & Engineering	Daryl Butt, Ph.D.	
Mechanical Engineering	M.S.	Master of Science in Mechanical Engineering	Rudy Eggert, Ph.D.	
	M.Engr.	Master of Engineering in Mechanical Engineering	Rudy Eggert, Ph.D.	
College of Health Sciences				
Health Sciences	M.H.S.	Master of Health Science, Environmental Health	Theodore McDonald, Ph.D.	
	M.H.S.	Master of Health Science, General Research	Theodore McDonald, Ph.D.	
	M.H.S.	Master of Health Science, Health Policy	Theodore McDonald, Ph.D.	
	M.H.S.	Master of Health Science, Health Promotion	Theodore McDonald, Ph.D.	
	M.H.S.	Master of Health Science, Health Services Leadership	Theodore McDonald, Ph.D.	
Health Sciences/ Counselor Education	Certificate	Addiction Studies	Ken Coll, Ph.D.	
Health Sciences/Social Work/ Counselor Education	Certificate	Gerontological Studies	Theodore McDonald, Ph.D.	
Health Sciences	Certificate	Health Services Leadership	Theodore McDonald, Ph.D.	
College of Social Sciences and Public Affairs				
Communication	M.A.	Master of Arts in Communication	Peter Wollheim, Ph.D.	
Criminal Justice Administration	M.A.	Master of Arts in Criminal Justice Administration	David Mueller, Ph.D.	
Dispute Resolution	Certificate	Conflict Management	Suzanne McCorkle, Ph.D.	
History	M.A.	Master of Arts in History	Nicholas Miller, Ph.D.	
	M.A.H.R.	Master of Applied Historical Research	Nicholas Miller, Ph.D.	
Public Policy and Administration	M.P.A.	Master of Public Administration, General Public Administration	Les Alm, Ph.D.	
	M.P.A.	Master of Public Administration, Environmental and Natural Resources Administration	Les Alm, Ph.D.	
	M.P.A.	Master of Public Administration, State and Local Government Policy and Administration	Les Alm, Ph.D.	
	Certificate	Community and Regional Planning	Susan Mason, Ph.D.	
Social Work	M.S.W.	Master of Social Work	William Whitaker, Ph.D.	
Social Work/Health Sciences/ Counselor Education	Certificate	Gerontological Studies	Theodore McDonald, Ph.D.	
Interdisciplinary Programs	.L			
Geosciences/Civil Engineering	M.S.	Master of Science in Hydrologic Sciences	James McNamara, Ph.D.	
Interdisciplinary Studies	M.A.	Master of Arts in Interdisciplinary Studies	Daryl Jones, Ph.D.	
	M.S.	Master of Science in Interdisciplinary Studies	Daryl Jones, Ph.D.	
Materials Science and	M.S.	Master of Science in Materials Science and Engineering	Daryl Butt, Ph.D.	
Engineering/Biology/ Chemistry/Physics	M.Engr.	Master of Engineering in Materials Science & Engineering	Daryl Butt, Ph.D.	
Counselor Education/ Health Sciences	Certificate	Addiction Studies	Ken Coll, Ph.D.	
Counselor Education/ Health Sciences/Social Work	Certificate	Gerontological Studies	Theodore McDonald, Ph.D.	

#### **Graduate College**

#### Office of the Graduate Dean

Office of the Oracocio Boar	
Math/Geosciences Building, Room 140	426-3647/1039/4203
Graduate Dean, John R. (Jack) Pelton	208 426-3647
Associate Graduate Dean, Alfred Dufty	208 426-3263/4203
Management Assistant, Naomi Fields	
Administrative Assistant, Julie Gerrard	208 426-3647
Financial Technician, Anne Herndon	208 426-1039
Graduate Admission and Degree Services	
Math/Geosciences Building, Room 141	3 426-3903/4204/1074
Graduate Degree Services Coordinator, Jim Allen	
Office Services Supervisor, Linda Platt	
Technical Records Specialist, Shari Kaiser	
Office Specialist, Suzetta Gibson	
Additional Services	
Financial Aid, Administration Building, Room 113	208 426-1664
International Student Admissions, Sally Pittman, Administration Building, Room 107	
GMAT Testing Center, Pearson Professional Centers, 1951 S. Saturn Way, Suite 200, Boise, ID 83709	1 800 247-8731
GRE, Testing Center, Pro-Metric, 5123 N. Glenwood Street, Garden City, ID 83714	208 321-7422
GRE, GMAT Test Prep Classes, Extended Studies, 1015 Grant Avenue	208 426-3492
Payment and Disbursement Center, Administration Building, Room 211	208 426-1212/4148
Registrar, Administration Building, Room 102	208 426-4249

#### **Administration**

#### **President**

Robert W. Kustra

**Provost and Vice President for Academic Affairs**Sona Andrews

**Associate Vice President for Academic Planning**James Munger

Vice President for Finance and Administration Stacy Pearson

**Vice President for University Advancement** Rick Frisch

Interim Vice President for Research John R. (Jack) Pelton

**Vice President for Student Affairs** 

Michael Laliberte

**Associate Vice President for Student Affairs**Mark Wheeler

**College of Arts and Sciences** 

Dean, Martin Schimpf Associate Dean, Helen Lojek

**College of Business and Economics** 

Dean, Howard L. Smith Associate Dean, Diane Schooley-Pettis Associate Dean for Graduate Studies and Executive Education, Kirk Smith

#### **College of Education**

Dean, Diane Boothe Associate Dean, Ross Vaughn

#### **College of Engineering**

Dean, Cheryl Schrader Associate Dean, Janet Hampikian

#### **Graduate College**

Dean, John R. (Jack) Pelton Associate Dean, Alfred Dufty

#### **College of Health Sciences**

Dean, James Girvan Associate Dean, Pam Springer Associate Dean, Sarah Toevs

#### **College of Social Sciences and Public Affairs**

Dean, Michael Blankenship Interim Associate Dean, Joanne Klein

#### **Division of Extended Studies**

Dean, Michael Stockstill Associate Dean, Kenneth Brauchle

#### **Larry Selland College of Applied Technology**

Dean, Larry Barnhardt

Associate Dean of Instruction, Vera McCrink Associate Dean of Enrollment Management and Student Success, Victor Watson

Associate Dean of Community, Economic and Workforce Development, Stan Brings

### An Introduction to Boise State University

#### **Boise**

Idaho's state capital and center of business, Boise is the largest metropolitan area between Portland, Oregon, and Salt Lake City, Utah. Set against a backdrop of the Rocky Mountain foothills, Boise is one of the most attractive and enjoyable cities in the nation. As a growing city of more than 186,000 people, Boise enjoys a varied economy based on high technology, agricultural products, tourism, government agencies, and manufacturing.

Known as the City of Trees, Boise is located in a land of infinite variety. To the south are rich farmlands; a rugged, high-mountain desert; North America's tallest sand dunes; and the famous Birds of Prey Natural Area. To the north, forests, whitewater rivers, and mountain lakes provide opportunities for kayaking, fishing, hunting, and hiking. For example, Bogus Basin ski resort is just 16 miles from the Boise State University campus, and world-famous Sun Valley is less than three hours

The Boise Greenbelt, a network of city parks and riverside paths, runs through the campus. Three city parks are within walking distance of Boise State University, and a footbridge spans the Boise River, linking the campus to Julia Davis Park, where the Boise Art Museum. Idaho State Historical Museum. and Zoo Boise are located. An array of outdoor activitiesfishing, hiking, skiing, river rafting, golf, tennis, and camping are available only a short distance from campus.

The city and campus offer many cultural opportunities, such as the Boise Philharmonic. American Festival Ballet. Boise Civic Opera, Idaho Shakespeare Festival, Gene Harris Jazz Festival, and a variety of other theatrical and musical productions. Touring artists frequently perform in the Morrison Center and The Taco Bell Arena, both on the Boise State University campus. In addition, a variety of national sporting events are held at The Taco Bell Arena.

#### Mission of the University

Boise State University exists to educate people. Our goal is to foster an intellectual atmosphere that produces educated, literate people—people knowledgeable of public affairs, committed to life-long learning, and capable of creative problem solving. As a student at Boise State University, you have an opportunity to receive an education that will prepare you not only for employment and career advancement, but also for participation in society as an active, informed citizen.

Since its inception, the university has responded to the wideranging academic needs of the community, serving Boise and the surrounding area with undergraduate and graduate programs, research, and public service. An urban university, Boise State University reflects the character and spirit of Boise-Idaho's center of business and government. In fact, to ensure that Boise State University's mission takes its cue from the university's urban setting, the Idaho State Board of

Education has mandated that we place primary emphasis on education in the following areas:

- · business and economics
- engineering
- · social sciences
- public affairs
- performing arts
- teacher preparation

At the same time, the university places continuing emphasis on the health professions and the physical and biological sciences and education, while maintaining basic strengths in the sciences and liberal arts.

#### History of the University

In 1932, the Episcopal Church founded Boise Junior College, the first post-secondary school in Idaho's capital. When the Episcopal Church discontinued its sponsorship in 1934, Boise Junior College became a nonprofit, private corporation, sponsored by the Boise Chamber of Commerce and by the community. In 1939, the State Legislature created a juniorcollege taxing district to fund the college through local property taxes. By the end of the 1930s, Boise Junior College boasted an enrollment of 600 students. Originally located at St. Margaret's Hall, near the present site of St. Luke's Regional Medical Center, the school was moved in 1940 to its present location alongside the Boise River. In 1965. Boise Junior College became a four-year institution and was renamed Boise College. In 1969, the school was brought into the state system of higher education and the Graduate College was established. In 1971, two master's programs were approved; the Master of Business Administration and the Master of Arts in Elementary Education. In 1974, Boise State College became Boise State University, and in the following year the university established the Master of Public Administration. That same year, the Master of Arts in Education program was expanded to include options in secondary education.

The University offers 70 master's programs, 11 graduate certificates, and 4 doctoral programs, the Doctor of Education in Curriculum and Instruction (1994), the Doctor of Philosophy in Geophysics (2000), the Doctor of Philosophy in Geosciences (2006), and the Doctor of Philosophy in Electrical and Computer Engineering (2006). Each semester more than 2,200 students enroll through the Graduate College.

During its history, Boise State University has operated under the leadership of six presidents:

- Bishop Middleton Barnwell (1932-34)
- Eugene B. Chaffee (1934-67)
- John B. Barnes (1967-77)
- John H. Keiser (1978-1991)
- Charles P. Ruch (1993-2003)
- Robert W. Kustra (2003-present)

#### **Accreditation**

The university is a fully accredited member of the Northwest Commission on Colleges and Universities and holds permanent membership on the College Entrance Examination Board and in the College Scholarship Service Assembly. Many of Boise State University's academic programs have special accreditation or endorsement from one or more of the following organizations:

- · Accreditation Board for Engineering and Technology
- The Association to Advance Collegiate Schools of Business (AACSB) International
- American Bar Association
- · American Chemical Society
- · American Council for Construction Education
- American Culinary Federation Accrediting Commission
- American Dental Association Commission on Dental Accreditation
- American Health Information Management Association
- Commission on Accreditation of Allied Health Education Programs
- Committee on Accreditation Respiratory Care
- Council for Accreditation of Counseling and Related Educational Programs
- Council on Social Work Education
- Equipment and Engine Training Council
- Idaho State Board of Nursing
- International Association of Counseling Services
- Joint Review Committee on Education in Radiologic Technology
- · National Association of Schools of Arts and Design
- · National Association of Schools of Music
- National Association of Schools of Public Affairs and Administration
- · National Association of Schools of Theatre
- National Association of State Directors of Teacher Education and Certification
- National Automotive Technicians Education Foundation
- National Council for Accreditation of Teacher Education
- · National Council in Economic Education
- National Environmental Health Science and Protection Accreditation Council
- · National League for Nursing
- Professional Truck Driving Institute

#### **Students**

Each semester, Boise State University enrolls more than 18,000 students in its academic and applied technology programs. Students come to Boise State University from every county in Idaho, from nearly every state in the nation, and from numerous foreign countries. The university's urban setting both attracts and complements this diverse student body, which includes many nontraditional students as well as traditional students enrolling directly from high school.

Because Boise is the commercial, financial, health care, and governmental center of Idaho, as a Boise State University student you can reach beyond the classroom for experiences unavailable elsewhere in the state. For instance, you can enhance classroom learning and gain valuable work

experience by serving as an intern with the State Legislature, government agencies, or private business and industry. In addition, you can attend a wide variety of civic, cultural, and social events hosted by Boise State University.

#### **Faculty**

You will find that the university attracts faculty who are dedicated to excellence in teaching, creative in generating new knowledge, and generous in using their expertise to solve society's problems. Moreover, the faculty at Boise State University recognize that high-quality teaching is their primary goal, giving you the opportunity to work with some of the West's most respected scientists, artists, researchers, and educators.

In addition to helping students learn, Boise State University faculty assist business, industry, educational institutions, government agencies, and professional groups with educational programs and research-and-development efforts. The university also assists organizations in upgrading the knowledge and skills of employees.

**The Graduate Faculty** consists of full-time faculty members approved by the Graduate Council to teach graduate-level courses, supervise graduate students, and participate in conducting graduate programs. Some part-time faculty members are appointed as members of the Adjunct Graduate Faculty; they are approved by the Graduate Council to teach graduate courses or serve on graduate committees. Of the 680 individuals who make up the Graduate Faculty, 97% possess a terminal degree.

The Graduate Program Coordinator for a graduate program is nominated by the academic unit and approved by the Graduate Council. The graduate program coordinator must be a member of the graduate faculty and an official faculty member of the academic unit. The duties of the graduate program coordinator are jointly defined by the academic unit and the Graduate College.

#### A Tour of the Campus

Boise State University's 113-acre main campus is bordered to the north by the Boise River, to the south by University Drive, to the east by Broadway Avenue, and to the west by Ann Morrison Park. Step across the footbridge spanning the Boise River, and you are in the open green space of Julia Davis Park, home to the Idaho Historical Museum, the Boise Art Museum, and Zoo Boise. Just a few minutes' walk from campus is downtown Boise, where you will find inviting shops, fine restaurants, and vibrant nightlife.

On campus, the **Administration Building** contains the offices of several student services, including enrollment services, financial aid, and the registrar. **The Counseling and Testing Center** is located on the first floor of **Taylor Hall**, while the **Student Health Center** and the **Boise State University Career Center** are located across University Drive from the main campus.

The **Business Building** features computer labs and three electronic classrooms furnished with the latest in

teleconferencing equipment. In addition, three Engineering and Technology Buildings contain modern classrooms and laboratories—many equipped with computers—for use in engineering, construction management, and other technical programs. Both the **Education Building** and the **Liberal Arts Building** offer comfortable, well-equipped classrooms and computer labs, as do the Math/Geosciences Building and the Public Affairs/Art West Building. In addition, a Multi-Purpose Classroom Facility opened the 1997-1998 year with state-of-the-art classroom and computer laboratory facilities.

Other notable features of the campus include the **Albertsons** 

**Library** as well as the **Centennial Amphitheater** - an outdoor venue for lectures.

concerts, and plays. The **Morrison Center for the Performing Arts** houses the music department, the theatre arts department, a 2,000-seat performance hall, a 200-seat recital hall, and a 200-seat theater. The **Student Recreation Center** houses informal recreation, intramural sports, outdoor programs, fitness opportunities, a wellness center, as well as athletic

training facilities.

In the **Simplot/Micron Building**, Boise State University through Academic Technologies is pioneering the use of technology to improve the effectiveness of instruction and to provide learning opportunities at remote locations. For instance, a satellite earth station and an inter-campus microwave system enable students scattered throughout the state to participate in classes conducted on campus.

Boise State University students

also enjoy a contemporary **Student Union**, which provides facilities for social, recreational, and cultural activities. In addition to a quick-copy center and three dining areas, the Student Union contains a game room, several lounges, the Boise State University Bookstore, and the Bronco Shop. While at the Student Union, you can stop by the Information Desk to pick up tickets for campus programs and community events, or visit the offices of more than 190 recognized student organizations.

**The Taco Bell Arena** is Idaho's largest multi-purpose arena. When not filled with fans of Bronco basketball, gymnastics, or volleyball, the Taco Bell Arena is the site of concerts, professional sporting events, and family entertainment. Nearby is **Bronco Stadium**, with a seating capacity of 30,000.

#### The Albertsons Library

The Albertsons Library and its collections support the curricular and research efforts of the university. The Library's holdings exceed 2 million items, including:

- 550,948 monograph volumes
- 89,014 bound periodicals
- 6,519 current periodicals, newspapers, and other serials
- 150 databases
- 99.974 maps
- 98,978 U. S. government publications
- 1,499,763 microform pieces

http://library.boisestate.edu is the URL for the Albertsons Library website through which the user can gain access to the online catalog and a host of other resources, including full text articles from 30,351 journals.

You may use the Library's computerized catalog to quickly identify material that the Library owns. The catalog is accessible from any computer connected to the world wide web. In addition to the public use computers in the Library there are 70 data outlets for lap top computers equipped with network interface cards as well as provisions for lap tops equipped with wireless networking cards.

The **Curriculum Resource Center** houses print and nonprint materials for elementary and secondary education, a collection of juvenile and young-adult books, a circulating collection of music CD's, and nonprint materials for collegelevel instruction. The Library's **Government Documents** collection is a depository for selected United States publications. Canadian documents to support the Canadian Studies program and Idaho State documents are included

in the general collection. The **Kenneth M. Hollenbaugh Map Collection** provides detailed coverage of Idaho as well as maps that cover a wide array of subjects.

The **Reference Area** is the information hub of the Library where staff are available to provide assistance and guidance in using Library Resources. These resources include an extensive collection of periodical indexes in print and electronic formats, handbooks, encyclopedias, dictionaries, and other types of reference materials. The reference area also provides basic and advanced bibliographic search materials and instruction in their use.



The print periodical and newspaper collections are augmented by web delivered electronic periodical indexes and databases that provide access to full-text periodicals.

The **Special Collections Area** contains manuscript collections, rare books, and the university archives. In addition to housing the papers of Senator Len B. Jordan, Senator Frank Church, and Interior Secretary/Governor Cecil Andrus, this area also maintains the Cecil D. Andrus and Frank Church Rooms. The **Warren McCain Reading Room**, located on the second floor, contains a growing collection of books and materials about the literature, anthropology, and history of the American West.

Boise State West has a small library that consists of several hundred books and is staffed by two classified employees. There are four computers administered by the Boise State University Albertsons Library systems staff. Students taking course work wholly or partially at Boise State West have access to the same library services and privileges as students on the main campus and pay the same total fees.

#### **Computer Resources**

The university provides student access to a variety of computer resources. There are many computer labs to support classroom assignments and discipline specific needs. All Boise State University offices and computer labs are connected to the campus fiber-optic network. This allows access to the campus network or the Internet. Wireless access to the internet is also available. See www.boisestate.edu/oitlabs for more information.

Boise State University provides e-mail accounts for all students. Students who want access to e-mail and the Internet from home will need to purchase access through an Internet service provider (ISP).

As a student at Boise State University, you will have the opportunity to learn to use computers in ways appropriate to your discipline. For more information about the computer skills required in your discipline, please consult your academic advisor.

#### **Athletics**

The purpose of the intercollegiate athletic program at Boise State University is twofold. First, to provide opportunities for a meaningful athletic experience for as many students as possible. Second, to develop and maintain a competitive Division I athletic program that competes on a regional and national basis and strives for excellence in both men's and women's athletics within the boundaries of integrity and honesty.

The athletic program is an integral part of the university and its total educational purpose. The objectives of the athletic program are in harmony with the mission and role of the university.

The university adheres to the principles of fair play and amateur athletic competition as defined by the NCAA. The university is concerned with the welfare of the student-athlete

and strives to ensure that every student-athlete has the opportunity to succeed academically and obtain a degree.

The university competes as a member of the Western Athletic Conference (WAC) in football, women's volleyball, men's and women's basketball, men's and women's track and field and cross country, women's soccer, men's and women's golf, women's gymnastics, and men's and women's tennis. The university competes in the PAC-10 in wrestling, and in the Rocky Mountain Intercollegiate Ski Association in women's skiing. Students that wish to participate in intercollegiate athletics should contact the head coach of the sport for which they wish to participate. A listing of head coaches is provided by calling the Athletic Department at 208 426-1288, or on the web at www.broncosports.com.

Student ticket policies to athletic events are listed in the *Boise State University Student Handbook*.

The *Equity in Athletics Disclosure Report* for Boise State University is available on line at http://ope.ed.gov/athletics/index.asp. The report provides participation rates, financial support, and other information on men's and women's intercollegiate athletic programs.

#### **Campus Recreation**

Campus Recreation offers activities that are exciting and challenging. The Student Recreation Center serves as the hub for university students, faculty, staff, and alumni who want to participate in physical activity. It provides personalized training, competitive and recreational sports, club activities, group exercise, outdoor recreation, cardio and strength workout options.

The Student Recreation Center is comprised of a 3-court gymnasium, 4 racquetball courts (one of which converts to a squash court), a full compliment of strength and cardio equipment, multi-purpose rooms, and a rock climbing gym. In addition, there are locker rooms, saunas, equipment available for check out, athletic training, and massage services. Beyond the doors of the SRC, facilities include a swimming pool, recreation field, and tennis courts.

The **Fitness Program** organizes over 50 drop-in group exercise classes each week during the semester including cycling, lift, yoga, street dance, and kickboxing. Motivational help in exercising is available, including instructional programs, periodic incentives, fitness testing, and personal training.

For students interested in an organized athletic activity the **Intramural Sports Program** establishes numerous oncampus activities. Both the novice and expert can experience fun competition in team, dual, and individual sports throughout the year.

**Club Sports** offers athletic and competitive choices in a variety of disciplines for those interested in more serious activity. All clubs are student led, operated, and funded. For more information, leadership opportunities, and additional activities, come visit us at the Student Recreation Center, call 208 426-1131, or click http://rec.boisestate.edu.

### Course Terminology and Numbering; Credit, Semester, and Prerequisite Codes

#### **Course Terminology**

A grade-point course is any course in which the awarded grade is one of the traditional grades (A, B, C, D, or F) and a pass-fail course is any course in which the awarded grade is P (pass) or F (fail). A graduate course is any course offered with a course number between 500 and 699 inclusive; successful completion of a graduate course earns graduate credit.

A university-wide graduate course represents a certain type of graduate activity with the same course number and title across all academic units (see University-Wide Graduate Courses in this section). University-wide graduate courses 591 Project, 593 Thesis, 600 Assessment, and 693 Dissertation represent work done on graduate culminating activities and are therefore known as culminating activity courses; some graduate programs have culminating activity courses that are numbered differently than these university-wide courses.

Graduate courses are said to be cross-listed if they are offered by multiple academic units and have identical titles, credit codes, and content descriptions in each unit (such as COUN 546 and MHLTHSCI 565). Courses offered by an academic unit at both the 400-level and 500-level with identical titles, credit codes, and content descriptions (such as GEOPH 420 and GEOPH 575) are said to be dual-listed courses.

A G-course is an upper division undergraduate course marked with a G-suffix (such as ENGL 401G); successful completion of a G-course earns graduate credit if the student meets certain requirements (see G-Courses and Dual-Listed Courses in the Graduate Academic Regulations section).

#### **Course Numbering System**

Each course at Boise State University has a course description that consists of a prefix, course number, title, credit code, semester code, additional information, content description, and list of requisites. These elements of the course description are described below.

**Prefix.** The prefix is an upper-case letter code that indicates the academic unit offering the course (e.g., ENGL indicates the Department of English). A complete list of prefixes is given in the Boise State University Undergraduate Catalog.

**Course Number.** The course number is a three-digit integer that indicates the academic level of the course according to the following hierarchy:

000-099	non-academic credit courses
100-299	lower-division undergraduate courses
300-499	upper-division undergraduate courses
500-699	graduate courses

**Title.** The title indicates the general content of the course.

**Credit Code.** The credit code is a sequence of three integers separated by hyphens with the entire sequence enclosed in parentheses. The first number is the number of required classroom hours each week, the second number is the number of required special hours per week (laboratory, studio, field), and the third number is the number of academic semester credits earned after successfully completing the course. For example, (3-2-4) indicates 3 required classroom hours per week, 2 required special hours per week, and 4 credits earned after successful completion. The symbol V in a credit code may be used in place of an integer to indicate variable hours and credit.

**Semester Code.** The semester code indicates the semester(s) and/or term in which the course is offered and is expressed using letter codes F for fall semester, S for spring semester, and SU for summer term, with the full sequence of letter codes enclosed in parentheses. A comma or slash between letter codes is used to interpret combinations as illustrated in the following examples:

- fall semester only
- (S) spring semester only
- (F,S)fall and spring semesters
- (S,SU) spring semester and summer term
- (F/S)fall semester or spring semester or fall and spring semesters

If the semester code is not indicated, then the course is offered during the fall and spring semesters and summer session (although there may be some exceptions).

**Additional Information.** Additional information associated with the scheduling of the course such as a notice of alternate year offering may be given in parentheses after the semester code.

**Content Description.** The content description is a concise summary of the concepts, theory, and methods addressed by the course, plus any special information not covered elsewhere in the course description.

**List of Requisites.** The list of requisites specifies any prerequisites and/or corequisites using the following abbreviations:

PREREQ: prerequisite (condition to be met before

enrollment)

COREQ: corequisite (condition met before or

during enrollment)

PERM/INST: permission of instructor required to

PERM/CHAIR: permission of department chair required

to enroll

The most common prerequisite is a specific course that must be successfully completed prior to enrollment. The most common corequisite is a laboratory course that must be taken during the same semester or term as a related science course.

### **University-Wide Graduate Courses**

**580-589 SELECTED TOPICS (Variable Credit).** Subjects normally offered and studied in one department can be divided into as many as 10 areas. Each area will be assigned one number of the 580-589 group. Although the topics considered in the courses in any one area may vary from semester to semester, repeated use of any one number implies that the topics continue to be selected from the

**590 PRACTICUM/INTERNSHIP (Variable Credit).** To earn graduate credit you must have a 3.00 cumulative GPA and no more than 12 credits may be applied toward a graduate degree or second undergraduate degree. Some graduate programs, however, accept only 3 internship credits. Practicum/Internship cannot be repeated to improve a grade.

**Note:** An undergraduate internship is an entry level employment experience related to the discipline. The graduate intern already has an undergraduate degree and is expected to perform with a higher level of responsibility, decision-making authority, and accomplishment.

**591 PROJECT (Variable Credit).** Execution of a substantial exercise that demonstrates the ability to successfully and independently carry out a professional activity similar to what is encountered in the professional workplace; archival of the results of the project is required according to standards approved by the Graduate College. Graded pass/fail (P/F) only.

**593 THESIS (Variable Credit).** Independent research or creative activity at the master's level resulting in a thesis that must be defended at a final oral examination and archived in the university library. The thesis must be written in clear and effective English and presented in a format that conforms to the standards of the Graduate College. Graded pass/fail (P/F) only.

#### 594 CONFERENCE OR WORKSHOP (Variable Credit).

Intensive daily instruction by a recognized expert in a specialized topic over a period of time considerably shorter than a semester. Workshop credits may not transfer.

**595 READINGS AND CONFERENCE (Variable Credit).** The conduct of topical research, assigned readings or literature review. The faculty advisor and the student prepare and sign an agreement describing the amount and type of work to be accomplished.

**596 INDEPENDENT STUDY (Variable Credit).** Advanced study of a specialized topic; design and completion of a project may be included in the study. The student works with a high degree of independence to meet well-defined goals under the supervision of a member of the graduate faculty. Requires submission of a completed Application for Independent Study prior to the deadline specified in the academic calendar.

**597 SPECIAL TOPICS [Required Modifier] (Variable Credit).** Instruction on a topic that is not included in the catalog of regular graduate courses; the topic is indicated by the required modifier. Descriptions for these courses are given in the Schedule of Classes published each semester.

**598 SEMINAR (Variable Credit).** Small group meetings for the exchange of ideas, debate of issues, or presentation of research. Format, conduct, and purpose of seminars varies widely among disciplines.

#### ${\bf 600~ASSESSMENT~[Optional~Modifier]~(Variable~Credit)}.$

Examination or other assessment required by a graduate program. The optional modifier is used to indicate the type of assessment and may be chosen from three possibilities: Preliminary Examination, Comprehensive Examination, or Capstone Course.

**693 DISSERTATION (Variable Credit).** Independent research at the doctoral level resulting in a dissertation that must be defended at a final oral examination and archived in the university library and with UMI. The dissertation must be written in clear and effective English and presented in a format that conforms to the standards of the Graduate College. Graded pass/fail (P/F) only.

**696 DIRECTED RESEARCH (Variable Credit).** Research conducted by a graduate student under the supervision of a member of the graduate faculty. Requires the clear statement of a hypothesis or proposition, a review of the relevant literature, analysis and synthesis of data or scholarly evidence, and the inference of conclusions. The results must be stated in a report written in clear and effective English. Requires submission of an Application for Directed Research prior to the deadline specified in the academic calendar.

**697 SPECIAL TOPICS [Required Modifier] (Variable Credit).** Instruction on a topic that is not included in the catalog of regular graduate courses; the topic is indicated by the required modifier. Descriptions for these courses are given in the *Schedule of Classes* published each semester.

### **University Policies and Services**

#### Your Rights and Responsibilities

Boise State University challenges its students to reach their highest levels of performance, encourages them to excel in academics and sports, and invites them to participate in the many cultural and social activities available at the university. At the same time. Boise State University expects students to conduct themselves in a manner compatible with the university's function as an institution of higher learning. Therefore, we have published this catalog and the *Boise State University Student Handbook* to acquaint you with your rights and responsibilities as a student. In the *Boise State University* Student Handbook, for instance, you will find the Student Bill of Rights and the Code of Conduct, along with information on:

- health insurance
- parking
- services for students
- student organizations
- university committees
- · civic and cultural events
- · academic regulations
- university policies and procedures governing sanctions, judicial procedures, and hearing boards

You can obtain a copy of the Boise State University Student *Handbook* at http://www.boisestate.edu/stuaff/handbook/ index.htm. It is the responsibility of each student to become familiar with the Boise State University Student Handbook and the policies and procedures that affect them as a graduate student enrolled at **Boise State.** 

#### **Student Records**

Graduate Admission and Degree Services maintains a permanent file for each student who has applied for admission to the Graduate College; your file will contain your application for admission, official transcripts, test scores, and any correspondence related to that application. Another file at the Registrar's Office contains your permanent transcript record and all materials that document that transcript record. And, your faculty advisor will maintain a file of advising records, grade sheets, and correspondence.

In general, you have the right to review the documents that constitute your official record, and you have the right to request copies of those documents. If you request copies, Boise State University will provide them in a timely and efficient manner.

The following sections provide more detail about your official record at Boise State University, about your rights and responsibilities regarding that record, and about Boise State University policies and procedures governing the information that your record contains. Other publications discussing these matters include the Boise State University Policy Manual and the Boise State University Student Handbook.

#### **Transcript Records**

The Registrar's Office makes every effort to ensure that transcript records are up-to-date and accurate. You have the right to appeal any information on your transcript that inaccurately reflects your academic history. However, information on a transcript is changed only in extraordinary or extenuating circumstances.

If there is an error or omission on your transcript, send a detailed description of the error or omission, along with copies of the relevant documents, to the Registrar's Office, Administration Building, Room 102, 208 426-4249.

#### **Confidentiality and Privacy**

Following the guidelines established by the Family Educational Rights and Privacy Act of 1974 (FERPA), the university strives to protect your personal privacy and the confidentiality of your official student record. This section generally describes Boise State University's policy on confidentiality and privacy, as defined by the Boise State University Policy Manual, (http://policy.boisestate.edu/).

Most of the information in your student record is considered confidential, with the following exceptions:

- · your local address
- your e-mail address
- your local telephone number
- · your major field of study
- the dates you attended Boise State University
- your student classification (freshman, sophomore, junior, senior, or graduate)
- your enrollment status (for example, whether you are a fulltime student or a part-time student)
- the type of any degree you have earned from Boise State University and the date on which you received it
- the Dean's list and other honors released to the newspapers

The information listed above is considered public information; however, the university does not sell lists of students or name-and-address labels to businesses or agencies outside the university. If you wish to limit access to this information, you should notify the Registrar's Office that you want the information treated as confidential. You can do so by completing a Privacy Request Form, available online at http://registrar.boisestate.edu/Forms/privacy request.pdf, and submit it to BroncoWeb Help Center, Administration Building,

In discharging their official duties, Boise State University employees may read, review, photocopy, and distribute to appropriate persons within the university any information contained in your student record. However, before distributing confidential information outside the university-even to members of your family—Boise State University faculty and staff must first secure your written permission to do so.

#### **Name Changes**

Currently enrolled students should promptly report a change of name to the BroncoWeb Help Center, Administration Building, Room 110. You may do so by completing a *Student Information Update* form and return the form to the BroncoWeb Help Center, Administration Building, Room 110. You must provide evidence showing that your name has officially changed, such as a certified copy of a court order, a marriage certificate, or a dissolution decree reflecting the new name in full.

If you are also an employee of the University, you must report your name change to the Department of Human Resource Services, Administration Building, Room 218 (documentation requirements may differ).

#### **Address Changes**

Whenever Boise State University policies or procedures call for a university office to send written notification to a student, that obligation is fulfilled when that office mails the notification to the student's last address on record. Past students may update their address in person, by telephone, or by sending in a change-of-address card from the post office to the BroncoWeb Help Center, Administration Building, Room 110. Currently enrolled students must update address information on BroncoWeb (http://www.boisestate.edu and select BroncoWeb).

#### **Verification of Your Enrollment Status**

Every day, Boise State University fields phone calls or letters from people wanting to verify an individual's enrollment status. Requests for verification often come from such businesses as employment agencies, insurance companies, and lending agencies. For example, a lending agency may request verification of your enrollment status to determine if you are enrolled at least half-time and therefore are eligible for continued deferment of a student loan.

Your enrollment status is public information unless you have notified the university that you want it to be treated as confidential (see "Confidentiality and Privacy" above). In responding to inquiries from outside the university, Boise State University calculates your enrollment status according to Table 1.

## Table 1 Schedule Used to Determine Enrollment Status for Federal Financial Aid

Number of Credits (currently enrolled)	Enrollment Status
9 or more	Full-Time
5 to 8	Half-Time
4 or fewer	Less Than Half-Time

Note: If you are taking a combination of graduate and undergraduate courses, a different formula is applied. Please contact the Registrar's Office at 208 426-4249 for further information.

Note: If you are receiving financial aid, please read the chapter on Financial Aid for additional enrollment requirements to maintain your financial aid eligibility.

Note: If you are receiving benefits under the G.I. Bill, you should contact the Veteran's Services Office, Administration Building, Room 111, to determine your enrollment status.

#### **Academic Honesty**

The university's goal is to foster an intellectual atmosphere that produces educated, literate people. Cheating and plagiarism are not tolerated in any form. All work submitted by a student must represent that student's own ideas and effort; when the work does not, the student has engaged in academic dishonesty.

Plagiarism occurs when a person passes in another person's work as his or her own or borrows directly from another person's work without proper documentation. For example, academic dishonesty occurs whenever a student:

- fails to properly document source material in a paper, project, thesis, or dissertation
- copies the work of another person and attempts to receive credit for that work
- copies from another student's exam, either before, during, or after the exam
- during an exam uses "notes" or information stored in a computer or calculator (if prohibited from doing so)
- collaborates on take-home exams when such collaboration is forbidden
- buys a paper or other project, then seeks to receive credit for the paper or project
- allows another person to take an exam in his or her place or takes an exam for another person
- receives editorial assistance that falls outside the scope of acceptable assistance.

**NOTE:** The list above is intended only to provide general guidelines for recognizing and avoiding common types of academic dishonesty. It is in no way an exhaustive or comprehensive list of all the types of academic dishonesty.

Responding to academic dishonesty is the responsibility of the instructor of the course in which the dishonesty occurs. If plagiarism or other academic dishonesty is committed during the course of thesis, project, or dissertation work, the research advisor, in consultation with the student's committee and the Graduate Dean, shall determine the appropriate response.

A student guilty of academic dishonesty may be dismissed from the class, may receive a failing grade, or may be dismissed from the university. For more information about academic honesty, see the following publications:

- Boise State University Policy Manual
- Boise State University Student Handbook

#### Administrative Withdrawal from Boise State University

An administrative withdrawal is the process by which Boise State University formally withdraws a student from the university, usually without the student's consent or cooperation. In performing its function as an institution of higher learning, Boise State may administratively withdraw any student who interferes with the university's ability to perform that function. In addition, students may be administratively withdrawn for a variety of other reasons, including the following:

- failure to meet academic performance requirements
- falsifying or omitting required information on a graduate admissions application or other university record or
- failure to submit all required graduate admissions materials within two semesters
- failure to pay deferred fee payments, library fines, overdue loans, housing accounts, or other charges
- failure to respond to an official summons issued by the university
- · exhibiting behavior that constitutes a clear and present danger to themselves or to others

To initiate an administrative withdrawal, the graduate program coordinator or department chair must submit a letter to the Graduate Dean justifying the withdrawal of the student. The Graduate Dean will complete the withdrawal procedure in cooperation with the Registrar's Office. Please refer to the sections on Acceptable Academic Performance and Course Repeat Policy for more information on withdrawals.

Administrative withdrawals due to nonpayment of financial obligations (library fines, overdue loans, deferred fees, housing accounts, etc.) will be recorded with a grade of 'W' and will appear on the student's transcript if processed after the 10th day of the semester.

Administrative withdrawals due to ineligibility to be in a course or continue in school for reasons other than nonpayment of financial obligations will not appear on the student's transcript.



#### **Right of Appeal**

You have the right to appeal any academic policy or requirement if either of the following conditions are present:

- Extenuating circumstances make it impossible for you to comply with the policy or requirement.
- An undue hardship would result from a strict application or interpretation of the policy or requirement.

Please note, however, that extenuating circumstances must be beyond your control and that undue hardship must be a condition far more serious than simple inconvenience. Documentation will be required and the timeliness of the appeal will be taken into consideration.

If you appeal an academic policy or requirement, that appeal will be reviewed by the Graduate Dean and by the University Appeals Committee if appropriate. Appeals for current semester complete withdrawals should be directed to the Dean of Student Services. For more information about appeals and grievances, see the Boise State University Student Handbook and the Boise State University Policy Manual. Contact the Dean of Student Services, Administration Building, Room 114, 208 426-1583.

#### **Questions About These Policies?**

If you have questions about these policies, contact the Registrar's Office, Administration Building, Room 102, 208 426-4249.

### **Graduate Admission Regulations**

#### **Admission Requirements**

Any applicant who seeks admission to a graduate certificate or degree program is said to be applying as a graduate degree-seeking student. All other applicants are said to be applying as graduate nondegree-seeking students and may be admitted to the Graduate College only.

Minimum Admission Requirements of the Graduate College. All applicants must hold at least a baccalaureate degree from a regionally accredited U.S. college or university or a degree from a non-U.S. institution of higher education that is judged equivalent to a U.S. baccalaureate degree by the Registrar. If an applicant is applying as a graduate degree-seeking student, his or her undergraduate academic record must be of high enough quality to satisfy at least one of the following grade point average (GPA) requirements referred to a 4-point maximum scale:

- 1. a GPA of 3.0 computed for all undergraduate credits;
- 2. a GPA of 3.0 computed for the last half of the undergraduate credits.

Finally, if the applicant is applying as a graduate degreeseeking student and was a graduate degree-seeking student elsewhere but did not complete the program, the applicant must demonstrate that he or she departed that program in good academic standing.

**Admission Requirements for a Graduate Certificate or Degree Program.** Achievement of the minimum admission requirements of the Graduate College does not guarantee admission to a graduate program. Furthermore, a student who is admitted to a graduate program is not guaranteed admission to any other graduate program at any time in the future. Admission to a graduate program is competitive and qualified applicants may be denied admission depending on a wide variety of programmatic variables. To ensure the best possible opportunity for admission, each applicant is strongly encouraged to review the specific admission requirements and application procedures given in this catalog for the program of interest. Applicants are cautioned that review of an application cannot begin until all application materials are received, including those that are specific to a particular program.

#### Admission Status for Degree-Seeking Students

Admission Status for Degree-Seeking Students

An applicant who applies as a graduate degree-seeking student with the required baccalaureate degree will be admitted initially to the Graduate College but not to the graduate program. Once Graduate Admission and Degree Services receives all necessary admission materials, a Program Admission Recommendation file is forwarded to the appropriate academic program. The student is said to be in PDR admission status (PDR indicates pending department review). A student in PDR status may enroll in courses for which he or she is eligible but is not permitted to work

toward a graduate certificate or degree and is not eligible for federal financial aid. If the student completes courses while in PDR status and is later admitted to a graduate program, the responsible academic unit has the authority to decide which courses completed during PDR status can be applied to the credit requirements of the program. The academic unit also has the authority to define a maximum number of applicable credits of this type for the program but the maximum cannot exceed one third of the total credit requirement.

The academic unit responsible for the program takes the application into consideration using its normal process to determine the admission recommendation. The program coordinator of the academic unit completes the Program Admission Recommendation form and forwards it to the dean of the Graduate College. The Graduate dean makes the final admission decision and notifies the student and the academic unit. If the student is admitted to a graduate program, his or her admission status changes from PDR to either regular or provisional status and the student becomes eligible for financial aid. Regular status indicates admission of the student to full graduate standing in a program. Provisional status establishes conditions such as a probationary period and/or other specific stipulations that must be satisfied by the student within a reasonable time. If the academic unit and the Graduate College jointly determine that the student has been successful in removing the conditions of provisional status, then the student is promoted to regular status by the dean of the Graduate College. If promotion to regular status is denied. then the student is administratively withdrawn from the graduate program by the dean of the Graduate College.

## Admission Status for Nondegree-Seeking Students

A student admitted to the Graduate College as a graduate nondegree-seeking student may take courses of interest for which he or she is eligible but may not work toward a graduate certificate or degree and is not eligible for federal financial aid. If the student completes courses while in graduate nondegree-seeking status and later applies and is admitted to a graduate program, the responsible academic unit has the authority to decide which courses completed in graduate nondegree-seeking status can be applied to the credit requirements of the program. The academic unit also has the authority to define a maximum number of applicable credits of this type for the program but the maximum cannot exceed one third of the total credit requirement.

## Application Deadlines for Degree-Seeking Students

The academic unit responsible for a graduate program may set one or more standard application deadlines appropriate for management of the program. Prospective students who wish to apply as graduate degree-seeking students are therefore strongly encouraged to consult the description of the program of interest in this catalog and to contact the graduate program coordinator with questions regarding application deadlines.

#### Table 2.

#### How to Apply for Admission to the Graduate College at Boise State University

To apply for admission to Boise State University as a graduate student, submit to the Graduate Admission and Degree Services all materials indicated in the checklist below. All admission materials must be received by the posted deadline. (See Academic Calendar.)

#### **New Degree-Seeking Graduate Applicants**

- Graduate Admission Application.
- One-time, nonrefundable \$55 application fee.
- Official\* transcripts from all postsecondary institutions (excluding Boise State) showing all courses completed and degrees earned.
- Official GRE, GMAT, MAT scores, if required.
- · Letters of recommendation and/or other materials that may be required by the program to which you are applying.

#### Returning Applicants Previously Admitted to a Graduate Degree Program

Boise State graduate students who applied for the Fall 2005 or later semester will remain active for 6 consecutive semesters (including summer) before a new Graduate Admission Application is required.

Boise State graduate students who were admitted but did not attend prior to Fall 2005, must reapply for admission. Submit the following:

- Graduate Admission Application.
- One-time, nonrefundable \$55 application fee.
- Official\* transcripts from all other colleges attended, if not previously submitted.
- Official\* GRE, GMAT, MAT scores, if required and not previously submitted.

Note: Boise State University retains admission materials for five years after your last term of enrollment.

Please submit new materials if you have not attended Boise State within the last five years.

#### **Nondegree-Seeking Applicants**

- Graduate Admission Application.
- One-time, nonrefundable \$55 application fee.
- Official\* transcript from institution (excluding Boise State) which granted your highest degree.

#### Applicants Seeking a Second Undergraduate Degree

- Apply for admission through undergraduate admissions office.
- · Admission status is Senior.

#### **Applicants from Other Countries**

- International Student Graduate Application
- One-time, nonrefundable \$55 application fee.
- Official\* proof of four-year degree and transcripts from each educational institution attended beyond high school.\*\*
- Official TOEFL or IELTS results.
- Official GRE, GMAT scores, if required.
- Letters of recommendation and other materials required by the program to which you are applying.
- Documentation to demonstrate adequate financial resources to cover one year living expenses, tuition, and fees.
- \* To be official, transcripts must be sent by the issuing institution directly to Boise State University, Graduate Admission and Degree Services.
- \*\* If written in a language other than English, these documents must be accompanied by an English translation.

If the program is not specific about its application deadlines, then the Graduate College strongly encourages prospective students to submit all application materials seven to nine months in advance of the anticipated starting semester or term. If the program states that it accepts applications at any time, then the application deadlines are those of the Graduate College:

Fall Semester 2006: July 12, 2006 Spring Semester 2007: November 30, 2006

Summer Sessions 2007: One week before classes begin

#### **Application Deadlines for** Nondearee-Seeking Students

Applications from graduate nondegree-seeking students are accepted any time but prospective students are advised to submit all application materials well in advance of the start of the desired semester or summer session.

#### Applying as a Degree-Seeking Student

To apply for admission as a degree-seeking student, complete the following steps before the deadline specified in "Application Deadlines," above.

- Submit an application for admission to Graduate Admission and Degree Services, along with the nonrefundable application fee. Current application fee is available online at http://www.boisestate.edu/gradcoll or call 208 426-3903.
  - An application is available inside the front cover of this catalog or you may submit an on-line application available at http://www.boisestate.edu/gradcoll.
- Request official transcripts from each educational institution (excluding Boise State) you have attended beyond high school. Instruct the institutions to send the transcripts directly to Graduate Admission and Degree Services, Room 141, Math/Geosciences Building, Boise

- State University, 1910 University Drive, Boise, ID 83725-1110.
- 3. Take any predictive exam, such as the Graduate Record Exam (GRE), required by the program to which you are applying. Ensure that the results of these exams are forwarded to Graduate Admission and Degree Services. For information about specific program requirements, see the program descriptions in this catalog.
- Submit all required letters of recommendation and other materials to the program to which you are applying.

After completing the steps listed above, you are eligible for admission to the Graduate College. Completing the steps, however, does not ensure that you will be admitted to the program. You must still meet any grade-point average (GPA) requirement stipulated by the program to which you are applying, and you must be recommended for admission by the coordinator of the graduate program to which you are applying. Finally, you are officially admitted to the graduate program only after receiving written notification from the Graduate Dean.

#### Applying as a Nondegree-Seeking Student

You may apply for admission as a nondegree-seeking student if you have earned a bachelor's degree or a higher degree from an accredited institution.

If you decide to become a degree seeking student, you will be required to meet the GPA and all other requirements of the program to which you apply.

To apply for admission as a nondegree-seeking student, complete the following steps before the deadline specified in the current academic calendar.

- Submit an application for admission to Graduate
   Admission and Degree Services, along with the
   nonrefundable application fee. Current application fee is
   available online at http://www.boisestate.edu/gradcoll or
   call 208 426-3903.
  - An application is available inside the front cover of this catalog or you may submit an on-line application available at http://www.boisestate.edu/gradcoll.
- 2. Request an official transcript from the institution (excluding BSU) that granted your bachelor's degree or higher degree. Instruct the institution to send the transcript directly to:

Graduate Admission and Degree Services Math/Geosciences Building, Room 141 Boise State University 1910 University Drive Boise, ID 83725-1110

If you are a nondegree-seeking student, you may register for as many credits as you wish as long as the courses are not restricted and you have met the necessary prerequisites. However, you will be ineligible for financial aid.

## Applying for Admission as an International Graduate Student

Boise State University welcomes applications from qualified students from around the world. The requirements described below apply to applicants in the United States with a visa or plan to come into the Unites Stated with a student visa.

You may apply for admission as a graduate student if you have earned—from an accredited institution—the equivalent of a U.S. four-year bachelor's degree or a higher degree, even if you plan to enroll in an undergraduate program.

To apply for admission to Boise State, complete the following steps before June 1 for Fall semester and before October 15 for Spring semester.

- Submit a completed International Student Graduate Application to the Boise State University International Admissions Office, Administration Building, Room 107 along with the nonrefundable \$55 application fee.
- Request official transcripts and proof of degree from each educational institution you have attended beyond high school or the equivalent of high school. Instruct the educational institutions to send the transcripts directly to:

International Admissions Office Administration Building, Room 107 Boise State University 1910 University Drive Boise, ID 83725

If written in a language other than English, these documents must be accompanied by an official English translation. If the institutions cannot submit these documents directly to the Boise State University International Student Admissions Office, you may substitute (1) certified or attested copies of official academic records and (2) proof of four-year degree. The certified copies must be issued or attested by an official of the institution.

- 3. Take the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System test (IELTS). Ensure that the results of these exams are forwarded to the Boise State University International Admissions Office. (The institution code number for Boise State is 4018.) For applicants to graduate degree programs, Boise State requires a minimum TOEFL score of 550 paper-/213 computer-/80 internet-based testing or 6.0 on the IELTS. The College of Business, College of Engineering (excluding the M.S. in Instructional & Performance Technology), and the Department of Educational Technology require a minimum TOEFL score of 587/240/95 or 6.5 on the IELTS for admission to their graduate programs.
- 4. Take the Graduate Management Admission Test (GMAT), Graduate Record Exam (GRE), or any other predictive exam required by the program to which you are applying. Ensure that the results of these exams are forwarded to:

Graduate Admission and Degree Services Math/Geosciences Building, Room 141 Boise State University Boise, ID 83725-1110



(The institution code number for Boise State is 4018.) For information about specific program requirements, see the program descriptions in this catalog.

- Submit all letters of recommendation and other materials required by the program to which you are applying.
- Submit documentation sufficient to demonstrate that you have financial resources to cover one calendar year of living expenses, tuition, and fees. Send the documentation to the International Admissions Office.

After you have met all of the requirements for admission and have been accepted to a degree program, the International Admissions Coordinator will issue you an I-20 form, which you will need to obtain an F-1 student visa. If you would like additional information, please contact the International Admissions Office at: 208 426-1757.

**NOTE:** All international students must purchase the mandatory health insurance. If you are enrolled full-time, your student fees cover the cost of participating in Boise State's health insurance plan.

**NOTE:** Additional information for international students is located in the sections on Financial Aid and Extended Studies.

#### Administrative Handling of **Admission Documents**

The Graduate Admission and Degree services office coordinates graduate admission processes and can provide additional information and answer questions. All documents received by Boise State University in conjunction with an application for admission become the property of the university. These documents will be duplicated only for use in admission decisions and student advising at the university. Moreover, the original documents will neither be returned to the applicant nor forwarded to any individual unaffiliated with Boise State University or forwarded to any other agency, organization, college, or university.

#### Questions About These Policies?

If you have questions about these policies, contact: Graduate Admission and Degree Services Mathematics/Geosciences Building, Room 141 208 426-3903 or 426-4204 FAX 208 426-2789

http://www.boisestate.edu/gradcoll e-mail: gradcoll@boisestate.edu

International Admissions Office Administration Building, Room 107 208 426-1757 http://www.boisestate.edu/admissions

### **Graduate Academic Regulations**

#### **Overview**

The general academic regulations of the university that apply to graduate certificate and degree programs are developed by the Graduate Council. Under this general regulatory umbrella, each program is locally administered by an academic unit assigned the task by the university. The academic unit may be a department, a college, or a specially appointed unit consisting of graduate faculty from multiple departments or colleges. Although an academic unit may develop local regulations for a specific program under its control, the local regulations must be consistent with the general regulations and are therefore subject to review and approval by the Graduate Council. It is the responsibility of the graduate faculty and each graduate student to become thoroughly familiar with the regulations that govern the graduate program in which they participate.

#### **Terminology**

The annual academic cycle at Boise State University consists of the fall semester, spring semester, and summer session. Critical dates associated with the annual academic cycle are specified on the *academic calendar*. Consecutive fall and spring semesters constitute an *academic year*. Unless otherwise indicated, the term *credit* refers to academic semester credit. A graduate student is considered to be engaged in *full-time graduate study* by the Graduate College in a given semester or session if the student is enrolled in at least 9 graduate credits. (Note that 8 or more credits are considered a "full schedule" for fee purposes.) Credit is said to be *applicable credit* if it is eligible for application to the credit requirements of a graduate certificate or degree program.

## Simultaneous Enrollment in Multiple Programs

A student at Boise State University may be enrolled in only one graduate program at a time. The only exceptions are a student may be enrolled simultaneously in (1) a graduate degree program and a graduate certificate program or (2) two graduate certificate programs. Both exceptions are subject to further conditions (see the *Regulations for Graduate Certificate Programs* section).

#### **Guidance of Graduate Students**

A graduate student must come under the guidance of either a supervisory committee or an advisor soon after admission to a graduate program. A supervisory committee is required for any master's student engaged in thesis activity and for any doctoral student. Proper guidance of graduate students is of primary importance and a major responsibility of the graduate program coordinators and the graduate faculty.

**Supervisory Committee.** A supervisory committee is composed of members of the graduate faculty who are appointed by the Graduate College and charged with the guidance of a student in a specific graduate program. The committee consists of a *major advisor* who serves as chair

plus at least two but no more than four additional members. The major advisor is the primary mentor for the student and must hold full rank in the graduate faculty. A majority of the committee membership must be graduate faculty of full or associate rank in the academic unit responsible for the program.

Appointment of a supervisory committee is initiated by the academic unit by submitting a request for appointment to the dean of the Graduate College. The request must include a recommended committee membership based on a reasonable match between student and faculty academic interests. The graduate dean can either appoint the recommended committee or solicit an alternative recommendation from the unit. Once the graduate dean is satisfied with the recommended committee, he or she formally appoints the committee and provides appropriate notifications. A change in the membership of the supervisory committee can be made after initial appointment but only according to policies and procedures developed by the academic unit and only with the approval of the Graduate College.

**Advisor.** A graduate student may come under the guidance of a single *advisor* if the student is not otherwise required to be under the guidance of a supervisory committee. An advisor is a full member of the graduate faculty and is appointed by the academic unit responsible for the graduate program. It is permissible for the graduate program coordinator to be appointed advisor for all students enrolled in the graduate program. It is also permissible for an advisor to guide a master's student (but not a doctoral student) through all graduate activities except for a culminating activity that is to be directed by a supervisory committee appointed as described above.

#### **Academic Performance**

Every student who is admitted to a graduate program (degree or certificate) must meet all of the academic performance requirements listed in this section. In order to conform with previous policies of the Graduate College on academic performance, the semester GPA requirement is effective beginning with the fall 2003 semester and the determination of academic notice disregards earlier semesters and summer sessions.

Semester GPA Requirement. A student who is admitted to a graduate program is required to achieve a semester grade point average (semester GPA) of 3.0 or better each and every semester or summer session in which he or she is enrolled through program completion. If a student fails to meet the semester GPA requirement and the failure is the first occurrence since admission to the program, the student will be placed on academic notice by the Graduate College but will be allowed to continue in the program. If a student fails to meet the semester GPA requirement and the failure is the second occurrence since admission to the program, the student will be administratively withdrawn from the program by the Graduate College. The semester GPA requirement is null for those semesters or summer sessions where none

#### University Policies — Graduate Academic Regulations

of the credits taken by the student are applicable to the GPA calculation (see page 37-38).

Program GPA Requirement. A student who is admitted to a graduate program is required to list on the Admission to Candidacy form (for a degree program) or on the Completion of Graduate Certificate form (for a certificate program) the specific courses to be applied to meet all of the credit requirements defined for the program. The program grade point average (program GPA) is the grade point average computed for this set of specific courses. If a student fails to achieve a program GPA of 3.0 or better, the student is ineligible for a degree or certificate and should consult the graduate program coordinator for advice and possible options.

**Individual Course Requirements.** A student who is admitted to a graduate program cannot list a course on the Admission to Candidacy form (for a degree program) or on the Completion of Graduate Certificate form (for a certificate program) if it is graded lower than C or P except that an undergraduate course, a G-designated course, or a transfer course cannot be listed if it is graded lower than B. If the grade for a specific course that is required by the program is too low to be listed on the *Admission to Candidacy* or *Completion* of Graduate Certificate form, and if that grade cannot be improved under the course repetition policy (see Repetition of Courses below), then it is not possible for the student to complete the program requirements and he or she will be administratively withdrawn from the program by the Graduate College.

#### **Repetition of Courses**

**Repetition to Improve a Grade.** A graduate student who has completed a course for credit may attempt to repeat that course to improve the grade but only once and only with the written approval of the graduate program coordinator. Certain courses cannot be repeated to improve a grade, including 590 Practicum/Internship, 591 Project, 593 Thesis, and 693 Dissertation. If an attempt to repeat a course to improve a grade results in a grade of W or CW, an additional attempt is not permitted unless extenuating circumstances can be documented that are clearly beyond the control of the student.

A course that has been completed more than once in an attempt to improve a grade can be listed only once on an Admission to Candidacy or Completion of Graduate Certificate form; the listed semester and grade must be for the most recent completion for credit. All course registrations on record beyond published drop dates for each semester or summer session appear on the student transcript and GPA computations are carried out according to university policy 2100-B. In order to conform with previous policies of the Graduate College on course repetition to improve a grade, a graduate student may not repeat a Boise State course to improve a grade of F if the course was initially completed prior to the start of the fall 2003 semester.

**Repetition for Credit.** The university-wide graduate course numbers and some departmental courses (such as MUS 563 and MUS 564) are associated either with specifically defined efforts by an individual student or with content characteristics that can change from semester to semester. These courses

and others like them may be repeated for credit and listed multiple times by a graduate student on his or her *Admission* to Candidacy form or Completion of Graduate Certificate form subject to all approvals and limitations of the graduate program and the Graduate College.

#### **Transfer Credit**

Transfer credit is academic credit that is awarded to a student by another college or university and is approved for application to the requirements of a graduate certificate or degree at Boise State University. Transfer credit must satisfy the following restrictions:

- Transfer credit must be academic credit representing a grade of A or B awarded by a regionally accredited U.S. college or university or by a non-U.S. institution of higher education that is approved for transfer purposes by the Registrar; continuing education units (CEU) and other non-academic credits are ineligible for transfer credit.
- Culminating activity courses, courses where the grade is based only on attendance, and courses representing experiential learning, regardless of the level (undergraduate or graduate), are ineligible for transfer credit.
- 3. Credit applied to meet the requirements of a previously earned degree or certificate of any type at another institution is ineligible for use as transfer credit. The only exception is that credit applied to a previously earned master's degree at another institution may be applicable as transfer credit to a doctoral degree.
- Application of transfer credit must be approved by the academic unit responsible for the graduate program.

The maximum transfer credit that can be applied to meet the requirements of a graduate certificate or degree is limited by the fundamental requirement that at least two thirds of the total credit requirement for the degree or certificate must be earned at Boise State University since admission to the program. An academic unit responsible for a particular graduate program may impose a more restrictive transfer policy (fewer allowed transfer credits) for that program. In the case of a cooperative graduate program offered by Boise State University and the University of Idaho and/or Idaho State University, a more liberal transfer policy (more allowed transfer credits) is permissible but only if the Graduate Council has approved a higher transfer credit limit for the program.

#### G-Courses and Dual-Listed Courses

A student enrolled in a G-course or a 500-level dual-listed course must complete all work required of students earning undergraduate credit (in the corresponding non-G-course or 400-level dual-listed course) plus substantial work at the graduate level. The Graduate College strictly limits the application of G-courses to no more than one third of the total credit requirement of a graduate certificate or degree. Furthermore, the Graduate College recommends that the applicable credit earned in G-courses and 500-level dual-listed courses together should not exceed one half of the total credit requirement of a graduate certificate or degree. The academic unit responsible for a graduate program may further restrict the application of G-courses and 500-level dual-listed courses.

#### Application of Credit Already Applied to a Graduate Certificate

A graduate certificate is viewed by some academic units as an intermediate accomplishment or stepping stone between a baccalaureate degree and a master's degree (see Regulations for Graduate Certificate Programs). The Graduate College therefore allows graduate credit (but not undergraduate credit) earned at Boise State University and previously applied to meet the requirements of a Boise State graduate certificate to also be applied to meet the requirements of a Boise State master's degree. This process is known as dual application and is subject to the following stipulations: (1) the dual application of credit must be consistent with those policies of the master's program that may limit or preclude such application; (2) all time constraints imposed by the Graduate College that govern the applicability of the credit must be met (including the requirement that at least two thirds of the total credit requirement for the master's degree must have been earned since admission to the master's program); (3) the dual application of credit must be approved by the advisor or by the chair of the supervisory committee. In no case may dual application of credit exceed one half of the total credit requirement for the master's degree. The creation of analogous arrangements between graduate certificates and doctoral degrees is prohibited by the Graduate College.

## In-Service Teacher Education Workshop Courses

Credit earned for in-service teacher education workshop courses (for which a special low fee is charged by the university) cannot be applied to meet the credit requirements of a graduate certificate or degree program (see section V.R.1.(10).(d) of the *Policies and Procedures of the Idaho State Board of Education*).

#### **Challenge Courses**

If a graduate student requests the opportunity to challenge a course in a graduate program, the department offering the course will decide whether to grant that opportunity. Proctoring fees and/or per-credit fees may be charged by the department. For interdisciplinary courses, the decision will be made by the coordinator of the graduate program to which the course applies.

#### Graduate Credit Option for Undergraduate Students

An undergraduate student who is also a senior may request approval to enroll in a G-course or a 500-level course. The student must complete a *Permit for Seniors to Take Graduate Courses* (available from the Registrar or from Graduate Admission and Degree Services). The student may request permission to earn graduate credit (option I) or upper-division undergraduate credit (option II) for a given course but cannot request both options.

**Graduate Credit (Option I).** Graduate credit earned under a *Permit for Seniors to Take Graduate Courses* does not imply that the student will be admitted to a graduate program at

Boise State University in the future. If the student completes courses for graduate credit while a senior and is later admitted to a graduate program, the responsible academic unit has the authority to decide which courses (if any) completed as a senior can be applied to the credit requirements of the program. The academic unit also has the authority to define a maximum number of applicable credits of this type for the program but the maximum cannot exceed one third of the total credit requirement.

**Upper-Division Undergraduate Credit (Option II).** The student may apply up to two successfully completed 500-level courses to his or her upper-division credit requirement for a baccalaureate degree.

**Other Limitations.** Undergraduate students may not enroll in 600-level courses. Courses offered as part of the Master of Business Administration program are excluded from enrollment by all undergraduate students.

#### **Choice of Catalog Year**

A student enrolled in a graduate certificate or degree program may choose to meet the program requirements defined in any graduate catalog in effect after admission to the program. The final audit carried out by the Registrar will use the requirements in the graduate catalog specified by the student. If the student specifies no particular catalog, then the program requirements in the current catalog become the default selection.

#### **Admission to Candidacy**

Admission to candidacy is required of all degree-seeking graduate students and serves as an important intermediate check that reveals overlooked or misinterpreted requirements. If left uncorrected, these shortcomings can seriously delay progress toward a graduate degree. Because of the importance of candidacy, a student who has not been admitted to candidacy cannot schedule or participate in a final oral examination or file a *Completion of Graduate Degree* form (see *Completion of Graduate Degree* below). Normal procedures may resume once the student has been admitted to candidacy. The requirements for admission to candidacy depend on the type of degree as follows:

Candidacy Requirements for a Master's Student. A master's student may be admitted to candidacy if he or she is in regular status and has completed a set of courses sufficient to satisfy at least one half of the total credit requirement with individual course grades of C or better and a GPA of at least 3.0 (computed for the set of courses).

Candidacy Requirements for a Doctoral Student. A doctoral student may be admitted to candidacy if he or she is in regular status, has passed the comprehensive examination, has satisfied any language proficiency requirement, has satisfied the doctoral residency requirement, and has completed a set of courses sufficient to satisfy the total credit requirements (exclusive of 693 Dissertation) with individual course grades of C or better and a GPA of at least 3.0 (computed for the set of courses).

**Procedures.** It is important that a student apply for candidacy as soon as the candidacy requirements are believed to be met. A student applies for admission to candidacy by completing an Admission to Candidacy form provided by the Graduate College or by the academic unit responsible for the program. A properly completed Admission to Candidacy form includes the exact final list of courses that are to be applied to meet the credit requirements of the graduate degree program as defined in a specified edition of the graduate catalog. The form must be signed by the student, by the chair of the supervisory committee or the advisor, and by the graduate program coordinator, and is then **submitted** to Graduate Admission and Degree Services no later than the semester prior to the semester of **graduation** (exact deadlines are published in the academic calendar). Once the *Admission to Candidacy* form is approved by the Graduate College, the student is notified that he or she has been admitted to candidacy and the form becomes a binding agreement between the student and the university. A change in an approved Admission to Candidacy form cannot be made without approval of an Adjustment of Academic Requirements form by the academic unit and the Graduate College.

#### Preparation and Submission of Theses, Projects, and Dissertations

A student must follow the publication standards of the Graduate College for dissertations and theses as given in a manual entitled Standards for Preparation of Dissertations, Theses, and Projects in the Graduate College (available in the Boise State University Bookstore). Academic units may also choose these standards on a programmatic basis for the format and archival of master's projects (see Project in the Regulations for Master's Programs section). A student should consult with the chair of his or her supervisory committee or his or her advisor on matters of form and style such as abbreviations, figures, tables, footnotes, references, and bibliography. Many academic units have adopted a style manual that is appropriate to the major field of study.

The final draft of a dissertation or thesis (or project if required to meet Graduate College standards by the academic unit) must be reviewed by the dissertation and thesis editor of the Graduate College. Documents that do not conform to the standards of the Graduate College will be returned to the student. When the document is fully approved by the editor, the student must provide two archival copies to be retained by the university that are printed on 25% cotton fiber paper. Receipt of these copies in the Graduate College must occur no later than the deadline published in the academic calendar (about five weeks before the expected date of graduation). The academic unit may also require the student to provide a fully approved archival copy on 25% cotton fiber paper.

#### **Completion of Graduate Certificate**

A student nearing completion of a graduate certificate program must submit a Completion of Graduate Certificate form with attached certificate fee to Graduate Admission and Degree Services. The form must be submitted no later than the deadline published in the academic calendar for the semester or summer session in which the student intends to complete the certificate requirements. The Completion of Graduate Certificate form specifies the expected date of completion (May, August, or December of a particular year) and also lists the courses to be applied to meet the certificate requirements. The form initiates required completion processes such as the certificate audit and reservation of an official embossed certificate. As is the case with students in degree programs, certificate students who miss their expected date of completion twice are placed on inactive status by the Registrar and are required to follow special procedures in order to regain a completion date.

#### **Completion of Graduate Degree**

A student nearing completion of a graduate degree program must submit a Completion of Graduate Degree form with attached diploma fee to Graduate Admission and Degree Services. The form must be submitted no later than the deadline published in the academic calendar for the semester or summer session in which the student intends to complete the degree requirements. The Completion of Graduate Degree form specifies the expected date of graduation (May, August. or December of a particular year) and initiates required completion processes such as the degree audit, addition to the list of graduation candidates, and reservation of an official embossed diploma. Students who miss their expected date of graduation twice are placed on inactive status by the Registrar and are required to follow special procedures in order to regain a graduation date.

#### Commencement

Candidates for graduate degrees are eligible for participation in commencement if cleared to do so by the Registrar. A student completing a graduate certificate program is not eligible to participate in commencement unless he or she is also a candidate for a graduate degree and has been cleared for participation by the Registrar. Diplomas and certificates are mailed to recipients after satisfactory completion of a final audit of all program requirements by the Registrar.

#### **Program Time Lines**

All time lines associated with graduate certificate and degree programs are published each semester or summer session in the academic calendar. These time lines include application and fee payment deadlines, last day to add and drop courses, starting and ending dates for semesters and sessions, and last days for filing program forms, final oral examinations, and submission of final archival copies of theses and dissertations. It is the responsibility of the student to be familiar with these time lines.

### **Regulations for Graduate Certificate Programs**

#### **Description**

A graduate certificate program is limited in scope relative to a graduate degree program but provides a significant opportunity for advanced study with a particular focus. Successful completion of a graduate certificate program is a coherent academic accomplishment that leads to an official notation on the student transcript. Subject to the regulations that govern a specific program, a graduate certificate can often serve as an intermediate accomplishment for a student whose ultimate goal is a graduate degree.

#### **Certificate Requirements**

The curriculum of a graduate certificate program is a set of academic courses identified by the university as suitable for all students who wish to study a clearly delineated topic within a disciplinary or interdisciplinary setting. The curriculum may include both specific courses and a selection of elective courses.

Credit Requirements. The program of study leading to a graduate certificate must satisfy the following stipulations: (1) the total credit requirement cannot exceed one-half of the total number of credits required by the most closely related master's degree program offered by the university; (2) the total credit requirement must include at least nine graduate credits earned in courses exclusive of university-wide graduate courses 591-600, 693, and 696-697. A limited number of credits earned in undergraduate courses may be applied to meet the credit requirements (see *Restrictions on Certain Courses* below). In all cases, at least two thirds of the total credit requirement must be earned at Boise State University since admission to the program. All credit must be academic credit and must be approved for application by the graduate program coordinator.

**Culminating Activity.** A culminating activity is normally not a requirement of a graduate certificate program but is not precluded from being a requirement. If a culminating activity is required, it must be of limited scope relative to the culminating activity required by the most closely related master's degree program offered by the university. The culminating activity must be represented in the total credit requirements using an appropriate course.

**Duration of Graduate Study.** All requirements for a graduate certificate (including courses completed at another college or university) must be started and completed within a single continuous interval of no more than four years; extensions of this time limit are prohibited by the Graduate College.

#### **Restrictions on Certain Courses**

All graduate certificate programs must be consistent with the following restrictions. An academic unit responsible for a particular certificate program may impose more stringent restrictions for that program.

**Undergraduate Courses.** The number of applicable credits earned in undergraduate courses cannot exceed one third of the total number of required graduate credits. An undergraduate course applied to a graduate certificate must be an upper division course with a grade of B or better and the course cannot represent effort for an undergraduate thesis, internship, practicum, independent study or research, conference or workshop, experiential learning, study abroad, seminar, or colloquium.

**Previously Applied Courses.** In general, any course applied to a previously earned certificate or degree of any type at any institution cannot be applied to meet the credit requirements of a graduate certificate program. An exception that applies to a specific certificate program may be approved by the Graduate Council.

## Simultaneous Enrollment in a Graduate Certificate and Degree Program

A student may be enrolled simultaneously in a graduate certificate program and a graduate degree program subject to the following conditions: (1) the content of the two programs are logically related; (2) the specific policies of the two programs permit co-enrollment; (3) the co-enrollment is approved by the chair of the supervisory committee or the advisor and the coordinators of the graduate certificate and degree programs. Because at least two thirds of the total credit requirement for a certificate must be earned at Boise State University since admission to the certificate program, graduate degree-seeking students who are interested in acquiring a graduate certificate as an intermediate step should promptly apply to the certificate program.

## **Enrollment in More Than One Certificate Program**

Simultaneous enrollment in two graduate certificate programs is permitted but only under the condition that both certificate programs allow simultaneous enrollment. Simultaneous enrollment in more than two graduate certificate programs is prohibited by the Graduate College.

### Regulations for Master's Programs

#### **Description**

Although programs leading to a master's degree are very diverse, they generally fall into two categories depending on overall emphasis and the nature of the culminating activity. Scholarly programs emphasize research or creative activities and require a thesis that is defended formally in a public setting and archived in the university library. Professional programs emphasize the application of advanced knowledge and skills and require a project, capstone course, series of practicums, recital, or comprehensive examination. Both scholarly and professional master's programs involve substantial study beyond the baccalaureate degree, impart the methodology of discovery or creation in a given discipline, and prepare students to contribute at an advanced level to the workplace and to the community.

#### **Degree Requirements**

Advisor or Supervisory Committee. A student admitted to a master's program must be under the guidance of either a supervisory committee or an advisor appointed soon after admission; see Guidance of Graduate Students in the Graduate Academic Regulations section.

**Credit Requirements.** The program of study leading to a master's degree must include at least 30 total credits. All credit applied to meet the total credit requirement must be graduate academic credit except that a limited number of credits earned in undergraduate courses outside the major are allowed (see Restrictions on Certain Courses below). In all cases, at least two thirds of the total credit requirement must be earned at Boise State University since admission to the program. All credit must be approved for application by the chair of the supervisory committee or the advisor.

**Language Proficiency.** A master's student must be proficient in English and may be required to demonstrate a prescribed level of ability in one or more other languages. If language ability beyond proficiency in English is required, the means of verification are defined by the academic unit responsible for the program.

Culminating Activity. The program of study leading to a master's degree must include at least one culminating activity that may be a thesis, project, capstone course, series of practicums, performance recital or lecture recital, or comprehensive examination. The culminating activity or activities should be represented in the program by nonzero credit but cannot exceed one third of the total credit requirement. Exceptions to the culminating activity requirement can only be made on a programmatic basis and must be approved by the Graduate Council.

**Final Oral Examination.** A student enrolled in a master's program with a thesis requirement must pass a final oral examination that probes his or her ability to describe and defend all aspects of the thesis in both a public setting and a private conference with experts (see Final Oral Examination below).

**Duration of Graduate Study.** The minimum duration of study for the master's degree is one academic year after admission to the program. All requirements for a master's degree (including courses completed at another college or university) must be started and completed within a single continuous interval of no more than seven years.

#### **Restrictions on Certain Courses**

All master's programs must be consistent with the following restrictions. An academic unit responsible for a particular master's program may impose more stringent restrictions for that program.

Undergraduate Courses. An undergraduate course may be applied to meet the credit requirements of a master's degree subject to the following restrictions:

- The course must be an upper-division course and must be in a discipline outside the major field of study of the master's program.
- A grade of B or better must have been earned in the course.
- The course cannot represent effort for an undergraduate thesis, internship, practicum, independent study or research, conference or workshop, experiential learning, study abroad, seminar, or colloquium.

**Previously Applied Courses.** In general, any course applied to a previously earned degree or certificate of any type at any institution cannot be applied to meet the credit requirements of a master's program. The only exceptions are (1) a graduate course applied to a graduate certificate previously earned at Boise State University and (2) a graduate course that qualifies for application under regulations for a second master's degree at Boise State University. Each course allowed under either of these two exceptions is subject to the following additional restrictions:

- A grade of B or better must have been earned in the
- The course cannot represent effort for a graduate culminating activity or for experiential learning.

Graduate courses allowed under the first exception are limited by any additional stipulations that may be in place for the master's program (see *Application of Credit Already* Applied to a Graduate Certificate in the Graduate Academic Regulations section). Graduate courses allowed under the second exception are limited by stipulations in place for second master's degrees (see Second Masters Degree below).

**Aggregate Restriction.** No more than one third of the total credit requirement exclusive of culminating activity credit can be met by the sum of credits earned in undergraduate courses, pass-fail courses, and university-wide courses numbered 590, 592, 594-598, and 696-697 (or equivalent courses that may appear as transfer credits).

#### **Thesis**

A thesis documents original research or creative activity carried out by a student enrolled in a master's program. A research thesis is characterized by a clearly stated proposition or hypothesis that is investigated using analysis and synthesis of data or other scholarly evidence; the thesis must include a discussion of the relevant literature and demonstrate the ability of the student to independently and successfully address a significant intellectual problem with concepts and methods that are accepted in the major field of study. A creative thesis includes works of fiction, poetry, and creative nonfiction and is associated with the Master of Fine Arts in Creative Writing program.

**Thesis Proposal.** A thesis proposal must be approved in advance by the supervisory committee. The thesis proposal presents the background, objectives, scope, methods, and time lines of the thesis research. Substantive work done by the student prior to the appointment of the supervisory committee or work represented by credit other than 593 Thesis (such as 596 Independent Study and 696 Directed Research) is not acceptable for the thesis under any conditions.

**Final Thesis Approvals and Procedures.** A thesis that has been successfully defended by the student at the final oral examination must be approved in final form by all members of the supervisory committee and by the dean of the Graduate College. The thesis in final form must also conform to the standards of the Graduate College as determined by the thesis and dissertation editor. Because the thesis is expected to be available to other scholars and to the general public, the entire thesis must be archived in the university library. The student should refer to Preparation and Submission of Theses, Projects, and Dissertations in the Graduate Academic Regulations section.

**Registration for Thesis Credit.** A master's student who is engaged in thesis activity during any semester or term, including the semester or term of the final oral examination and the semester or term in which the two archival copies of the thesis are submitted to the Graduate College, must register for at least one credit of 593 Thesis, regardless of the number of 593 Thesis credits already accumulated by the student.

**Thesis Grading.** All 593 Thesis credits are graded in progress (IP) until a final grade of either pass (P) or fail (F) is assigned by the academic unit responsible for the program. A grade of pass (P) is assigned to all 593 credits if the final oral examination is passed, the thesis in final form is fully approved, and the student has met all procedural requirements related to the thesis. A grade of fail (F) is assigned to all 593 credits if the student fails the final oral examination.

#### **Project**

A project is a substantial exercise that demonstrates the ability of a master's student to carry out independently and successfully a professional activity similar to what may be encountered in the workplace. Although a final oral examination for a project is not required by the Graduate College, the academic unit responsible for a master's program

may define procedures for such an examination and require it for all students in the program.

Final Project Approvals and Procedures. The academic unit determines the common format and archival method (subject to approval by the Graduate College) that applies to all projects produced in the program. This flexibility is an acknowledgment of the great diversity of projects and the difficulty of preserving them with a system fixed for the entire university. A format and archival method for text-based projects has been established by the Graduate College and is one option available to academic units (see Preparation and Submission of Theses and Dissertations in the Graduate Academic Regulations section). Regardless of the procedures adopted for projects by an academic unit, the unit is responsible for filing a Report of Master's Culminating Activity form with the Graduate College as soon as the project is successfully completed.

**Registration for Project Credit.** A master's student who is engaged in project activity during any semester or term, including the semester or term in which the project in final form achieves full approval, must register for at least one credit of 591 Project, regardless of the number of 591 Project credits already accumulated by the student.

**Project Grading.** All 591 Project credits are graded in progress (IP) until a final grade of either pass (P) or fail (F) is assigned by the academic unit responsible for the program. The same grade (P or F) must be assigned to all 591 credits registered by the student during his or her career in the program.

#### **Capstone Course**

A capstone course is a graduate course that serves as a final comprehensive assessment of the knowledge and skills of a master's student in the major field of study. As a culminating activity, a capstone course is taken in the last semester of a master's program and may be a grade-point course or pass-fail course. A capstone course may be designated with a program-specific graduate course number or may use university-wide graduate course 600 Assessment with Capstone Course as the optional modifier.

#### **Series of Practicums**

A practicum is a supervised practical application of previously studied theory that takes place in a professional, clinical, or field setting. The culminating activity for a master's program may be a series of practicums completed primarily during the later phases of the program. A practicum may be designated with a program-specific graduate course number or may use university-wide graduate course 590 Practicum/Internship.

#### **Performance Recital or Lecture Recital**

A performance recital or lecture recital coupled with one or more examinations may be used as a culminating activity for a master's program in the performing arts. A performance recital or lecture recital is designated with a program-specific graduate course number and must be a pass-fail course.

#### **Comprehensive Examination**

A comprehensive examination assesses depth and breadth of knowledge. When used as the culminating activity or as part of the culminating activity for a master's degree, a comprehensive examination cannot be attempted until the student has completed all core courses and has been admitted to candidacy. The academic unit responsible for the program may impose additional conditions to be met by the student prior to the examination, such as completion of all courses required for the degree.

Considerable autonomy is granted to the academic unit in the design, administration, and evaluation of a comprehensive examination. However, the examination date must be no later than the deadline specified in the academic calendar. In addition, the result of the examination can only be stated as pass or fail and must be reported to the Graduate College on a Report of Master's Culminating Activity form.

A student must be registered for at least one credit during the semester or term of the comprehensive examination. This registration requirement may be satisfied by enrollment in any course for academic credit. In some programs the registration requirement is automatically satisfied because the academic unit requires the student to register for 600 Assessment with Comprehensive Examination as the optional modifier. When 600 Assessment is used to represent a comprehensive examination, the result of the examination can only be reported to the registrar as pass (P) or fail (F).

#### **Final Oral Examination**

The Graduate College requires a final oral examination for a master's student only if he or she is completing a thesis as a culminating activity. The examination must consist of three sequential parts in which the student presents and defends the thesis research: (1) a public presentation, (2) a public question and answer session, and (3) a private question and answer session with a committee of experts known as the defense committee. The final oral examination must occur no later than the deadline specified in the academic calendar for the semester or term just prior to graduation. Announcement of the public presentation to the university community is required and should precede the presentation by at least two weeks.

The defense committee is normally responsible for conducting all three parts of the final oral examination and is identical to the student's supervisory committee. However, at the request of the student or academic unit, a graduate faculty representative (GFR) may be appointed to the defense committee as a nonvoting member by the dean of the Graduate College. The GFR must hold full rank in the graduate faculty and must be a member of an academic unit not represented on the supervisory committee. The GFR conducts all three parts of the final oral examination according to procedures established by the Graduate College. In all cases, the result of the final oral examination can only be reported as pass or fail and must be included on a Report of Master's Culminating Activity form.

#### Failure of a Comprehensive Examination or Final Oral Examination

A comprehensive examination or final oral examination that is failed on the first attempt can be repeated once but only if a repeat attempt is requested by the student and approved by the academic unit responsible for the program. The student request must be in writing to the head of the academic unit and must be made within five working days after the student is notified of his or her failure. If a repeat attempt is not requested by the student, or if a request is made by the student but not approved by the academic unit, then the student is administratively withdrawn from the program by the Graduate College. If the student's request is approved by the academic unit, then the repeat attempt must occur within twelve months after the first attempt. If the student does not repeat the examination within twelve months after the first attempt, or if the student fails the repeat attempt, then the student is administratively withdrawn from the program by the Graduate College. Any extension of the twelve-month limit on the repeat attempt must be approved by the academic unit and by the graduate dean.

#### Second Master's Degree

Students who have earned a master's degree from Boise State University may earn a second master's degree in another discipline under the following guidelines:

- The student must meet all requirements prescribed for the second degree.
- Requirements for the second degree that have already been met in the program for the first degree may be counted toward the second degree at the discretion of the supervisory committee or advisor and with the approval of the graduate dean. Credit for culminating activities is automatically excluded from application to both degrees.
- At least two thirds of the credit applied to the second degree must represent new course work (i.e., courses not already applied to the first degree).
- All requirements for the second degree (including courses completed at another college or university) must be started and completed within a single continuous interval of no more than seven years.
- A student cannot be admitted to a second master's degree program until all requirements for the first master's degree have been completed.

#### Handbook of Procedures

Some academic units have compiled handbooks of procedures for those master's programs for which the unit has responsibility. A copy may be obtained through the graduate program coordinator for the program.

# **Regulations for Doctor of Philosophy Programs**

#### **Description**

The Doctor of Philosophy (Ph.D.) degree is the most advanced research degree awarded by the university. It requires demonstration of expertise in a major field of study, a working understanding of one or more related disciplines, independent research leading to a significant and original contribution to knowledge, and (in some cases) proficiency in one or more foreign languages. Recipients of the Ph.D. degree generally engage in careers of active scholarship in a wide variety of employment settings.

#### **Degree Requirements**

**Supervisory Committee.** A student admitted to a Ph.D. program must be under the guidance of a supervisory committee appointed soon after admission: see *Guidance of Graduate Students* in the *Graduate Academic Regulations* section.

Credit Requirements. The program of study leading to a Ph.D. degree must satisfy the following minimum credit requirements: 66 total credits consisting of 18 credits in 693 Dissertation plus 48 credits in other courses. Of the 48 credits in other courses, 24 credits must be earned in graduate courses in the major field of study with 12 such credits in 600-level courses. All credit applied to meet the credit requirements must be graduate academic credit except that a limited number of credits earned in undergraduate courses outside the major are allowed (see *Restrictions on Certain Courses* below). In all cases, at least two thirds of the total credit requirement must be earned at Boise State University since admission to the program. All credit must be approved for application by the supervisory committee.

**Residency.** A Ph.D. student must spend at least one academic year in full-time on-campus graduate study at Boise State University.

**Comprehensive Examination.** A Ph.D. student must pass a comprehensive examination that assesses (1) depth and breadth of knowledge in the major field of study and in one or more related disciplines and (2) readiness to undertake dissertation research; see *Comprehensive Examination* below.

**Language Proficiency.** A Ph.D. student must be proficient in English and may be required to demonstrate a prescribed level of ability in one or more other languages. If language ability beyond proficiency in English is required, the means of verification are defined by the academic unit responsible for the program.

**Dissertation.** A Ph.D. student must prepare a dissertation written in clear and effective English that embodies the results of his or her original scholarly research (see *Dissertation* below).

**Final Oral Examination.** A Ph.D. student must pass a final oral examination that rigorously and deeply probes the ability of the candidate to describe and defend all aspects of the

dissertation research in both a public setting and in a private conference with experts (see *Final Oral Examination* below).

**Duration of Graduate Study.** The minimum duration of study for the Ph.D. degree is three academic years beyond the baccalaureate degree. All requirements for a Ph.D. degree (including courses completed at another college or university) must be started and completed within a single continuous interval of no more than ten years.

#### **Restrictions on Certain Courses**

All Ph.D. programs must be consistent with the following restrictions. An academic unit responsible for a particular Ph.D. program may impose more stringent restrictions for that program.

**Undergraduate Courses.** An undergraduate course may be applied to meet the credit requirements of a Ph.D. degree subject to the following restrictions:

- The course must be an upper-division course and must be in a discipline outside the major field of study of the Ph.D. program.
- 2. A grade of B or better must have been earned in the course.
- The course cannot represent effort for an undergraduate thesis, internship, practicum, independent study or research, conference or workshop, experiential learning, study abroad, seminar, or colloquium.

**Previously Applied Courses.** In general, any course applied to a previously earned degree or certificate of any type at any institution cannot be applied to meet the credit requirements of a Ph.D. degree. The only exception is a graduate course applied to a master's degree previously earned at a regionally accredited U.S. institution or non-U.S. institution approved by the Graduate College and the Registrar. Each course allowed under this exception is subject to the following additional restrictions:

- A grade of B or better must have been earned in the course.
- The course cannot represent effort for a graduate culminating activity or for experiential learning.

Graduate courses allowed under this exception are limited by the fundamental requirement that at least two thirds of the total credit requirement for the Ph.D. degree must be earned at Boise State University since admission to the program.

**Aggregate Restriction.** No more than one third of the total credit requirement exclusive of culminating activity credit (693 Dissertation) can be met by the sum of credits earned in undergraduate courses, pass-fail courses, and university-wide courses numbered 590, 592, 594-598, and 696-697 (or equivalent courses that may appear as transfer credits).

## **Comprehensive Examination**

The comprehensive examination for a Ph.D. student should be administered when the student is in regular status and

#### University Policies — Doctor of Philosophy Programs Regulations

has completed at least 32 but no more than 48 applicable credits exclusive of 693 Dissertation credit. Although the comprehensive examination is required for a Ph.D. student by the Graduate College, considerable autonomy is granted to the academic unit in its design, administration, and evaluation. The result of the comprehensive examination can only be stated as pass or fail and must be reported to the Graduate College on a *Report of Doctoral Comprehensive Examination* form. The academic unit may also record the result on the transcript as pass (P) or fail (F) using 600 Assessment with Comprehensive Examination as the optional modifier.

#### Dissertation

Original research carried out by a student at the doctoral level is documented by a dissertation. A dissertation is characterized by a clearly stated proposition or hypothesis that is investigated using analysis and synthesis of data or other scholarly evidence. The dissertation must demonstrate mastery of the relevant literature and the ability of the student to independently and successfully address a substantial intellectual problem with concepts and methods that are accepted in the major field of study.

**Dissertation Proposal.** A dissertation proposal must be approved in advance of the dissertation research by the supervisory committee. The dissertation proposal presents the background, objectives, scope, methods and time lines of the dissertation research. Substantive work done by the student prior to the appointment of the supervisory committee or work represented by credit other than 693 Dissertation (such as 596 Independent Study and 696 Directed Research) is not acceptable for the dissertation under any conditions.

Final Dissertation Approvals and Procedures. A dissertation that has been successfully defended by the student at the final oral examination must be approved in final form by all members of the supervisory committee, by the chair or dean of the responsible academic unit, and by the dean of the Graduate College. The dissertation in final form must also conform to the standards of the Graduate College as determined by the thesis and dissertation editor. Because the dissertation is expected to be available to other scholars and to the general public, the entire dissertation must be submitted to UMI and must also be available in the university library. The student should refer to Preparation and Submission of Theses, Projects, and Dissertations in the Graduate Academic Regulations section.

Registration for Dissertation Credit. A Ph.D. student who is engaged in dissertation activity during any semester or term, including the semester or term of the final oral examination and the semester or term in which the two archival copies of the dissertation are submitted to the Graduate College, must register for at least one credit of 693 Dissertation, regardless of the number of 693 Dissertation credits already accumulated by the student.

**Dissertation Grading.** All 693 Dissertation credits are graded in progress (IP) until a final grade of either pass (P) or fail (F) is assigned by the academic unit responsible for the program. A grade of pass (P) is assigned to all 693 credits if

the final oral examination is passed, the dissertation in final form is fully approved, and the student has met all procedural requirements related to the dissertation. A grade of fail (F) is assigned to all 693 credits if the student fails the final oral examination.

#### Final Oral Examination

The final oral examination for a Ph.D. student must consist of three sequential parts in which the student presents and defends the dissertation research: (1) a public presentation, (2) a public question and answer session, and (3) a private question and answer session with a committee of experts known as the *defense committee*. The defense committee must include the supervisory committee plus a nonvoting graduate faculty representative (GFR) appointed by the dean of the Graduate College. At the request of the academic unit responsible for the program, the graduate dean may appoint one additional voting member to the defense committee where this appointee may be from the university or from outside the university. The GFR must hold full rank in the graduate faculty and must be a member of an academic unit not represented on the supervisory committee. The GFR conducts all three parts of the final oral examination according to procedures established by the Graduate College. In all cases, the result of the final oral examination can only be reported as pass or fail and must be included on a Report of Doctoral Final Oral Examination form.

#### Failure of the Comprehensive **Examination or Final Oral Examination**

A comprehensive examination or final oral examination that is failed on the first attempt can be repeated once but only if a repeat attempt is requested by the student and approved by the academic unit responsible for the program. The student request must be in writing to the head of the academic unit and must be made within five working days after the student is notified of his or her failure. If a repeat attempt is not requested by the student, or if a request is made by the student but not approved by the academic unit, then the student is administratively withdrawn from the program by the Graduate College. If the student's request is approved by the academic unit, then the repeat attempt must occur within twelve months after the first attempt. If the student does not repeat the examination within twelve months after the first attempt, or if the student fails the repeat attempt, then the student is administratively withdrawn from the program by the Graduate College. Any extension of the twelve-month limit on the repeat attempt must be approved by the academic unit and by the graduate dean.

## Handbook of Procedures

Some academic units have compiled handbooks of procedures for doctoral programs for which the unit has responsibility. A copy may be obtained through the graduate program coordinator for the program.

# Registration Policies, Procedures, and Grades

Shortly after you have been admitted to a graduate-degree program, your department will assign a member of the faculty to serve as your academic advisor. Nondegree-seeking students may seek advising in Graduate Admission and Degree Services or the department from which you intend to take courses. Prior to registration, all students are encouraged to seek advising.

Registration is held at the beginning of each semester and at the beginning of summer sessions. All registration is completed online by selecting the BroncoWeb link on the Boise State University home page at http://www.boisestate.edu. You may register from your home or office, at an on-campus computer lab, or the Canyon County Center. The Registrar's Office serves as a Help Center for those students not familiar with the web process. You must have your user name and password when you register.

#### Registration for Continuing, New and Readmitted Students

Graduate students are initially assigned a registration appointment for fall and spring semesters.

- Fall 2006 appointments begin April 3, 2006
- Spring 2007 appointments begin October 23, 2006.

Open registration begins after the fee-payment deadline for preregistered students and runs through the tenth day of the fall and spring semesters. Appointments are not assigned for summer sessions.

• Summer 2007 open registration begins February 5, 2007.

## **Registration Cancellation**

If you wish to adjust your schedule by adding or dropping a class, see instructions concerning the drop-add process. If you wish to withdraw from classes after the first day of instruction, see the instructions for "Complete Withdrawal."

## **Academic and Fee Policy**

Once you register for classes, you will remain registered and will be held responsible for the fees and grades assessed for these classes unless you cancel your registration even if you do not pay for the courses or do not plan to attend. If you decide not to attend any classes, you must drop all your classes (including classes and workshops that begin later in the semester) by going through BroncoWeb at http://broncoweb.boisestate.edu by the appropriate session deadline.

If you do not cancel your registration or pay your fees by the fee payment deadline, you will remain registered, you will be charged course fees, and you will be assessed a \$50 late penalty.

**NOTE:** cancellation of courses may have financial aid impacts. You may be required to repay all, or a portion of, any financial aid awarded to you.

#### **Credit Courses and Audit Courses**

During registration, if space in the class is available, you may register for a course under audit status with the understanding that you have a seat in the class, but you will receive neither credit for the course nor a final grade. Some instructors won't require you to attend class regularly, complete assigned work, take tests, or otherwise participate in the class. On the other hand, the instructor can require of you everything that is required of students who take the course for credit. Therefore, before registering under audit status, discuss your plans with the instructor.

In any of the classes in which you are enrolled, you can change the course status from credit to audit or from audit to credit before the appropriate session deadline. Please note that if you change the status from credit to audit, or from audit to credit, your instructor still defines the requirements for successfully completing the class. If you fail to meet those requirements under **audit** course status, your instructor may give you a final grade of 'UAU' (for **Unsatisfactory Audit**). To change your registration status, access the Website at http://www.boisestate.edu and select BroncoWeb to complete the process.

## **Adding Classes and Dropping Classes**

For a short time at the beginning of each semester, enrolled students may add classes to their schedule or drop classes from their schedule.

You may drop and add classes on BroncoWeb (http://www.boisestate.edu and select BroncoWeb). For more information about dropping or adding classes, see the *Boise State University Schedule of Classes* or call the BroncoWeb Help Center at 208 426-2932.

Before the semester begins, you may add classes to your schedule, on BroncoWeb (http://www.boisestate.edu and select BroncoWeb), without first obtaining the instructor's permission, if there is space available in the class. You may continue to add classes from the first day of classroom instruction, until the deadline appropriate to the session. (See the academic calendar in the *Boise State University Schedule of Classes* for the exact deadline.)

However, after the fifth day of the semester, you must obtain the instructor's approval to add the class. Instructors may refuse to grant permission if the class is full. They may also refuse permission if your late entry would prevent you from benefitting fully from the class, or prevent other students in the class from doing so. (If you are registering for or adding **graduate** readings and conference, practicum, internship or portfolio or **undergraduate** independent study, challenge, or credit for prior learning, you may do so through the end of the sixth week of the semester.)

#### University Policies — Registration Policies, Procedures, and Grades

You may drop classes from your schedule, on BroncoWeb (http://www.boisestate.edu and select BroncoWeb), through the sixth week of the semester. (See the academic calendar in the Boise State University Schedule of Classes for the exact deadline.) If you drop a class before the tenth day of the semester, the class will not appear on your transcript. However, if you drop a class after the tenth day, your transcript will contain a grade of W for that class. Grades of W will not be used in GPA calculation. Short courses, five week, and eight week block courses have different deadline dates. (See the academic calendar in the Boise State University Schedule of Classes for the exact deadline.)

For more information about dropping or adding classes, see the Boise State University Schedule of Classes or call the Registrar's Office at 208 426-3486.

#### Boise State limits the number of withdrawals (W's) a student may receive while enrolled at Boise State.

If you are a graduate student and wish to pursue a second degree at the associate, advanced technical certificate, or technical certificate level, you may receive up to five W's. If you are pursuing a second baccalaureate degree, you may earn up to ten W's, including any received while in an associate degree, advanced technical certificate, or technical certificate program. (W's received before Fall, 1995 are not counted toward the total allowed.) Once you have exhausted the allowed number of W's, you may receive only an A, B, C, D, P, or F in any succeeding course. (There is no limit on the number of W's received if you are a graduate student enrolled in a graduate degree program.)

**Exceptions:** Withdrawals from co-requisite courses that must be taken together (primarily lecture/lab courses) will count as one course for permitted withdrawal purposes. Withdrawals received as a result of a complete withdrawal from the university will not count toward the allowed total.

**Note:** The university has placed limits on the number of times you may enroll in a course. See section on "Grades" for more information.

**Note:** If you intend to drop a class in which you have been issued university property, such as lab equipment, uniforms, or instruments, you must return the property before dropping the class. If you fail to do so, the Registrar's Office will place a hold on your official record, and reinstate you in the class.

#### Complete Withdrawal from **Boise State University**

Students who wish to leave the University in GOOD STANDING (drop all courses) must drop all their classes via BroncoWeb (http://www.boisestate.edu and select BroncoWeb). If the complete withdrawal is made after the fee payment deadline and the student has not paid their fees, the student is still responsible for the entire amount of fees incurred plus a \$25.00 administrative processing fee. Extended Studies students can initiate a complete withdrawal via BroncoWeb or in the Extended Studies Building, 1015 Grant.

Students who are physically unable to drop their classes via BroncoWeb because of hardship or health reasons should telephone or write to the Registrar's Office and request an Authorization for Complete Withdrawal. The authorization must be completed, legally signed, and returned by the student requesting the withdrawal within two weeks of the request and by the end of the sixth week of the semester before the student's records can be officially closed for that semester. See refund information in this directory.

Students who do not cancel their registration, completely withdraw prior to the end of the sixth week of the semester, or who fail to complete the course requirements by deadlines discussed previously will be awarded a final grade of "F." Complete withdrawal after the published deadline will only be granted by special appeal and because of extraordinary circumstances. See the Dean of Students.

For information on refunds of tuition and fees following a complete withdrawal, see the chapter on "Tuition and Fees." For important information concerning withdrawals for students receiving financial aid, see the heading "Change in Enrollment Status" in the section on "Financial

## **Faculty-Initiated Withdrawal**

An instructor can withdraw a student from a course if any of the following conditions are present:

- The student fails to attend one of the first two meetings of a class that meets more than once each week.
- The student fails to attend the first meeting of a class that meets once each week.
- The student has not satisfied the entrance requirements for the class.

To withdraw a student for **failing to attend one of the** first two meetings of a class that meets more than once each week or the first meeting of a class that meets once each week, the instructor submits a Faculty Initiated Withdrawal form to the Registrar's Office. Students withdrawn from a course for failing to attend these specified class meetings may re-enroll in the course with the instructor's permission through the tenth day of the semester. (See the Boise State University Schedule of Classes for the exact deadline.)

To withdraw a student for **failing to satisfy entrance requirements**, the instructor or the graduate program coordinator must notify the student of the impending withdrawal and then request the withdrawal through the Registrar's Office. All faculty-initiated withdrawals will be removed from the student's record and will not appear on the student's transcript.

Students should not expect that an instructor will withdraw them for nonattendance. The primary responsibility for course withdrawal rests with the student.

**Note:** For information regarding Administrative Withdrawal from Boise State University, please refer to the chapter on University Policies and Services.



## **Grades**

Boise State University uses a 4.0 grading scale. Table 3 lists the letter grades that instructors use to document their evaluation of your work and to document your academic status in the class. In addition, Table 3 defines the meaning of each letter grade and specifies the number of quality points that correspond to each grade. Quality points are used to determine your grade-point average (GPA).

	Table 5.1 Letter Grades				
Letter Grade	Meaning Quality Points per Credit Hour		Used to Calculate GPA?		
A+	Distinguished work	4	Yes		
A	Distinguished work	4	Yes		
A-	Distinguished work	3.7	Yes		
B+	Superior work	3.3	Yes		
В	Superior work	3	Yes		
B-	Superior work	2.7	Yes		
C+	Average work	2.3	Yes		
С	Average work	2	Yes		
C-	Average work	1.7	Yes		
D+	Below-average work	1.3	Yes		
D	Below-average work	1	Yes		
D-	Below-average work	.7	Yes		
F	Failure	0	Yes		
Р	Pass: satisfactory work equivalent to C or higher; credits earned	0	No		
I	Incomplete (See "Incompletes" in this chapter.)	0 (until changed to a letter grade)	No		
W	Student withdrew from the course	0	No		
AUD	Course was taken under audit status	0	No		
UAU	Unsatisfactory Audit Did not meet requirements set by instructor	0	No		
NR	No Report or Record: Instructor has not yet turned in a grade	0 (until changed to a letter grade)	No		
IP	In Progress; Used for thesis, project, and dissertation work in progress*	0 (until changed to a letter grade)	No		
CW	Student completely withdrew from all classes that semester	0	No		

\*Note: if a student voluntarily leaves a graduate program in good standing, any IP grades accumulated will be changed to a grade of W.

## How to Calculate Your Grade-Point Average (GPA)

For each student, Boise State University calculates and documents three types of grade-point average (GPA):

- cumulative GPA
- semester (term) GPA
- Boise State University GPA

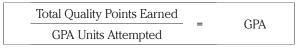


Figure 1. Formula for Calculating Grade Point Average (GPA)

As a student at Boise State University, you can be enrolled in one of three possible careers-undergraduate, graduate, or applied technology. In calculating your cumulative GPA, Boise State uses courses you have taken at the university in your current "career" and all courses you have transferred from other post-secondary institutions—but only if you received a final letter grade of A, B, C, D, or F in those transferred courses. Courses repeated prior to Fall 1995 use a grade replacement policy. Only the most recent grade was used in calculating the cumulative GPA.

- Courses repeated prior to Fall 1995 use a grade replacement policy. Only the most recent grade is used in calculating the cumulative GPA.
- Courses repeated Fall 1995 through Summer 2001 use a grade averaging policy. Courses repeated are averaged, using both grades in the calculation of the GPA.
- Beginning Fall 2001 and on, courses repeated will use a grade replacement policy. Only the most recent grade will be used in calculation of the cumulative GPA.

In calculating *semester GPA*, the formula uses only the quality points earned and GPA units attempted that semester. For Boise State University GPA, the formula uses only quality points earned and GPA units attempted at Boise State.

All GPA calculations exclude credits for:

- pass/fail courses in which you received a final grade of P; an F will impact your GPA.
- courses that you registered for but later dropped from your schedule, even though the course may appear on your transcript with a final grade of W or CW
- courses you took under audit status (AUD or UAU)
- courses in which you have received the grade of I, for incomplete; IP, for in progress; or NR, for no record (until the I, IP, or NR is changed to a letter grade)

#### **Incompletes**

Instructors can enter a grade of I-for incomplete-if both of the following conditions are present:

- Your work has been satisfactory up to the last three weeks of the semester.
- Extenuating circumstances make it impossible for you to complete the course before the end of the semester.

If you receive an incomplete in a **graduate** course, you and your instructor will write and sign a contract stipulating the work you must do to receive a grade in the class and the length of time in which it must be completed. By the end of this specified time, the instructor may submit a grade.

You may not remove the incomplete from the transcript by re-enrolling in the class during another semester. A grade of incomplete is excluded from GPA calculations until you receive a final grade in the course.

#### Questions About These Policies?

Contact the Registrar's Office, Administration Building, Room 102, 208 426-4249.

## **Tuition and Fees**

In general, the costs of attending Boise State University arise from tuition, institutional fees, and special fees (such as fees for private music lessons or laboratory classes). Your actual costs depend on how many classes you take, the type of classes you take, and your status as a resident or nonresident student. In addition to these fees, you may also have to pay such additional charges as workshop fees or materials charges, depending on the type of classes you take. You may pay with cash, check, Visa, MasterCard, or Discover.

This chapter defines the current tuition and fees for attending Boise State University and provides other information about tuition and fees, including information on deadlines, deferred payment, the senior-citizen rate, and insurance coverage for full-time students. Also included in this chapter are some of the more commonly asked questions about Idaho residency requirements.

# Deadlines for Paying Tuition, Fees, and Other Charges

You are expected to pay all tuition, fees, and other charges by the deadline specified in the current academic calendar. If you register after the deadline, you will be expected to pay all tuition, fees, and other charges when you register.

Access your student account on BroncoWeb to find out deadlines for paying tuition, fees, and other changes. **Boise State does not mail out paper statements.** Login to http://www.boisestate.edu and select BroncoWeb. Once you are in, select: For Students, Student Account. Please contact the Payment and Disbursement Office, Administration Building, Room 211 or call 208 426-1212 for specific fee information. Other financial information is available on the Student Financials website at http://finad.boisestate.edu/sfs. htm.

## Fee Payment Plan

Information regarding deferred fee payment plans may be obtained in Payments & Disbursements, Administration Building, Room 211, 426-1212 or on-line at http://finad.boisestate.edu/sfs.htm

#### How Boise State University Calculates Your Tuition and Fees

When you apply for admission to Boise State University, you pay a one-time, nonrefundable fee for processing your application. To calculate your other tuition and other fees, Boise State University uses a milestone of eight credits per semester. Once you register for eight or more credits, you are required to pay the full tuition and fees shown in Table 4, below.

Table 4 Full Graduate Tuition and Fees, Per Semester, (8 credits or more)			
Tuition and Fees	Resident	Nonresident	
Tuition	\$0	\$3,889.00	
Institutional Fees*	\$2,968.00	\$2,968.00	
Total (for up to 19 credits)	\$2,968.00	\$6,857.00	
Overload Fee**	\$211.00 per credit hour	\$211.00 per credit hour	

<sup>\*</sup>Includes \$496 per semester Health Insurance fee that may be waived with proof of other insurance.

In determining whether you have reached the total of 8 credits per semester, Boise State counts all credit hours on your registration form, including credit hours under audit status, credit hours for courses you are repeating, and credit hours for workshops. In short, nearly every combination of any type of credit hour counts toward the 8-credit total. Please note, also, that developmental courses (such as ENGL 010 Developmental Writing or MATH 020 Elementary Algebra) count as 3 credits each toward the 8-credit total, even though you earn no credits by taking the course.

Although 8 credits is considered full time for fee paying purposes, you may be required to enroll in 9 credits or more to be eligible for some types of financial aid. (Direct Loan recipients must be enrolled in at least 5 credits that apply directly towards a graduate degree to qualify for a disbursement). Please see Table 1 in the section on "University Policies and Services."

NOTE: Tuition, fees, and other charges are subject to change at any time by the Idaho State Board of Education, acting as the Board of Trustees for Boise State University.

## Other Fees and Charges

If you enroll for fewer than eight credits, your fees are calculated according to the schedule shown in the following Table 5. Among the fees listed in Tables 5 and 6 are an application processing fee, music fees, special fees, and an overload fee. You pay the application processing fee once when you first apply for admission to Boise State. You pay the music fee if you register for private music lessons, and you pay the overload fee whenever you enroll for more than 19 credits in a single semester.

Music fees are refundable, if you drop the class within the first 5 days of classroom instruction (see "Refund Policy," below). **Application fees are nonrefundable.** 

<sup>\*\*</sup>An overload fee is imposed if you register for more than 19 credits. Each credit over 19 costs the per credit hour cost in Table 5, below.

Table 5 Partial Graduate Fees, Per Semester, (less than 8 credits)			
Fee Type	Fall or Spring Semester	Summer Session	
Destrict France	\$254.00	<b>2006</b> — \$230.85 per credit	
Part-time Fees	per credit hour	<b>2007</b> — \$249.00 per credit	
Application Fee	\$55.00 one-time; non-refundable		

Table 6 Fees for Private Music Lessons		
2 Credits	4 Credits	
\$140	\$280	

These music fees may be waived, however, if you are a music major enrolled for 8 or more credits. To be eligible to receive the waiver, you must be taking the class in order to satisfy a requirement for private performance study in a degree program. You must also be concurrently enrolled, for credit, in a major ensemble and in a concert class. You must receive a grade of C or higher in the ensemble and a grade of P (for Pass) in the concert class. For more information about this policy, and to apply for the waiver, contact the music department.

#### **Senior Citizen Rate**

If space in a course is available, Idaho residents who are at least 60 years old may register for the course and pay \$5 per credit hour, a \$20 registration fee (per semester), and any special fees (such as for private music lessons or laboratory fees). To register at the senior citizen rate, first apply for admission, then request the form Senior Citizen's Waiver from the Payment and Disbursement Center, Administration Building, Room 211, Boise State University, 1910 University Drive, Boise, ID 83725. Fill it out according to the instructions. When you pay your registration charges, you will need to show the cashier your driver's license, birth certificate, or other proof of your age.

## **Refund Policy**

Boise State University has published deadlines for 100% refund or waiver of fees. These deadlines differ depending upon which session the course is in. Please refer to the grid published on the Registrar's home page and/or in the printed Boise State University Schedule of Classes. Failure to drop the course or cancel registration by the published 100% deadline results in assessment of full fees for the course(s).

All students who completely withdraw from Boise State will be assessed a \$25.00 administrative complete withdrawal fee.

**Fee Appeals:** Students who wish to appeal for a refund or waiver of the course fees they are assessed should contact Account Maintenance, Room 209, Administration Building, 208 426-2134 or utilize the appeal form located at http://finad. boisestate.edu/images/uvappeal.pdf.

**NOTE:** Boise State cannot extend the deadlines to take into account a late registration. In summary, you must completely withdraw from the university **and** apply for your refund no later than the published deadline.

This general refund policy applies to full-time and part-time students regularly enrolled at the time of the withdrawal. However, the policy may not necessarily govern refunds for short courses, special workshops, and Extended Studies classes. Because refund policies for such classes may vary, you should direct any request for a refund to the academic unit or organization offering the class.

In some circumstances, you may be expecting a full refund of tuition and fees, yet receive less than the amount you have paid to Boise State. If you owe money to the university, that money will be deducted from the refund before it is issued. Similarly, Boise State will take a deduction from the refund check if you used financial aid to pay all or part of room-andboard costs, tuition, or registration charges. In such cases, Boise State reimburses the government agency or other organization that furnished the financial aid. Any balance that remains is forwarded to you, usually three to four weeks after you withdraw from the university.

## **Student Health Insurance Program**

If you are a **full fee-paying student**, enrolled for 8 or more credit hours, you are covered under the University's Student Health Insurance Program. This premium is automatically included in the fee schedule on your bill. Coverage begins on the first day of classroom instruction. You are insured at home or school, while traveling and during all vacation periods 24 hours a day for the policy period. Coverage for the fall semester begins on the first day of class and ends on the first day of the spring semester. Spring semester benefits continue until the first day of the fall semester.

You may be exempt from participation in the Student Health Insurance Program if you have existing health insurance coverage. Since the Fall 2003 semester, the State Board of Education requires full time students to submit proof of insurance before an exemption can be granted. You must log in to BroncoWeb (http://www.boisestate.edu and select BroncoWeb) and submit the online health insurance waiver each semester after you have registered for 8 or more credits.

If you are a **part-time student**, enrolled in 7 or fewer credit hours, you are not eligible for the Student Health Insurance.

**Dependent coverage** is available to your dependents if you are a full time student. In order to purchase dependent coverage, you must also be insured under the Student Health Insurance Program. You may enroll your dependents by completing the enrollment form which is attached to the brochure, and paying the premium to the Student Health Insurance Representative in the Student Health Center. Dependent coverage is voluntary and billings will not be sent.

**NOTE:** All full-time students may obtain medical assistance or services at Student Health Services, 2103 University Drive, Boise, ID 83725. Student Health Service has **no connection** to the insurance program covering Boise State students.

## **Idaho Residency Requirements**

When you are first admitted to Boise State, the university classifies you as either a resident student or a nonresident student, then uses this classification to determine your tuition and fees. It is the student's responsibility to apply for residency status. This section briefly answers two of the most frequently asked questions about residency requirements. See Table 7 below to determine your residency classification. For further information, please contact the Residency Coordinator, Registrar's Office, Administration Building, Room 102, Telephone: 208 426-4249.

- **Q:** When I first enter the university, what determines my residency status?
- A: For the purpose of calculating tuition and fees, your status is determined by your responses to several questions on your application for admission. In general, students are considered residents of Idaho if their parents have resided in Idaho for 12 consecutive months before the first day of classroom instruction and have in fact established a bona fide domicile in this state primarily for purposes other than educational.



- **Q:** Can I appeal Boise State's decision to classify me as a nonresident student?
- A: Yes. To do so, obtain a Residency Information form from the Registrar's Office, Administration Building, Room 102. Complete the form and submit it with a letter to the Residency Appeals Committee, according to the instructions provided, by the 15th day of class during the semester in which you are enrolled. Turn all paperwork into the Residency Coordinator, Registrar's Office, Administration Building, Room 102.

#### **Questions About Tuition and Fees?**

If you have questions about tuition and fees, contact the Account Maintenance Center, Administration Building, Room 209, 208 426-2134.

## **Questions About Residency Status?**

If you have questions about residency status, contact the Registrar's Office, Administration Building, Room 102, 208 426-4249.

#### Table 7

#### **Residential/Nonresidential Classification Information**

#### Procedures to be Observed in Determining Residency for Tuition Purposes Boise State University

The legal residence of a student for fee purposes is determined at the time of initial application for admission to BSU and remains unchanged in the absence of satisfactory written evidence to the contrary. The burden of proof in requesting reclassification to resident status rests with the individual in providing clear and convincing evidence of residency for tuition purposes as defined by the law. Individuals applying to change a nonresident classification made at the point of application or are requesting consideration for reclassification based upon satisfying state law criteria must follow the procedure outlined below:

- Contact the Residency Coordinator in the Registrar's Office, Room 102, Administration Building.
- Complete the Residence Information Form and return it to the Residency Coordinator with supporting documentation. A form requesting reclassification to resident status may be filed after qualifying criteria have been satisfied but no later than 15 school days after the opening of the semester for which the change in status is requested.
- The Residency Coordinator will determine if the individual meets the criteria for residency and will notify the individual in writing of the decision
- 4. The applicant may appeal the decision in writing to the Residency Appeals Committee. To file an appeal the applicant must specify in writing why they believe they have met the criteria and on what basis they should be given residency. The appeal should be turned in to the Residency Coordinator. The applicant will be notified in writing of the decision of the Residency Appeals Committee.
- 5. If an applicant contests the determination of the Residency Appeals Committee that the applicant is not a qualified resident, the applicant may petition the State Board of Education for review. The petition must be submitted to the President of Boise State University in writing and must set forth the applicant's reasons for contesting the decision. The President will submit the petition to the Executive Director of the Office of the state Board of Education who will determine whether the Board or the Board's designated representatives will hear the appeal. If the Board decides to hear the appeal, it will set forth the scope of review and notify the applicant of the time, date, and place of the hearing. The decision of the Board is final and binding on all parties concerned. The student must agree to the release of information to the review body and must comply with deadlines established by the institution for requesting an appeal.

#### Qualifying Criteria for Establishing Idaho Residency for Educational Purposes

- Have one (1) or more parent or parents or court-appointed guardians
  who are domiciled in the state of Idaho. To qualify under this section, the
  parent, parents or guardian must have maintained a bona fide domicile in
  the state of Idaho for at least one (1) year prior to the opening day of the
  term for which the student matriculates.
- 2. Receive less than fifty percent (50%), or none, of your support from a parent, parents or legal guardians and have continuously resided in the state of Idaho for twelve (12) months preceding the opening day of the term during which you propose to attend BSU and have in fact established a bona fide domicile in this state primarily for purposes other than educational. The establishment of a new domicile in Idaho by a person formerly domiciled in another state has occurred if such person is physically present in Idaho primarily for purposes other than educational for 12 consecutive months and can show satisfactory proof that such person is without a present intention to return to such other state or to acquire a domicile at some other place outside of Idaho. The determination will be based on but not limited to consideration of the following factors:
  - a. Registration and payment of Idaho taxes or fees on a motor vehicle, mobile home, travel trailer, other item of personal property for which state registration and the payment of a state tax or fees is required.
  - Filing of Idaho state income tax returns.
  - Permanent full-time employment or the hourly equivalent thereof in the state of Idaho.
  - Registration to vote for state elected officials in Idaho at a general election.

- e. Purchase of a house or other real estate which is or will become your permanent residence.
- f. Obtain Idaho driver's license or state identification card.
- g. Establishment and duration of account records with state financial institutions.
- And other similar factors indicating intent to be domiciled in Idaho.
- 3. Graduate from an accredited secondary school in the state of Idaho and enter BSU the term immediately following such graduation regardless of the residency for the student's parent or guardian. The individual must be a citizen of the United States of America, have permanent resident status, or hold "refugee-parolee" or "conditional entrant" status with the United States Immigration and Naturalization Service to qualify under this criteria.
- 4. Be married to a person who is classified, or is eligible for classification, as a resident of the state of Idaho for the purposes of attending a college or university. Request for classification under this criteria will require that a copy of the marriage certificate be filed, and the qualifying spouse may be required to submit proof of residency in the form of an affidavit.
- Be a member of the armed forces of the United States, stationed in the state of Idaho on military orders. A certified copy of the military orders may be requested in support of this qualification for residency classification.
- 6. Have a parent or guardian who is a member of the armed forces and stationed in the state of Idaho on military orders, or has Idaho as their "home of record," and receive fifty percent (50%) or more of support from the parent or legal guardian. The student, while in continuous attendance, shall not lose that residency when the student's parent or guardian is transferred on military orders. A certified copy of the military orders may be requested in support of this qualification for residency classification.
- 7. Be separated, under honorable conditions, from the United States armed forces after at least two (2) years of service and at the time of separation designate the state of Idaho as your intended domicile or have Idaho as the home of record in service and enter a college or university in the state of Idaho within one (1) year of the date of separation. A certified copy of the DD-214 separation papers may be requested in support of this qualification for residency classification.
- 8. Have been domiciled in the state of Idaho, have met the qualifications for residency and have been away from the state for a period of less than one (1) calendar year and have not established legal residence elsewhere provided a twelve (12) month period of continuous residency had been established immediately prior to departure.
- 9. Be a member of any of the following Idaho Native American Indian tribes, regardless of current domicile. Members of the following Idaho Native American Indian tribes, whose traditional and customary tribal boundaries included portions of the state of Idaho, or whose Indian tribe was granted reserved lands within the state of Idaho: (1) Coeur d'Alene tribe; (2) Shoshone-Paiute tribes; (3) Nez Perce tribe; (4) Shoshone-Bannock tribes; (5) Kootenai tribe.

#### **Definitions:**

**Resident student:** Any student who meets the criteria specified in items 1 - 9 above.

**Nonresident student:** Any student who does not qualify as a "resident student" under the provisions of items 1-9 listed above and includes:

- A. A student attending BSU with the aid of financial assistance provided by another state or governmental unit or agency thereof, such nonresidency continuing for one (1) year after the completion of the semester for which such assistance is last provided.
- B. A person who is not a citizen of the United States of America, who does not have permanent resident status, or does not hold "refugee-parolee" or "conditional entrant" status with the United States Immigration and Naturalization Service.

**Domicile:** An individual's true, fixed and permanent home and place of habitation. It is the place where that individual intends to remain, and to which that individual expects to return when that individual leaves without intending to establish a new domicile elsewhere.

One (1) year: twelve (12) consecutive months immediately preceding the opening date of the term for which resident status is requested.

**Armed Forces:** the U.S. Army, Navy, Air Force, Marine Corps, and Coast Guard. Uniformed services such as the National Guard or other reserve force do not qualify for residency requirements.

Two (2) years of service: two (2) years of active duty service. Reserve duty status does not qualify for residency requirements.

## **Financial Aid for Graduate Students**

## **Graduate Assistantships**

Graduate students at Boise State may apply for a wide variety of financial aid, drawn from an equally wide variety of sources. You should investigate any financial aid that seems appropriate to your circumstances, beginning with financial aid available from your department or your graduate-degree program.

Most departments award teaching or research assistantships that include a stipend and a waiver of fees. In addition, non-resident tuition is waived for any non-resident student who receives an assistantship award. You may obtain an application for an assistantship on the Internet at http://www.boisestate.edu/gradcoll/0004.html, from the department in which you are applying, or from the Graduate College, MG-140.

Teaching and research assistants are expected to provide 15 to 20 hours of service per week to the university, while scholarship or fellowship recipients have no service requirements.

If you are awarded a Boise State assistantship, you are required to enroll for 9 or more credits in a graduate-degree program, maintain at least a 3.0 grade-point average, and make satisfactory progress toward your degree. If you are enrolled for 5-8 credits in a graduate degree program, you may be eligible for a partial assistantship. Hours of service required would be assigned on a prorated basis as determined by the department. In order to be eligible for reappointment, a graduate or research assistant must receive a satisfactory performance review each semester.

When you accept a graduate teaching assistantship, research assistantship, scholarship, or fellowship, you enter into an agreement with the Graduate College, one that both parties are expected to honor throughout the next year. If you accept an award before April 15, but change your mind about accepting, you may resign your appointment at any time through April 15. Your resignation must be in writing to the chair of the department. After April 15, your acceptance of the award commits you to that appointment.

**NOTE:** Students who receive an assistantship will be required to pay special course fees for any elective courses taken that are not included in their degree program.

**NOTE:** Students who withdraw from the university, or who are dismissed from their degree program, forfeit their appointment or award and may be required to repay some or all of the money received from the assistantship to the department.

## **Deadline for Departmental Aid**

You should apply for these awards when you apply for admission to the Graduate College—no later than March 1. Some departments require an application deadline the first week in January. If your application is received by the department after the required deadline, it may not be considered until the following year.

NOTE: Financial aid is available only to students who are admitted to Boise State University in a degree or certificate

program which has been approved for financial aid by the Department of Education. In addition, you must have an admissions status that meets financial aid eligibility requirements. For example, if you have applied to a graduate degree program but have Pending Department Review admission status, you are not eligible for federal financial aid until your status is changed to either Regular or Provisional.

The information contained in this publication reflects current procedures and rules affecting the delivery of financial aid. The University reserves the right to change, at any time, schedules, rules and regulations. Appropriate notice of such changes is given, whenever possible, before they become effective.

#### Federal, State, and Institutional Aid

Graduate students can apply for loans and work-study through the federal aid programs. Complete the following steps in order to apply for federal aid:

#### How to Apply for Financial Aid

- 1. Obtain a PIN from the U.S. Department of Education. If you applied for aid last year, your PIN should have been sent to you. If you do not have a PIN, or if you have forgotten your PIN, you may request that one be sent to you by going to the PIN web site: www.pin. ed.gov. A PIN will allow you to electronically sign your federal aid application.
- 2. Complete the Free Application for Federal Student Aid (FAFSA). You must submit the FAFSA if you are applying for federal loans or work-study. The FAFSA is available from the Financial Aid Office in January. Listed below are the options available for submitting the FAFSA.
  - FAFSA on the Web (www.fafsa.ed.gov): This is the preferred method of submitting the FAFSA, and may save you weeks in processing time over the paper application. Please note that unless you have a PIN, you are required to send a signature page within 14 days of transmitting your FAFSA on the Web.
  - Students who applied for financial aid in the prior year may find some of their information rolled over to the following year after logging onto www.fafsa.ed.gov. Use your PIN number to correct/update that information.
  - Paper FAFSA: The paper FAFSA is available for students who prefer to apply by mail.

Tips in completing the FAFSA:

- Boise State University Title IV Code is 001616.
- Boise State University Financial Aid address: 1910 University Drive, Boise, ID 83725-1315.
- Ensure that all information you provide on the application is entered correctly.
- Do not send tax documents or other materials with your application or signature page.
- After completing your FAFSA, if you provided an e-mail address, you will receive an e-mail with a link to your Student Aid Report (SAR). If you did not provide an

## University Services — Financial Aid for Graduate Students

e-mail address, you will receive a paper SAR or a paper SAR Acknowledgment Form. Review whatever you are sent and make any necessary corrections. Please note that marital status cannot be updated if it changes after filing the FAFSA.

- 3. Submit verification materials, if requested. Certain applicants are requested to provide documents to verify information reported on the FAFSA. If you are selected for verification, the Financial Aid Office will list those items on BroncoWeb as financial aid TO DO's. Examples of requested documents include:
  - Verification Form (provided to you by Boise State).
  - Tax forms. Submit a signed copy of your federal income tax return. Submit a signed copy of your spouse's federal income tax return if you are married and your spouse filed a separate return. If you do not have a copy of these forms, you may request a transcript of your tax return from the Internal Revenue Service (IRS) by completing Form 4506.
  - W-2 forms. Submit a copy of all W-2 forms corresponding to the requested tax returns. Duplicate copies of W-2 forms may be requested from your employer(s).

#### Be aware of the following deadlines.

March 15 — Deadline for graduate students to submit the FAFSA. Students who submit the FAFSA by this date are given priority status and are among the first to be considered for Perkins Loans and work-study.

June 1 - All documents and other information requested by the Financial Aid Office must be submitted by this date in order to retain priority status.

Students who miss these deadlines may still apply for federal aid. However, processing of applications may not be completed in time for aid to be disbursed prior to the fall fee payment deadline.

In considering applications for financial aid, the Financial Aid Office makes every effort to ensure that resources available through the university are distributed fairly. To determine need, the Financial Aid Office uses a formula mandated by the federal government.

#### **Eligibility Requirements**

The following is a summary of the most common criteria affecting student eligibility for financial aid.

- Complete the Free Application for Federal Student Aid (FAFSA) and receive an official Expected Family Contribution (EFC).
- Be admitted to Boise State University in a degree or certificate program which has been approved for financial aid by the Department of Education. In addition, you must have an admissions status that meets financial aid eligibility requirements. For example, if you have applied to a graduate degree program but have Pending Department Review admission status, you are not eligible for federal financial aid until your status is changed to either Regular or Provisional.

- Enroll for the minimum number of credit hours required by the aid program. For example, to receive a Direct Loan, a graduate student must be enrolled in at least 5 credit hours/ semester that apply directly towards a graduate degree, or at least 6 undergraduate credits/semester if the credits are required as prerequisites (for no longer than a consecutive 12 month period). In the second case, loan amounts will be at the undergraduate level.
- Maintain Satisfactory Academic Progress standards (see detail on following pages).
- Be a U.S. Citizen, permanent resident, or eligible noncitizen. Federal financial aid is not available to international students attending Boise State on a student visa. (International students who encounter financial difficulties are encouraged to seek assistance from the International Programs Office.)
- If you are male, you must be registered with Selective Service.
- You must not owe a repayment of any federal aid to Boise State, to any other school previously attended, or to the U.S. Department of Education.
- You must not be in default on a federal student loan.
- Submit all materials requested by the Financial Aid Office as soon as possible, but no later than the specified deadlines.
- You must meet all other eligibility requirements. Please contact the Financial Aid Office if you have any questions.

The following section describes a sampling of financial aid programs for which Boise State students may be eligible. Since different types of aid carry different obligations, we recommend that you discuss your options with a customer service representative in the Financial Aid Office.

#### **Federal Perkins Loans**

Perkins Loans are long-term, low-interest loans awarded to both undergraduate and graduate students who show exceptional financial need. You must repay these loans according to a schedule established by federal law. Typically, you begin repaying your loan nine months after graduation or after your enrollment drops below five credits. Table 8, below. shows estimated repayment schedules for Perkins Loans of various amounts.

Table 8 Federal Perkins Loans Estimated Repayment Schedule (based on 5% interest rate)				
Loan Amount	Number of Payments	Monthly Payment	Total Interest	Total Amount
\$ 4,000.00	120	\$ 42.43	\$1,091.01	\$ 5,091.01
\$ 5,000.00	120	\$ 53.03	\$1,364.03	\$ 6,364.03
\$15,000.00	120	\$159.10	\$4,091.73	\$19,091.73

**NOTE:** Your actual payment obligations may differ from these examples, which are presented here only to illustrate a typical repayment plan.

#### William D. Ford Federal Direct Loans

Direct Loans are long-term loans available to undergraduate and graduate students. They usually carry a moderate variable rate of interest capped at 8.25 percent. To apply, complete the FAFSA, available at www.fafsa.ed.gov.

Boise State processes Direct Loan applications throughout the year. If you are awarded a Direct Loan, you will need to sign a master promissory note (MPN) if you do not already have an MPN on file. If you have not previously received a Direct Loan, you must complete a debt management session (http://financialaid.boisestate.edu/loancounseling.htm) before you can receive the funds. Also, the Direct Loan commits you to participating in an exit interview when you graduate or withdraw from the university.

There are two types of Direct Loans: subsidized and unsubsidized. Borrowers of unsubsidized loans are responsible for the interest while attending school. The Financial Aid Office will determine which loan you will receive, based on your financial need. You are expected to begin repaying the loan six months after graduation or six months after you have dropped below five credit hours. There are terms and conditions under which students receiving this assistance may obtain deferral of the repayment of the principal and interest of the loan for service under the Peace Corps Act (22 U.S.C.2501); service under the Domestic Volunteer Service Act of 1973 (42 U.S.C.4951); or comparable service as a volunteer for a tax-exempt organization of demonstrated effectiveness in the field of community service. Please see the exit counseling information link on the following web site for more information: http://financialaid. boisestate.edu/loancounseling.htm.

Table 9, below, shows estimated repayment schedules for typical Direct Loans. Your actual debt and repayment plan may not match any of these examples; they are presented here merely to show typical loan amounts and repayment plans.

Table 9 Federal Direct Loan Estimated Repayment Schedule (based on 8.25% interest rate)				
Loan Amount	Number of Payments	Monthly Payment	Total Interest	Total Repaid
\$ 2,625.00	66	\$50.00	\$617.00	\$3.242.00
\$ 5,000.00	120	\$62.00	\$2,359.00	\$7,359.00
\$10,000.00	120	\$123.00	\$4,717.00	\$14,717.00
\$15,000.00	120	\$184.00	\$7,076.00	\$22,076.00
\$25,000.00	120	\$307.00	\$11,794.00	\$36,794.00

#### **Federal PLUS Loans**

Beginning July 1, 2006, Federal PLUS Loans became available to graduate students. These loans are available to graduate students who still have an unmet cost of attendance after borrowing \$18,500 through the Federal Direct (Stafford) Loan program plus any other sources of aid. Other differences between the Federal PLUS Loan for Graduate Students and other federal loan programs include:

- Applicants for the Federal PLUS Loan must not have an adverse credit history, as reported by a national credit reporting agency. Applicants with an adverse credit history may still qualify with an eligible co-signer.
- Repayment begins within 60 days of the last disbursement of the award year. There is no six-month grace period.
   Borrowers may request a deferment while enrolled at least half-time.
- The interest rate is fixed at 7.9 percent.
- Annual loan limits are determined by subtracting all other sources of aid from the estimated cost of attendance figure.
- A separate PLUS Master Promissory Note must be completed and signed.

In addition to the requirements reported above, a student must meet all other eligibility requirements. For more information on the Federal PLUS Loan for Graduate Students, please visit http://financialaid.boisestate.edu/.

#### Federal Work-Study Program (FWS)

This program gives undergraduate and graduate students the opportunity to earn money to pay for a portion of their educational expenses. FWS aid is awarded to selected undergraduate and graduate students who show financial need. Students receive payment based on hours worked. Payment is typically through direct deposit by the payroll office.

#### Atwell J. Perry College Work-Study Program

This work-study program operates much like the Federal Work-Study Program, giving undergraduate and graduate students the opportunity to earn money to pay for a portion of their educational expenses. Only Idaho residents are eligible.

#### Student Employment

All student employment opportunities are listed on the Internet on BroncoJobs at http://career.boisestate.edu. Passwords are available from the Career Center located in the Alumni Center at 1173 University Drive (corner of Grant and University Drive), by calling 426-1747, or by e-mailing career@boisestate.edu

#### The GEM Nonresident Tuition Waiver

The GEM Scholarship is a nonresident tuition waiver for new students who are not residents of the state of Idaho, who are enrolled full-time, and are pursuing a major designated as "high-tech" by the Idaho State Board of Education.

The eligible majors are: Biology, Civil Engineering, Computer Engineering, Computer Science, Earth Science Education, Electrical Engineering, Exercise and Sport Studies, Geology, Geophysics, Health Sciences, Management Information Systems, Materials Science and Engineering, Mathematics, Mathematics Education, Mechanical Engineering, Raptor Biology, and Technical Communications.

Students do not need to submit an application as they are automatically considered for the waiver as part of the evaluation process during admission.

The scholarship is renewable for an additional year if you complete a minimum of 16 graduate credits in the first two semesters and maintain a 3.00 GPA.

#### **Scholarships**

Information about scholarships for graduate students can be found on the web at http://financialaid.boisestate.edu/ scholarships/ or www.boisestate.edu/gradcoll/grsp notice.pdf.

#### **Short-Term Loans**

Emergency Short Term Loans are available to students with a minimum grade-point average of 2.00. This loan is available to students who experience a significant financial emergency during the academic year. The maximum amount available is \$250 per semester. Only one loan is given per semester. The loan requires a \$25 processing fee, and must be repaid within 90 days. Applications are available in the Account Maintenance Office, Room 209, Administration Building.

#### Financial Aid for the Summer Session

The university has limited financial aid available for the summer session. If you need financial aid for the summer session, review the information on the Financial Aid website at http://financialaid.boisestate.edu. Please note, also, that your FAFSA for the preceding year must be submitted by April 1.

#### Financial Aid for International Students

As part of the admissions process, international students must demonstrate that they have sufficient funding to attend Boise State University for one academic year. International students are eligible for all scholarships and tuition waivers outlined in this Financial Aid section, except for financial aid provided by the U.S. government or State of Idaho. As international students apply for graduate admission to Boise State University, the application packet they receive from International Admissions contains a brochure explaining the various financial resources that are available.

#### **Disbursing Funds**

In March, the Financial Aid Office begins notifying scholarship recipients. Need-based aid, such as loans and work-study money, is awarded as it is processed. During fall semester, if your registration fees are paid, your remaining funds will be electronically deposited into your bank account or a check will be mailed to you about one week before the start of classes. During spring semester, you can pay your spring registration fees with previously awarded aid. The balance of your aid will be mailed to you or electronically deposited about one week before the start of classes, if your registration fees are paid.

Note: All financial aid funds are distributed from the Account Maintenance Office, Administration Building, Room 209. Please direct questions about your balance funds to that office.

#### **Change in Enrollment Status**

Any change in your enrollment status may affect your ability to maintain satisfactory academic progress (see "Satisfactory Academic Progress" section).

Partial withdrawals. Adjustments may be made to your financial aid eligibility if enrollment changes after disbursement of aid has occurred. Please be aware that withdrawals will negatively impact your satisfactory academic progress performance.

Complete withdrawals. In general, students receive no refund of tuition and fees if they withdraw from the university after the tenth day of classroom instruction. Federal financial aid regulations state that eligibility for aid be recalculated whenever a student withdraws from Boise State University, either officially or unofficially. The recalculation determines the amount of aid a student has "earned," by prorating according to the percent of the term completed before withdrawing. For example, a student who withdraws after completing only 30 percent of the term will have "earned" only 30 percent of aid eligibility. A student who completes more than 60 percent of the term is considered to have "earned" 100 percent of his/her aid eligibility. Examples of these calculations can be found on the web at: http://financialaid. boisestate.edu/cwd.htm.

Once a student officially withdraws, the Financial Aid Office will determine if/what is owed and will provide notification of adjustments to financial aid funding. If you have questions about what will happen when you withdraw, review the information on the web at: http://financialaid.boisestate. edu/cwd.htm. After reviewing that information, if you still have questions, contact the Financial Aid Office.

Unofficial withdrawals. Students who unofficially withdraw from the university, or receive a failing grade for all courses within a term, may be asked to verify attendance. Students who cannot demonstrate attendance will be required to repay all financial aid received for that term.

## **Satisfactory Academic Progress**

Students applying for or receiving financial aid must make satisfactory academic progress at the university. Your academic progress is considered satisfactory if you:

- enroll for the purpose of obtaining a degree or certificate (you must be admitted by the Graduate College as well as your specific program).
- maintain a minimum of a 3.0 cumulative Boise State GPA.
- pass 75% of all credit hours attempted while enrolled as a graduate student at Boise State University.
- complete your degree requirements within the maximum time allowed.

In addition to the above requirements, you must satisfactorily complete at least 1 credit any term you receive federal or state financial aid. Review the complete satisfactory progress policy at http://financialaid.boisestate.edu/sappolicy.pdf.

#### Satisfactory Academic Progress Review

The university reviews most financial aid files annually (at the end of spring term). Students who are in programs of one year or less are reviewed more often. In addition, the term completion portion is reviewed at the end of summer and fall. If you are not making satisfactory academic progress or do not meet the term completion requirements (as defined by this policy on the web and briefly outlined above), you will be ineligible for financial aid until you are once again making satisfactory academic progress.

#### **Appeals**

If the university declares you ineligible to receive financial aid because of your failure to make satisfactory academic progress or meet the term completion policy, you have the right to file a written appeal for temporary exemption from this policy. In filing an appeal, you must document any extenuating circumstances that prevented you from making satisfactory academic progress. If your appeal is granted, the exemption from this policy will remain in effect for only a short time (usually no longer than one semester). Appeal forms are available on the web at http://financialaid.boisestate.edu/forms.htm.

## **Questions About Assistantships?**

If you have questions about assistantships, contact the Graduate College, Math/Geosciences Building, Room 140, Telephone 208 426-3647

#### **Questions About Financial Aid?**

If you have questions about financial aid, contact the Financial Aid Office, Administration Building, Room 113, 208 426-1664 or 800 824-7017 or by e-mail: faquest@boisestate.edu.



## **Student Housing**

Student housing is available through the Student Housing Office, which administers housing in seven residence halls located on campus and five apartment complexes located within walking distance from campus. This chapter describes the student housing available at Boise State University, provides cost information for the residence halls and university apartments, and describes the assistance Boise State University provides to students seeking off-campus housing.

**NOTE:** If you wish to live in university housing while attending Boise State University, you must submit two applications: one housing and another for admission to the University. If you apply for housing, it does not constitute acceptance or approval of your application for admission to the University. Likewise, being accepted for admission to the University does not constitute that your application for housing has been accepted and approved.

## **Fair-Housing Policy**

Boise State University is an equal-opportunity institution and offers its living accommodations and makes housing assignments without regard to race, color, national origin, or handicap (as provided for in Title VI and Title IX and Sections 503 and 504 of the Rehabilitation Act of 1973).

## **University Residence Halls**

Altogether, the seven on-campus residence halls accommodate approximately 1,200 students. All residence halls have computer Internet access through direct Ethernet connection and are equipped with cable television jacks.

- **Chaffee Hall** is divided into three separate 3-story units; enclosed corridors connect the units to a common area containing a lounge, office, and recreational facility. Each floor is air-conditioned, has a small informal lounge, study room, bathrooms, and laundry facilities. Typically, two students occupy each double room. Single rooms are available. The D wing of Chaffee Hall has double rooms with connecting semi-private bathrooms.
- John B. Barnes Towers consists of six residential floors: the first five floors are coed; the top floor is for women only. The air-conditioned residence hall is equipped with study lounges, laundry facilities, and a computer lab. Four students occupy each suite with semi-private bathrooms in each room.
- Morrison Hall and Driscoll Hall are both coed and nearly identical in design. Each hall contains single and double rooms, arranged into suites housing 7 to 12 students. Preference will be given to students participating in the Honors College for Driscoll Hall.

- Keiser Hall and Taylor Hall are new, suite-style residence halls that accommodate students in mostly single rooms, arranged in suites of four to eight people that include living rooms and semi-private bathrooms. Keiser and Taylor Halls both have residential colleges, which is an integrated living and learning community. Students will live and interact with other students of same academic interests and the Faculty in Residence while pursuing their academic success.
- University Suites specifically designed for single students, this complex features four bedroom furnished suites, each of which include a living room, shared bathrooms, modern kitchen, dishwasher and washer/ dryer. High-speed Internet, cable TV, phone line, and utilities are provided. Meal plans are optional for residents who must be at least age 20 or have upper-division status.

If you wish to stay in a residence hall during semester break, the cost will be in addition to the charges covered by your residence hall and dining agreement. Meal service is suspended during these times.

#### **Cost Information**

When the Student Housing office accepts your application for housing in one of the residence halls, your contract covers room and board for the full academic year, as well as the costs of cable TV service. Internet, Dining Plan and state sales tax. Housing prices also include a nonrefundable programming fee of \$25, 2006-2007 prices for housing in the residence halls, along with the meal options are available by checking http://housing.boisestate.edu or calling 208 447-1001.

**NOTE:** Students occasionally ask if they can pay a reduced rate for housing if they omit the meal option from the housing contract. However, the economics of on-campus housing require Boise State University to base its charges on both room **and** board (with the exception of University Square Suites).

## **Rules and Regulations**

Rules and regulations governing student housing are defined generally in this chapter and more specifically in the Boise State University Student Handbook, the Residence Hall & Dining Agreement, and the Student Housing Handbook.

## **Housing Preferences**

If your application for residence hall housing is accepted, Boise State University will assign you to a room in one of the seven residence halls. In doing so, Boise State University will make every effort to accommodate the preferences you have indicated on the application. However, priority is given to continuing residence hall students. Room assignments and accommodation of preferences are based on

the date your Residence Hall & Dining Agreement is received (along with the \$250.00 application fee/security deposit). If you have a roommate preference, you should arrange for your applications to arrive at about the same time, so you will be about equal in priority. Finally, please note that the preferences you indicate on the Residence Hall & Dining Agreement are not themselves contractually binding, though they will be honored whenever possible.

#### How to Apply for Residence Hall Housing

The most efficient application process is to apply online at http://housing.boisestate.edu. You may also apply by requesting an application from the New Student Information Center, Boise State University, 1910 University Drive, Boise, ID 83725, or by telephone, 208 426-1820. Complete the Residence Hall & Dining Agreement according to the instructions and return it to the Payment and Disbursement Center, Administration Building, Room 211 with the \$250.00 application fee/security deposit.

## **University Apartments**

Students may apply to rent an apartment in one of five Boise State University complexes: University Heights, University Manor, University Park, University Village and University Square. Approximately 300 apartments are available, all within walking distance of campus. A common community center and computer lab is open to all apartment residents.

- University Heights and University Manor consist of one-bedroom and two-bedroom apartments. Each have wall-unit air conditioning, stove and refrigerator. Coinoperated laundry facilities are located on-site. Tenants are responsible for Idaho Power. Water, sewer, trash, and highspeed Internet are provided.
- University Park consists of two-bedroom and threebedroom apartments. Each have wall-unit air conditioning/ heating, stove and refrigerator. Coin-operated laundry facilities are located on-site. Tenants are responsible for Idaho Power. Water, sewer, trash, and wireless Internet are provided.
- University Village consists of two-bedroom apartments.
   Each have forced air-conditioning, stove, refrigerator and dishwasher. Coin-operated laundry facilities and a computer lab are located on-site. Tenants are responsible for Idaho Power and Intermountain Gas. Water, sewer, high-speed Internet, and trash are provided.
- University Square is an apartment community that consists of two-bedroom apartments. The apartments are equipped with forced air-conditioning, stove, refrigerator, dishwasher, and stackable washer and dryer. Tenants are responsible for Idaho Power and Intermountain Gas. Water, sewer, trash and high-speed Internet are provided.

#### **Eligibility**

The Boise State University apartments are reserved for undergraduate students taking 8 credits or more and graduate students taking 6 credits or more. Single students must have upper-division status, or at least age 20, or head of household.

#### **Cost Information**

2006-2007 monthly rental rates for units in the apartment complexes operated by Boise State University are available at http://housing.boisestate.edu or by calling the Student Housing Office at 208 447-1001.

## **Applying to Rent an Apartment**

The most efficient application process is to apply online at http://housing.boisestate.edu, You may also apply by requesting an application from the New Student Information Center, 1910 University Drive, Boise, ID 83725, 208 426-1820, or from the Office of Student Housing, Chaffee Hall, 1424 Campus Lane, Boise, ID 83706, 208 447-1001. After completing the application, return it to the Payment and Disbursement Center, Administration Building, Room 211, along with a check or money order for \$250 (processing fee/security deposit). The university will conduct a credit and reference review. Nine or twelve month leases are required.

## **Residential Colleges**

Residential Colleges are on-campus communities of students who share similar interests or educational goals living in a single residence hall or apartment complex. Faculty coordinate social, educational, cultural and other programming that is related to the theme of the Residential College. There are seven Residential Colleges to choose from: Honors, College of Business and Economics, Health Professions, Music, Renaissance, Engineering, and Civic Leadership.

There are no additional costs associated with living in a Residential College and a lot of extra benefits. Spaces are limited, so apply as soon as you are admitted to Boise State.

Check out the details online at housing.boisestate.edu/rc/reshome.html.

## **Questions About Student Housing?**

If you have questions about student housing, contact the Student Housing Office, Chaffee Hall, 208 447-1001 or online at http://housing.boisestate.edu.

## **Directory of Student Services**

#### Academic

The following services are available to students seeking assistance with academic matters, from improving their writing, reading, and study skills to planning for a career.

Career Center The Career Center offers employment and job-search assistance (including instruction in writing resumes and cover letters and interview training), career counseling, and coordinates the university's internship program. The Career Center also hosts annual events including the Career/ Job Fair, Graduate and Professional School Day, and the On-Campus Student Job Fair.

Through BroncoJobs (the university's web-based, job-referral system), students and alumni can schedule on-campus interviews with employers and search for career employment opportunities, internships, and student employment opportunities.

The Career Center is located in the Alumni Center at 1173 University Drive. For more information, please contact us at 208 426-1747 or career.boisestate.edu

**Test Preparation** Assisting students to prepare for graduate school is the focus of short courses on the Graduate Records Exam (GRE) and the Graduate Management Admissions Test (GMAT) offered by Boise State University Extended Studies, 208 426-3492.

**Writing Center** The Writing Center is a free service open to all students at Boise State, a place where you can find support for your writing efforts in any subject, at any stage of your writing process: brainstorming, revising, editing. To schedule a consultation, stop by Liberal Arts, Room 200, or call 426-1298. You may also make an appointment online: www.boisestate. edu/wcenter.

Our normal hours:

- Monday through Thursday, 9:00 a.m. to 6:00 p.m.
- Friday, 9:00 a.m. to 4:00 p.m.
- For evening and weekend hours, please call.

To make the best use of the Writing Center, bring the piece of writing that you are working on and a copy of the assignment (if possible). If you cannot come in to the Center, we do offer e-mail consultations for writers. Visit our web page for more information on how to send us your paper.

The Boise State Writing Center-Make Us Central to Your Writing!

## Health, Wellness and Counseling Services

ALL Boise State University students are eligible to utilize the Health, Wellness and Counseling Services, regardless of their health insurance coverage status.

**Counseling Services** The Counseling Services primary purpose is to help students deal more effectively with concerns that influence their pursuit of personal and academic goals. The Counseling Services is staffed with psychologists, counselors, para-professionals, and graduate counseling students. Services range from individual counseling and crisis intervention to workshops and classes aimed at enhancing the overall learning environment at Boise State University. In particular, the Counseling Services assists students in resolving such matters as interpersonal conflicts, test anxiety, stress-related problems, depression, couple's concerns, and social and emotional problems. Counseling services are available for all students at a minimal per visit cost (no charge for initial assessment). To make an appointment, call 208 426-1601 or 426-1661 between 8:00 a.m. and 5:00 p.m., Monday through Friday, or stop by the Counseling Services (first floor of Taylor Hall).

Health/Medical Services All students may receive outpatient medical care at the Health and Wellness Center, located at 2103 University Drive, 208 426-1459. The Health Center is equipped to address most of the student's outpatient health care needs, and makes referrals to community providers for more specialized tests and procedures. Primary clinical care services are student-focused, accessible and affordable. Emphasis is placed upon early screening and prevention, and empowering students with self care knowledge and skills. Costs are covered through a combination of student fees and fee-for-service charges for office visits, laboratory tests, medications, and specialized procedures. Students are financially responsible for any non-covered charges from their health insurance plan and for services received outside of the Health Center. Located directly across University Drive from the Public Affairs/Arts West Building, the clinic is open from 8:00 a.m. to 5:00 p.m., Monday and Wednesday through Friday, and 9:00 a.m. to 5:00 p.m. on Tuesday. Spring semester students not enrolled in summer school are eligible for summer services at a minimal cost.

Student Health Insurance Program (SHIP) The Health, Wellness, and Counseling Services also coordinates the university-sponsored SHIP program. SHIP provides supplemental health care coverage for students, seamlessly integrating campus primary care services with community specialty care, emergency services, and hospitalization. SHIP also educates students on how to be savvy consumers of health care, focusing on how to effectively access and utilize all health-related services and insurance/financing options.

- Insurance Coverage All full-fee-paying students (those enrolled for 8 or more credit hours) and all international students are automatically enrolled in SHIP, with the premium charge added to their tuition and fees billing. Students are insured at home or school, while traveling, and during all vacation periods 24 hours a day for the policy period. Coverage for the fall semester begins on August 15th and ends on January 14th. Spring semester benefits continue through August 14th. Student health insurance benefits are available to spouses and dependents.
- Waiver Policy Students who provide proof of continuous enrollment in an alternative U.S.-based health insurance plan with comparable benefits are able to waive out of their SHIP coverage each semester. Waivers must be filed for both the fall and spring semesters by their respective deadlines. Please go to: http://www.boisestate.edu/healthservices/insurance/waiver.asp to review the comparability requirements. If your alternative health insurance plan meets these comparability requirements, please log on to broncoweb.boisestate.edu to submit your SHIP waiver request (MUST be filed online). Log in to your BroncoWeb account, proceed to Student Finances then proceed to Health Insurance Waiver.

For questions about enrollment or waivers please e-mail Pat Branson, SHIP Manager (pbranson@boisestate.edu), or call 208 426-2158.

Wellness/Health Promotion Services Health promotion focuses on primary prevention, implementing proven population-based risk reduction strategies for a diverse student population. Programming focuses on the overall education of students in the areas of lifestyle and behavior change that promote physical, psychological, spiritual, and social health. Resources are available to all students on-line and in the Health and Wellness Center and the Recreation Center on campus.

#### Other Student Services

Listed below are a number of services and programs provided to students, staff, and faculty, including services offered by the Student Services Office, the Veterans Services Office, and the Women's Center.

**Children's Center** The University Children's Center provides care for children of students enrolled for six or more credits. Operating hours are 7:00 a.m. — 5:30 p.m., five days a week during fall and spring semesters and ten weeks of summer session. Care is provided for children six weeks — five years of age. It is located at the corner of Beacon and Oakland Streets. The Center is licensed through the City of Boise and accredited through the National Academy of Early Childhood Programs. Financial assistance is available. For more information and rates telephone 208 426-4404.

**Cultural Center** Located on the second floor of the Student Union Building, 208 426-5950, the Cultural Center is a place where students can meet in a relaxed, friendly atmosphere. The Cultural Center promotes cultural diversity and appreciation through campus-wide cultural awareness

programs and through the support of Boise State University's ethnic organizations' festivals and events. The Cultural Center also provides a forum for workshops aimed at helping students learn the skills they need for a successful experience at Boise State University.

**Disabilities Services Office** is located in the Administration Building, Room 114, 208 426-1583. It is responsible for providing support services that enable all students with disabilities to participate in Boise State University's educational programs and activities as well as other disability related information. Disability Services provides students, faculty, and staff with information about specific disabilities. Among the services provided are:

- information and orientation to the university
- registration assistance, interpreter and note taking services
- · classroom and educational accommodations

In addition, a limited amount of equipment is available for temporary use by students with disabilities, including a TTY, modified computer terminals, talking spell checkers, and FM loop hearing systems. Other equipment is available at the Albertsons Library, including a Braille typewriter, Braille dictionary, a Talking Book player, and various reading accessories. For further information, please visit: www2.boisestate.edu/disabilityservices.

International Students The International Programs Office, located at 1136 Euclid Avenue, 208 426-3652 advises all international students, assisting with orientation, immigration regulations, visa issues, and cultural adjustment. Upon arrival in Boise, new international students must report to the International Programs Office and attend the international student orientation. This office serves as a central source of information for all international students.

**Veterans Services** The Veterans Services Office, located in the Administration Building, Room 111, 208 426-3744, provides counseling assistance to all of Idaho's armed forces veterans, National Guard members and reservists, as well as dependents who qualify. Peer counselors assist student veterans and dependents with Veterans Administration educational benefits, individual educational goals, and admission requirements. Tutorial and work-study programs for veterans and dependents are also coordinated through the Veterans Services Office.

Women's Center The Women's Center empowers students to achieve their goals and promotes social change by providing educational outreach, support services, and a safe place. Services include a mentoring program for "non-traditional" women students, support groups, educational workshops, academic internships, a resource lending library, supportive referrals, a single parents club, publication of a monthly newsletter, and sexual assault crisis response. The center sponsors educational programs such as Eve Ensler's play, The Vagina Monologues, Women's History month activities, and violence prevention initiatives. For a full list of programs and services visit the website at http://womenscenter.boisestate. edu or stop by the center, located at the corner of Lincoln and University Drive, 208 426-4259.

## **Division of Extended Studies**

The Division of Extended Studies is committed to responding to diverse student populations as they discover and fulfill their potential in today's rapidly changing world. Our programs expand the range of educational opportunities offered by the seven academic colleges - on campus, at area and international sites, through the use of current technologies and in convenient time frames. Programs administered by Extended Studies include off-campus sites, summer programs, Weekend University, courses delivered at a distance through the use of technology, specialized certificate programs, international programs, and university-wide noncredit programming to serve the needs of area business, industry, and government.

#### **Summer Programs**

Academic programs, courses, and services are offered during the summer, including graduate, undergraduate, and noncredit courses in 3-week, 5-week, 8-week sessions, and a 10-week session. A variety of workshops is also offered each summer. The Boise State University Summer Schedule of Classes is available to students each spring. For more information, call 208 426-1709.

#### **Weekend University**

A large selection of academic classes is offered on campus on Friday evenings, in two time blocks on Saturday and on Sunday afternoons, to allow students more flexibility in scheduling. Courses are taught by Boise State University faculty and Boise State University adjunct faculty. For more information, call 208 426-1709.

#### **Other Campus Centers**

The Division of Extended Studies offers a wide range of academic courses at locations off the main campus. Advising, registration, book sales, and library services are available at most off-campus sites, and many locations serve as receiving sites for Knowledge Network, a series of interactive, televised classes broadcast from the Boise campus. The off-campus locations are:

Boise State University Canyon County Campus 2407 Caldwell Boulevard, Nampa ID 83651 208 426-4700

Boise State West 16660 Can-Ada Road, Nampa, ID 83687 208 526-3100

Gowen Field

Harvard Street, Building #521, Gowen Field, Boise, ID 208 422-3758 or 208 426-3293

Mountain Home Air Force Base 665 Falcon, Mountain Home Air Force Base, ID 83648 208 828-6746 or 208 426-3293

Twin Falls Taylor Administration Building College of Southern Idaho Campus 208 736-2161

#### Distance Education Classes

Boise State University offers classes and programs through technologically-mediated distance education methods such as: Knowledge Network, interactive and cable television, telecourses, videoconferencing, and the Internet.

Courses Offered Via the Internet Instruction using computers, the Internet, and/or multimedia allows students throughout Idaho and the United States to participate in Boise State courses. For more information, call 208 426-1709.

Two full master's degrees and three certificate programs are offered online as described below.

- Master of Science in Instructional & Performance Technology (Online Option): The Department of Instructional & Performance Technology has been in the forefront of technology-delivered education by offering its internationally recognized Master of Science degree online since 1989. This degree is intended to enhance careers in the areas of instructional design, training, training management, human resources, performance improvement, e-learning, and distance education. In addition to accessibility, quality instruction, and state-ofthe-art curriculum, a major benefit of the program is the wealth of expertise of its geographically diverse faculty and students. For more information, call 208 424-5135 or 208 426-1312 or access the web site at http://coen.boisestate.edu/dep/ipt.htm.
- Master of Science in Educational Technology: Boise State University's College of Education leads the universities in the state in the area of training in technology integration for K-12 teachers. Teachers who want to learn how to integrate technology into the teaching/learning process can take these classes over the Internet. These Internet-based classes also assist teachers as they prepare for the state technology assessment and can help them teach this information to others. In addition to the master's degree, teachers can take three 12-credit sequences over the Internet which, when completed, provide them with graduate certificates recognizing their advanced technology skills. For more information call 208 426-1966 or access the Web site at http://edtech.boisestate.edu/online.

Knowledge Network and Cable Television Using oneway video and two-way audio, Boise State faculty broadcast live, interactive classes to such receiving locations as the Boise State Campus, Canyon County Campus, Mountain Home AFB, and Gowen Field Campus. At these locations, students view the broadcast on monitors and talk with the main-campus class through a phone line. In addition, cable television subscribers can access these courses in their own homes. For more information, call 208 426-1709.

Telecourses (Idaho Public Television) Each semester, Boise State students have the opportunity to earn university credits at home through a mix of televised lectures and textbook readings. These courses require some on-campus attendance. For more information, call 208 426-1709.

#### **International Programs**

**Intensive English** Boise State's Intensive English Program offers 20 hours of classroom instruction per week plus field experiences. The program is organized into 8-week and 16-week sessions during the fall and spring semesters and two 4-week sessions during the summer. Students may enroll until language proficiency goals are achieved. Language skills are developed through a thematic approach using discussions, readings, writing, and communicative grammar. Program components include skill development in reading, writing, listening, and speaking; literacy strategies for academic success; TOEFL preparation; and individualized tutoring. Students are engaged in critical thinking - analyzing, synthesizing, and evaluating cultural ideas and values while improving English language skills through classroom practice and field experiences. For more information, call the International Programs Office at 208 426-3652 or check the web site at http://www.boisestate.edu/international/iep

**International Students** The International Programs Office, located at 1136 Euclid Avenue, recruits and advises all international students, assisting with orientation, immigration regulations, visa issues, and cultural adjustment. Upon arrival in Boise, new international students must report to the International Programs Office and attend the international student orientation. This office serves as a central source of information for all international students. For more information please call 208 426-3652.

**Study Abroad** The International Programs Office provides students with the opportunity to participate in academic programs at universities throughout the world. There are summer, semester, and academic year options for which students can receive credit at Boise State University with predeparture planning and course approval. The opportunities are affordable (with both federal financial aid and scholarships available), students continue to earn credit toward their degrees, and there are sites in both English-speaking countries and those where students can enhance their foreign language skills.

Graduating seniors and graduate students are encouraged to apply for the Fulbright Student Program. The Fulbright program provides funding for students to attend overseas universities and independent research projects abroad. Contact the International Programs Office for details.

Graduate students significantly benefit from an international experience: gaining the ability to view their academic field and research interests from a variety of perspectives, potentially seeing and experiencing what they are studying at a personal level that is not possible in Boise, enhancing their cross-cultural communication skills, increasing their self-awareness and understanding of American culture, and developing new research or professional interests that may originate while learning about other cultures. Additionally, graduates with international experience typically have a distinct advantage in the job market.

For more information about the various study abroad opportunities available, please contact the International Programs Office at 208 426-3652.

#### Professional Education Program for Public School Teachers and School District Employees

Working closely with local school districts, the Idaho State Department of Education, campus Academic Departments and the Boise State College of Education, the Professional Education program enables teachers, para-professionals, and professional employees of school districts to earn credit required for certification/re-certification and salary increases. The program offers courses for both academic credit and noncredit. For more information, call 208 426-1709.

#### **Graduate Preparation Courses**

Assisting students to prepare for graduate admission exams is the focus of short courses on the Graduate Record Exam (GRE) and the Graduate Management Admissions Test (GMAT) offered by the Division of Extended Studies, 208 426-3492.

#### **Corporate Relations Program**

Established in response to the needs of local corporations, the Corporate Relations Program provides a variety of services for local corporations, including educational programming, on-site registration, and on-site courses. For more information, call 208 426-3369.

#### Continuing Education Units (CEUs)

A Continuing Education Unit (CEU) is a nationally standardized unit documenting participation in noncredit programs, courses, or workshops. The Division of Extended Studies approves and transcribes CEUs, which can be provided to employers as verification that you have completed a course in which CEUs were granted. CEUs cannot be converted to academic credit. For more information, call 208 426-3861.

#### Renaissance Institute

This program, designed for learners over 50, provides a number of lectures and short courses each academic year. Membership in the Institute provides you with access to special classes designed to expand intellectual horizons and enrich your life. For more information, call 208 426-1709.

#### **Center for Professional Development**

The Center serves the professional development needs of the Treasure Valley by providing, with the academic colleges at Boise State, high quality work-related education for professionals and managers in public and private sector enterprises. For more information, call 208 426-3861.

# College of Arts and Sciences

**Dean: Martin Schimpf** Associate Dean: Helen Lojek Education Building, Room 601 Telephone 208 426-1414 FAX 208 426-3006

## **General Information**

As the university's largest and most comprehensive academic unit, the College of Arts and Sciences enjoys a broad mission in teaching, research and creative activity, and service. In teaching, the College of Arts and Sciences offers a core curriculum that prepares students by developing their communication, numerical, and analytical skills; enhancing their creative abilities; fostering in them a greater awareness of human values and needs; and encouraging in them a lifelong appreciation of learning for its own sake.

Additionally, the College offers strong graduate programs for students of the arts, humanities, sciences, and interdisciplinary studies, and a full array of elective and service courses for students majoring in other subjects.

In research, the College generates and disseminates knowledge through basic and applied research, scholarship, and creative activity, thereby enhancing the scientific, technological, humanistic, and cultural environment of the state, the region, and the larger society.

In service, the College meets the educational, economic, and cultural needs of the state through research, publications, workshops, and a rich diversity of cultural and entertainment

#### **Graduate Programs**

The College of Arts and Sciences offers graduate programs leading to doctor and master degrees and graduate certificates in the following fields:

- art (master of arts); visual art (master of fine arts)
- biology (master of arts and master of science)
- creative writing (master of fine arts)
- earth science (master of science)
- mathematics (master of science)
- mathematics education (master of science)
- English, education, rhetoric and composition (master of arts)

- geology (master of science); GIS (graduate certificate)
- geophysics (doctor of philosophy and master of science)
- geosciences (doctor of philosophy)
- interdisciplinary studies (master of arts and master of science)
- music education, pedagogy, performance (master of
- raptor biology (master of science)
- technical communication (master of arts, graduate certificate)

#### **Activities**

Departments and centers within the College of Arts and Sciences sponsor a variety of activities that complement and enhance the graduate curriculum. For instance, the English Department is the home of several publishing ventures, including cold-drill (Boise State University's national awardwinning student literary magazine), Ahsahta Press (poetry by western poets and others), the Western Writers Series (booklets about the lives and works of Western authors), Poetry in Public Places (posters distributed throughout the Northwest), and the *Idaho Review* (a national literary journal published by the M.F.A. in Creative Writing program and featuring the work of the best writers in this country).

The Hemingway Western Studies Center sponsors an annual national book competition and has been designated by the Library of Congress as the Idaho Center for the Book, responsible for initiating and coordinating statewide exhibitions and events related to books and publishing.

The biology department is affiliated with the World Center for Birds of Prev. a research and breeding center for raptors. located near Boise. In addition, the biology department is the home of the Raptor Research Center. Also, the biology department is the home of the Biomolecular Research Center (BRC). The BRC emphasizes molecular studies and the techniques used to investigate medical issues.

CGISS, the Center for Geophysical Investigation of the Shallow Subsurface, a research center housed within the geosciences department, focuses on investigating engineering applications and environmental problems in the shallow subsurface of the earth. The geosciences are also affiliated with the Permian Research Institute (PRI), and the Geospatial Research Facility (GRF). Both of these research units are designed for students to learn geology and geographical information systems.

# College of Arts and Sciences Department of Art

**Department of Art** 

Chair: Richard Young

Liberal Arts Building, Room 252 Telephone 208 426-4070 FAX 208 426-1243 e-mail: artdept@boisestate.edu http://www.boisestate.edu/art/

**Full Graduate Faculty:** Stephanie Bacon, Laurie Blakeslee, Jim Budde, Francis Fox, Kathleen Keys, Larry McNeil, Cheryl Shurtleff-Young, John Taye, Ron Taylor, Lee Ann Turner, Richard Young

#### **Associate Graduate Faculty:**

John Francis, Tudor Mitroi, Janice Neri, Anika Smulovitz, Elizabeth Wiatr, Jennifer Wood

**Adjunct Graduate Faculty:** Karen Brown, Jill Fitterer, Kirsten Furlong.

## **Graduate Degrees Offered**

- · Master of Fine Arts, Visual Art
- Master of Arts in Art Education

#### **General Information**

**Master of Fine Arts:** The Department of Art offers a minimum two year, full time Master of Fine Arts degree program with an emphasis in painting, drawing, alternative media, photography, printmaking, ceramics, art metals, and sculpture. The degree requires 60 total credits distributed as follows: 9 credits in art history, 30 credits in the studio major, 6 credits in Graduate Concourse, 3 credits in Graduate Seminar, 6 credits in thesis and 6 credits in general electives.

Students admitted to the program will be provided with private studio space. Graduate faculty will hold regular studio visits and consultations.

The MFA degree program is designed to engage the student in both the theory and practice of their elected discipline. Graduate students are encouraged to explore and integrate other relevant disciplines. Course work centers around applied study, art history, theory and criticism. A final exhibition and a written thesis, approved and passed by the graduate faculty are required.

**Master of Arts in Art Education:** The program leading to the Master of Arts in Art Education degree is designed to meet the needs of art educators working in schools, museums and other arts organizations or communities, and gives students the opportunity to gain the knowledge and skills necessary

to become reflective and well-informed art educators. It does not lead to initial certification nor does it require certification for admission. Course work focuses on advanced curriculum development, an examination of contemporary issues relating to art and education, and advanced study of art history and studio practices. Students may select from two possible culminating experiences.

**Teaching Assistantships** are available for full-time students. Assistantships include an out-of-state tuition waiver, instate fee waiver, and a stipend. Assistants must enroll for a minimum of nine credit hours each semester and must meet any other requirements as set forth by the Graduate College. Applications are available on the website and must be received by January 15.

## Master of Fine Arts, Visual Arts

**Graduate Program Director:** Cheryl Shurtleff-Young PAAW Building, Room 104 Telephone 208 426-3450 e-mail: cshurtle@boisestate.edu

## **Admission Requirements**

**Fall admission only.** To be considered as a graduate student in the MFA program, applicants must possess a B.A., B.F.A., or a M.A. degree in Art from an accredited institution and have a minimum grade point average of 3.0 in art course work. Admission is competitive and the achievement of minimum requirements does not guarantee acceptance to the program.

Students must first be admitted to the Graduate College and have official transcripts from all institutions previously attended submitted to Graduate Admission and Degree Services, MG 141, Boise State University, Boise, ID 83725.

Applicants must also provide the following to the Art Department, Boise State University, 1910 University Drive, Boise, ID 83725-1510 by January 15:

- A portfolio of at least 20 labeled slides of a recent body of work with an accompanying slide list, and an artist statement that addresses the work submitted..
- Three letters of recommendation from professionals in the field.
- A statement of purpose outlining your educational and professional background, the overall objectives in your studio work and why you are interested in the program.
- · Self-addressed, stamped envelope.

#### **College of Arts and Sciences** Department of Art

#### **Degree Requirements**

Master of Fine Arts, Visual Arts	
Course Number and Title	Credits
ART 575 Graduate Seminar	3
ART 576 Studio Practices (3-6 credits per semester)	18
ART 577 Graduate Concourse	6
ART 580-588 Selected Topics and/or ART 596 Independent Study	12
ART 589 Selected Topics Art History or other graduate level art history	9
ART 593 Thesis	6
Electives at the graduate level	6
TOTAL	60

## Master of Arts in Art Education

Graduate Program Coordinator: Kathleen Keys PAAW Building, Room 116A Telephone 208 426-3873 e-mail: KathleenKeys@boisestate.edu http://www.boisestate.edu/art/

## **Application and Admission Requirements**

**Admission Requirements.** Fall or Spring admission. An applicant must satisfy the minimum admission requirements of the Graduate College (see Graduate Admissions Regulations in this catalog). Admission is competitive and the achievement of minimum requirements does not guarantee acceptance to the program. To be considered as a graduate student in the MA program, applicants must possess an earned baccalaureate or professional degree in a relevant program from an accredited college or university by the expected date of entry. Applicants must possess a minimum of 3.0 cumulative grade point average (GPA) based on a 4.0 scale in all previous undergraduate work and a minimum of 3.3 cumulative GPA based on a 4.0 scale in all previous relevant graduate work. Artistic proficiency within at least one studio area is required.

**Application Procedures.** A prospective student must follow the general graduate application procedure for degreeseeking students (see Applying as a Degree-Seeking Student in this catalog). Students must first be admitted to the Graduate College and have official transcripts from all institutions previously attended submitted to Graduate Admission and Degree Services, MG 141, Boise State University, Boise, ID 83725.

The prospective M.A. in Art Education student must also submit the following to the Department of Art graduate program director by January 15 to be considered for Fall admission, or by October 1 to be considered for Spring admission:

- A. A statement outlining your educational and professional background, your professional objectives, and philosophy of art or art education and why you are interested in the program.
- B. Three letters of recommendation in which the applicant's experience working in art and/or educational settings and potential contribution to the field of art education are described from professionals in art education or related fields.
- C. A portfolio of at least 20 labeled slides of a recent body of work with an accompanying slide list, and an artist statement that addresses the work submitted.
- D. An example of academic or professional writing.
- E. Additional related work samples.
- F. Evidence of any public or private teaching experiences.
- G. Evidence of successful completion of basic K-12 art education methods courses; both K-8 and 6-12 or their equivalents. Deficiencies may be completed upon acceptance.
- H. A self-addressed, stamped envelope.

## **Degree Requirements**

Master of Arts in Art Education	
Course Number and Title	Credits
Required Courses:	
ART 501 The Fine Arts: Analysis and Appreciation	3
in the Educational Program	
ART 551 Curriculum Development and Assessment	3
in Art Education	
Education Graduate Core courses	6
ART 591 Project or ART 593 Thesis	6
Electives	15
TOTAL	33

#### **College of Arts and Sciences Department of Art**

## **Course Offerings**

ART - ART

#### ART 501 THE FINE ARTS: ANALYSIS AND APPRECIATION IN THE EDUCATIONAL PROGRAM (3-0-3)(S)(Alternate

**Years**). Emphasis will be placed on learning about and applying the psychological and aesthetic theories commonly used in the creation, appreciation, and response to the fine arts in American educational settings. Course activities include attending a variety of arts presentations. Students will develop a researched, written unit of arts curriculum appropriate for educational use. PREREQ: Graduate status or PERM/INST.

#### ART 521 TEACHING THROUGH EXPERIMENTAL ART MEDIA

(0-6-3)(SU). Varied and unique experimental art processes and media to be used in conjunction with creative teaching techniques that emphasize critical thinking skills and the development of new or enriched art(s) curricula for K-12. Students will solve procedural problems and adapt art media to teaching experiences. Outside reading and creative exploration will be expected, as well as a final presentation including a written paper. PREREQ: Graduate standing.

ART 533 CONTEMPORARY IDEAS IN ART METALS (0-6-3) (F/S). Advanced exploration of design issues and techniques related to conceptual problems. Content varies by term with a focus on

individual processes or topics. Repeatable for credit. PREREQ: ART 221 and 222 or PERM/INST.

ART 535 STUDIO IN ART METALS (0-6-3) (F/S). Individual problems in Art Metals. Content varies by term with a focus on individual processes or topics. Repeatable for credit. PREREQ: 9 credits of Art 307 and/or Art 533 or PERM/INST.

ART 551 CURRICULUM DEVELOPMENT AND ASSESSMENT IN ART EDUCATION (3-0-3) (F) (Alternate Years). Designed

for those teaching or planning to teach art at any level, this course includes the history and rationale of American arts curricula K-12, the development of a selected, viable curriculum in a specific area, and the use of curriculum planning techniques appropriate in current educational settings. PREREQ: Graduate status or PERM/INST.

ART 575 GRADUATE SEMINAR (3-0-3) (F/S). Group meetings for the critical examination of works, practices, and issues within contemporary discourse and visual culture. PREREQ: Graduate

ART 576 STUDIO PRACTICES (0-V-V)(F/S). Independent work in the studio under the guidance of the student's graduate committee members. Periodic critiques of the work are conducted by the graduate committee and by the full graduate faculty.

ART 577 GRADUATE CONCOURSE (3-0-3) (F/S). Through a variety of seminar meetings, critiques, studio and community-based activities, students will locate their art practices within the contexts of contemporary art and theory, articulate the strategies unique to their work and explore their roles as artists in society.

ART 578-589 SELECTED TOPICS (V-0-V). Media specific studio courses taught by the graduate faculty. Students will have an opportunity to have their art work analyzed and critiqued by practicing fine art professionals. PREREQ: The following courses are reserved for matriculated graduate MA and MFA art students. Exceptions may be allowed by special permission of the course instructor and the director of the program.

ART 578 SELECTED TOPICS-ART EDUCATION ART 580 SELECTED TOPICS-DRAWING

ART 581 SELECTED TOPICS-PAINTING

ART 582 SELECTED TOPICS-ART METALS

ART 583 SELECTED TOPICS-SCULPTURE

ART 584 SELECTED TOPICS-PHOTOGRAPHY

ART 585 SELECTED TOPICS-CERAMICS

ART 586 SELECTED TOPICS-PRINTMAKING

ART 587 SELECTED TOPICS-GRAPHIC DESIGN

ART 588 SELECTED TOPICS-ILLUSTRATION

ART 589 SELECTED TOPICS-ART HISTORY

ART 590 PRACTICUM/INTERNSHIP (3-0-3). This course is designed primarily for students intending to teach at the college level. Assisting in the preparation and teaching of one or more studio courses; minimum of six contact hours per week required. PREREO: Consent of instructor and Graduate Program Coordinator.

ART 591 PROJECT (6 credits). The graduate project includes a scholarly paper describing the history and results of original research used to substantiate a special view in the field of visual arts. The project will be:

- 1) An art exhibition subject to full graduate faculty review; or
- 2) A comprehensive, illustrated visual arts curriculum in written form appropriate for use in an educational setting.

The required oral comprehensive examination will be prepared, administered, and evaluated by the student's M.A. graduate advisory committee within the final month of the project presentation. PREREO: Graduate status.

ART 593 THESIS (V-V-6). Independent research or creative activity at the master's level resulting in a thesis that must be defended at a final oral examination and archived in the university library. The thesis must be written in clear and effective English and presented in a format that conforms to the standards of the Graduate College. Graded pass/fail (P/F) only.

ART 594 WORKSHOP (1-3 credits) **ART 595 READING AND CONFERENCE (1-2 credits)** 

**ART 596 INDEPENDENT STUDY (1-3 credits)** 

ART 597 SPECIAL TOPICS

# College of Arts and Sciences Department of Biology

# **Department of Biology**

#### **Chair: James Belthoff**

Science/Nursing Building, Room 100 Telephone 208 426-3262 FAX 208 426-1040 http://www.boisestate.edu/biology/

**Full Graduate Faculty:** Marc Bechard, James Belthoff, Alfred Dufty, Greg Hampikian, Cheryl Jorcyk, Peter Koetsier, James Long, Richard McCloskey, James Munger, Steven Novak, Julia Thom Oxford, Ian Robertson, Troy Rohn, Marcelo Serpe, James Smith, Denise Wingett

**Associate Graduate Faculty:** Kevin Feris, Juliette Tinker, Merlin White, GongXin Yu

Adjunct Graduate Faculty: Christopher Ball,
Jonathan Bart, Keith Bildstein, Kenneth Brewer,
William Burnham, Jay Carlisle, Susan Earnst, David Eldridge,
Mark Fuller, Nicholas Hadjokas, Stuart Hardegree,
Charles Harris, Cynthia Keller-Peck, Lloyd Kiff, Cecilia Kinter,
Steven Knick, Michael Kochert, Daniel Leavell, Yongsheng Ma,
Carl Marti, Jr., Bill Mattox, Rosemary Mazaika, Richard Olson,
Rebecca Pullen, Janet Rachlow, Bruce Rieman,
Gary Roloff, Roger Rosentreter, Randall Ryan, Victoria Saab,
Rex Sallabanks, Nancy Shaw, Michael Spence,
Jamison Spencer, Karen Steenhof, Dennis Stevens,
Robert Van Kirk, Richard Watson, David Whitacre,
Rick Williams, Eric Yensen

## **Graduate Degrees Offered**

- · Master of Arts in Biology
- · Master of Science in Biology
- · Master of Science in Raptor Biology

#### **General Information**

Professional biologists, teachers in public and private schools, and others can use these programs to increase their knowledge base and to advance professionally.

## **Admission Requirements**

Enrollment in the program is limited. Applications are due February 1 for fall admission and October 1 for spring admission. For additional information concerning the department, faculty, and potential projects, visit the departmental web site (www.boisestate.edu/biology). To apply:

- Send the following three items to: Graduate Admissions Office, Boise State University, 1910 University Drive, Boise, ID 83725-1110.
  - A graduate application along with the \$55 application fee. Please submit the application PRIOR to submitting any additional items. Apply online at www.boisestate.edu/gradcoll.

- Have the Registrar(s) of ALL post-secondary institutions attended send official transcripts to the Graduate Admissions Office. Have Graduate Record Exam (GRE) scores forwarded to the Graduate Admissions Office.
- Send the following to: Graduate Coordinator, Department of Biology, Boise State University, Boise, ID 83725-1515.
  - A cover letter discussing professional goals and reasons for wishing to study biology or raptor biology at Boise State University. MS applicants should also discuss research interests, especially as they mesh with those of faculty members. MA applicants should also discuss what goals they wish to achieve by enrolling, specifically discussing project interests and desired areas of emphasis for course work. Also note any communication you have had with faculty members.
  - Three letters of recommendation. These should be from faculty, supervisors, or others than can describe the applicant's qualifications and promise relative to graduate studies and independent research.

Individuals admitted to REGULAR STATUS as graduate students in biology or raptor biology typically have:

- an undergraduate GPA of at least 3.00 on a 4-point system;
- results that average in the 50th or higher percentile in the verbal, quantitative, and analytical writing portions of the GRE exam;
- an undergraduate degree in biology or a closely related field.

PROVISIONAL STATUS may be granted to those otherwise promising applicants who do not meet GPA or GRE requirements or who have undergraduate course work deficiencies.

Initial evaluation of applicants will be undertaken by the Biology Department Graduate Studies Committee; final decisions on admission will depend on qualifications of the candidates and openings that exist within the Biology and Raptor Biology graduate programs.

Each student who has been admitted into our programs will form an advisory committee, which will consist of at least three members: the student's major professor and two other members. The committee will determine if academic deficiencies exist that must be remedied, help design thesis/project research, help guide appropriate graduate course work, evaluate the thesis/project, and conduct the final defense or comprehensive examination.

The Graduate Studies Committee will, in cooperation with the student's major professor and advisory committee, assess performance and progress in thesis/project research, course work and teaching assistant duties (where applicable). Continuing enrollment in the program requires a 3.0 GPA and satisfactory progress toward completing the degree.

#### Financial Aid

Teaching Assistantships that include a stipend, a tuition and fee waiver, and student health insurance may be available on a competitive basis. Additional support for master's research projects may be available from faculty members in the form of research assistantships. Other forms of financial aid, such as loans or the College Work Study Program, are available to graduate students. Prospective students should contact the Financial Aid Office and consult the Boise State University catalog.

#### **Degree Requirements**

The M.S. is a research-based degree. The M.S. candidate will complete a thesis based on original research carried out by the student. Ideally, the thesis should make a significant contribution to the body of scientific knowledge and be of sufficient quality to warrant publication in a peer-reviewed journal.

The M.A., Project Option is an application-based degree and is considered to be a terminal degree (except for students intending to attend professional school); students wishing to later pursue a Ph.D. should enroll in the M.S. program. In addition to completing substantial course work, the M.A. candidate will complete a project that may be an application or synthesis of original research carried out by others. Examples of such projects include development of biology-based curricula, compilation and analysis of studies on a range of species, review and the synthesis of a body of ideas or data, and development of a resource management plan based on relevant studies.

The M.A., Examination Option is a course work-based degree and is considered to be a terminal degree (except for students intending to attend professional school); students wishing to later pursue a Ph.D. should enroll in the M.S. program. The M.A. candidate will complete a wide range of relevant course work. At the end of course work, the candidate will be required to pass a comprehensive examination. The examination is to be tailored by each candidate's committee to emphasize the areas covered by course work. After the candidate has completed the written portion of the examination, the candidate will meet with the committee for an oral review prior to final approval or rejection of the written examination.

Completion of a degree program requires an average grade of B or better for all courses applied to the 30-33 credits required. All requirements for the degree and graduation must be completed within a period of seven years.

M.S. students will be expected to produce a written thesis/ project proposal and give an oral presentation of that proposal during their first year and, following completion of the thesis/ project, give an oral defense of the thesis/project and an exit seminar to present results to the public.

## Master of Arts in Biology

Graduate Program Coordinator: Ian Robertson

Science/Nursing Building, Room 100 Telephone 208 426-3262 e-mail: jbeltho@boisestate.edu

Master of Arts in Biology, Project Option	
Course Number and Title	Credits
BIOL 598 Graduate Seminar	2
BIOL 579 Research in the Biological Sciences (for two semesters)	2
BIOL 591 Project Students will be expected to develop a written project proposal and give an oral presentation of their project upon completion.	6
Electives to be chosen in consultation with advisor and committee:  Electives for the M.A. may include up to a combined total of 6 credits of workshop credits, practicum/internship credits, directed research credits. A combined total of 9 credits may include approved courses taken outside the biological sciences, workshops, practicum/internship, and directed research. Workshop, directed research, and practicum/internship credits are limited to a maximum of 3 credits each.	23
TOTAL	33

Master of Arts in Biology, Examination Opt	ion
Course Number and Title	Credits
BIOL 598 Graduate Seminar	2
BIOL 579 Research in the Biological Sciences (for two semesters)	2
Electives to be chosen in consultation with advisor and committee:  Electives for the M.A. may include up to a combined total of 6 credits of workshop credits, practicum/internship credits, directed research credits. A combined total of 9 credits may include approved courses taken outside the biological sciences, workshops, practicum/internship, and directed research. Workshop, directed research, and practicum/internship credits are limited to a maximum of 3 credits each.	29
TOTAL	33

# College of Arts and Sciences Department of Biology

## Master of Science in Biology

Graduate Program Coordinator: Ian Robertson

Science/Nursing Building, Room 100 Telephone 208 426-3262

e-mail: jbeltho@boisestate.edu

Master of Science in Biology	
Course Number and Title	Credits
BIOL 501 Biometry	4
BIOL 598 Graduate Seminar	2
BIOL 593 Thesis	6
Electives from course offerings that follow: Electives may include a maximum of six credits of Directed Research, must be approved by the student's thesis committee, and may not include workshop, pass/fail or practicum/internship credits.	18
TOTAL	30

## Master of Science in Raptor Biology

Graduate Program Coordinator: Ian Robertson

Science/Nursing Building, Room 103 Telephone 208 426-3262 e-mail: jbeltho@boisestate.edu

Master of Science in Raptor Biology	
Course Number and Title	Credits
BIOL 501 Biometry	4
BIOL 598 Graduate Seminar	2
BIOL 593 Thesis	6
Electives from course offerings that follow: Electives may include a maximum of six credits of Directed Research, must be approved by the student's thesis committee, and may not include workshop, pass/fail, or practicum/internship credits.	18
TOTAL	30

## **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

**BIOL - BIOLOGY** 

**BIOL 310G PATHOGENIC BACTERIOLOGY (2-6-4)(S)(Offered odd-numbered years).** Medically important bacteria, rickettsia, and chlamydia are surveyed with emphasis on their pathogenicity, host-parasite relationships, and the clinical and diagnostic aspects of the diseases they produce in humans and animals. PREREQ: BIOL 205 or BIOL 303 or PERM/INST.

#### BIOL 344G MOLECULAR AND CELL BIOLOGY LABORATORY

(0-6-2)(F). A course that explores modern molecular and cellular techniques including cloning, computer analysis of DNA sequences, karyotyping, DNA amplification, and use of Southern and Western blots for transgene detection and expression analysis. Periodic reports will be submitted. Some laboratory time will be arranged. PREREQ/COREO: BIOL 343.

**BIOL 401G ORGANIC EVOLUTION (3-0-3)(S).** Philosophical basis of evolutionary theory. Detailed examination of genetic variation, mechanisms of evolutionary change, adaptation, speciation, origin of diversity, and phylogeny. Genetics recommended. PREREQ: BIOL 323 and BIOL 343 or PERM/INST.

#### BIOL 412G GENERAL PARASITOLOGY (2-3-3) (Offered

**Occasionally).** Animal parasites with emphasis on those of man and his domestic animals. Lectures cover general biology, life history, structure, function, distribution, and significance of parasites. Laboratory provides experience in identification and detection. PREREQ: BIOL 301, PERM/INST.

#### **BIOL 415G APPLIED AND ENVIRONMENTAL**

**MICROBIOLOGY** (3-3-4) (S). Microbial populations and processes in soil and water. Water and food-borne pathogens. Microbiological and biochemical methods of environmental assessment. PREREQ: BIOL 303 or BIOL 205, and CHEM 317-319, or PERM/INST.

**BIOL 420G IMMUNOLOGY (3-0-3)(S).** A survey of the principles of immunology, host defense systems, the immune response, immune disorders, serology and other related topics. PREREQ: BIOL 205 or BIOL 303 or PERM/INST.

**BIOL 445G HUMAN GENETICS (3-0-3) (S).** Taught intermittently. Discussion of important aspects of human heredity. Topics include the reproductive system, single gene disorders, chromosome abnormalities, hemoglobinopathies, inborn errors of metabolism, somatic cell and molecular genetics, immunogenetics, gene screening, and human variation and evolution. PREREQ: BIOL 343 or PERM/INST.

**BIOL 501 BIOMETRY (4-0-4) (F).** An application of statistical methods to problems in the biological sciences. Basic concepts of hypothesis testing; estimation and confidence intervals; t-tests and chi-square tests. Linear and nonlinear regression theory and analysis of variance. Techniques in multivariate and nonparametric statistics. PREREQ: MATH 147 or equivalent, or PERM/INST.

#### **BIOL 502 POPULATION AND COMMUNITY ECOLOGY (3-0-3)**

**(F).** The structure of populations and communities. Competition, predation, life history strategies, demography, population regulation, and species diversity are examined from experimental and theoretical perspectives. PREREQ: BIOL 323 or equivalent, or PERM/INST.

**BIOL 503 ADVANCED BIOMETRY (3-3-4)(S)(Offered evennumbered years).** A survey of experimental design and selected multivariate techniques. The course is designed to assist students in selecting proper statistical techniques for gathering and analyzing biological data, and correctly interpreting the statistical analysis of their data. Prior experience with Statistical Analysis System (SAS) is helpful. PREREQ: BIOL 501 or PERM/INST.

#### BIOL 504 TEACHING ASSISTANT SKILLS AND ISSUES (2-0-2).

Discussion of learning styles, testing strategies, disability issues, and other topics relevant to being a teaching assistant for undergraduate biology laboratories. Graded Pass/Fail. PREREQ: PERM/INST.

# College of Arts and Sciences Department of Biology

#### BIOL 505 APPLIED RAPTOR BIOLOGY (0-3-2)(F)(Odd years).

A study of the techniques appropriate to the study of the ecology, behavior, and physiology of raptors and other birds. Field trips will be taken in addition to regularly scheduled class. PREREQ: Graduate standing in Biology or Raptor Biology or PERM/INST.

**BIOL 506 RAPTOR ECOLOGY (3-0-3) (S).** Theoretical ecology as applied to birds of prey. Strategies of reproduction, habitat selection, foraging and spacing; theory of competition and predatorprey interactions; niche theory and community structure; raptor management. PREREQ: BIOL 323 or equivalent, or PERM/INST.

**BIOL 509 MOLECULAR ECOLOGY AND PHYLOGEOGRAPHY** (3-0-3) (F) (Odd years). Theory and methodologies used in molecular ecology and phylogeography. Molecular genetic markers currently used to study ecological phenomena (e.g., mating systems, parentage and kinship, population structure, gene flow, dispersal, natural selection). Emphasis on an hypothesis-testing approach. Determination of which molecular techniques are most appropriate for specific research questions. PREREQ: BIOL 323 and BIOL 343.

#### BIOL 517 SPECIES AND SPECIATION (3-0-3)(F)(Odd years).

Species definitions are fundamental for all investigations in the biological sciences. This course will investigate the numerous species concepts proposed over the last 100 years with an emphasis on primary literature. Concepts to be discussed will include biological, phylogenetic, genealogical, and evolutionary species concepts. The second part of the course will emphasize the processes involved in speciation, looking at both micro- and macroevolutionary events. PREREQ: BIOL 401-401G (or equivalent) or PERM/INST.

**BIOL 522 CONSERVATION BIOLOGY (3-0-3) (S) (Odd years).** An introduction to the field of conservation biology, the applied science concerned with understanding the effects of human activities on natural biological systems and with developing practical approaches to prevent the loss of biodiversity. Topics covered will include conservation genetics, demographic analysis, habitat degradation, overexploitation, and restoration ecology. Discussion of the social, political, and economic aspects of conservation biology. PREREQ: BIOL 323

**BIOL 526 INSECT ECOLOGY (3-0-3) (S) (Even years).** An indepth exploration of insect ecology, evolution and behavior. Topics include life history evolution, insect-plant interactions, predation and parasitism, reproduction, insect societies, chemical ecology, biodiversity and pest management. PREREQ: BIOL 323 or PERM/INST.

**BIOL 527 STREAM ECOLOGY (3-3-4) (F) (Odd years)).** The biology and ecology of flowing waters is emphasized; their biota, management, and ecology at both the community and ecosystem level will be discussed. PREREQ: BIOL 323 or PERM/INST.

BIOL 528 GEOGRAPHIC INFORMATION SYSTEMS IN BIOLOGY (3-0-3)(S). Discussion of the use of Geographic Information Systems to apply spatial data to ecological problems. Analysis of the ways that spatial relations affect patterns, processes, and decision making at multiple scales. Specific topics covered include GAP analysis, habitat modeling, spatially-explicit population modeling, landscape ecology, home range analysis, interpretation of satellite imagery, and natural resource issues. PREREQ: Graduate standing or PERM/INST.

**BIOL 529 MODERN METHODS IN ECOLOGY AND BEHAVIOR (2-3-3)(S)(Odd years).** Instruction in the theory, practice, and analysis of modern methods used in ecological and evolutionary studies will be provided. Methods to be covered include: cytology, isozyme electrophoresis, DNA restriction site analysis, DNA sequencing, and RAPD analysis. PREREQ: PERM/INST.

**BIOL 531 PHARMACOLOGY (3-0-3) (F).** Basic pharmacological principles including mechanisms of drug action in relation both to drug-receptor interactions and to the operation of physiological and biochemical systems. Pharmacokinetics, metabolism, receptor theory and an examination of major classes of therapeutic agents used in humans. PREREQ: BIOL 227-228 or BIOL 191-192, and BIOL 301.

**BIOL 533 BEHAVIORAL ECOLOGY (3-0-3) (Odd years).** This course focuses on the evolutionary significance of animal behavior in relation to the ecology of the organisms. Using theoretical background and recent empirical evidence, mating systems, foraging, parental care, selfishness and altruism, competition, territoriality, and other behavioral patterns will be assessed in relation to the survival and reproduction of animals. PREREQ: BIOL 323 or PERM/INST.

**BIOL 541 MOLECULAR BIOLOGY OF CANCER (3-0-3) (S).** A treatment of the basic biology of cancer and the process of tumor progression. Topics examined will include oncogenes, tumor suppressor genes, and the causes of cancer. PREREQ: BIOL 301, BIOL 343.

**BIOL 542 MOLECULAR NEUROBIOLOGY (3-0-3) (F).** Emphasis will be on the molecular aspects of neurobiology. Topics will include: cells of the nervous system, neurochemical transmission, nerve terminals, membrane structure and function, electrical signaling, neural development, process outgrowth and myelination and glia, and specific neural diseases including Alzheimer's disease, Parkinson's disease, and Lou Gehrig's disease. PREREQ: BIOL 301.

BIOL 543 ADVANCED DEVELOPMENTAL BIOLOGY (1-6-2) (F) (Odd years). Application of molecular and cellular methods to current topics in developmental biology. Analysis of current literature in biology with emphasis on the coordinated regulation of gene expression, cellular differentiation and migration. Laboratory studies include model systems such as chick, zebrafish, sea urchin and mouse, utilizing cell/tissue culture, histology, immunohistochemistry, RT-PCR, protein purification, SDS-PAGE, western blot and others. Previous enrollment in BIOL 344 and ZOOL 351 recommended.

**BIOL 546 BIOINFORMATICS (2-3-3) (F).** Practical training in bioinformatics methods: accessing sequence data bases, BLAST tools, analysis of nucleic acid and protein sequences, detection of motifs and domains of proteins, phylogenetic analysis, gene arrays, and gene mapping. PREREQ: BIOL 343 or PERM/INST.

**BIOL 551 DEVELOPMENTAL BIOLOGY (2-6-4)(S)(Odd years).** Germ cell development, comparative patterns of cleavage and gastrulation, neurulation and induction, and development of human organ systems with emphasis on molecular and cellular mechanisms. Laboratory studies of sea urchin, frog, chick, and pig development. PREREQ: BIOL 191-192 or PERM/INST.

#### **BIOL 561 ADVANCED TOPICS IN AQUATIC BIOLOGY (1-0-1)**

**(F/S).** An exploration of the current primary literature of aquatic biology. Topics vary, and may include community dynamics of algae, fish, zooplankton, and benthic invertebrates; tropic relationships; stream and reservoir management; primary and secondary

#### College of Arts and Sciences Department of Biology

production; organic matter and nutrient dynamics; and wetland ecology. May be repeated once for credit. PREREQ: BIOL 323 and PERM/INST.

#### **BIOL 562 ADVANCED TOPICS IN ANIMAL BEHAVIOR (2-0-2)**

(F/S). An exploration of current animal behavior and behavioral ecology literature through group discussion and presentations. Topics vary and may include animal mating systems, foraging, group living, behavioral endocrinology, conservation and wildlife management related to behavior, behavioral genetics, dispersal, orientation and migration, neurobiology of behavior, and others. May be repeated once for credit. PREREQ: BIOL 433 or 533 or ZOOL 434 or 534 or PERM/INST.

**BIOL 565 ADVANCED TOPICS IN MOLECULAR BIOLOGY TECHNIQUES (1-0-1)(F).** Discussion of scientific literature with emphasis on modern molecular biology techniques. Students will lead discussions and present articles. Topics will include southern-. western-, and northern-blot analysis, sequencing, cloning, transfection and transduction; immunoprecipitation, and other molecular, cellular, and genetic techniques. PREREQ: BIOL 343 and PERM/INST.

#### BIOL 566 ADVANCED TOPICS IN THE BIOLOGY OF CANCER

(1-0-1)(S). Discussion of current research in the field of cancer biology, with emphasis on prostate and mammary cancer. Students will lead discussions and present articles, as well as monitor recent literature on cancer. Topics will include tumor suppressor genes, cell cycle regulation, apoptosis, signal transduction, and other cancerrelated systems. May be repeated once for credit. Previous enrollment in BIOL 465 or BIOL 565 is recommended. PREREQ: BIOL 343 and PERM/INST.

#### BIOL 577 (ME 577) (MSE 577) BIOMATERIALS (3-0-3) (F/S).

Theory of biomaterials science. Medical and biological materials and their applications. Selection, properties, characterization, design and testing of materials used by or in living systems. PREREQ: ENGR 245 or CHEM 112.

#### BIOL 579 RESEARCH IN BIOLOGICAL SCIENCES (1-0-1)(F/S).

Seminars by biologists on a wide range of subjects. Students will attend seminars, write summaries, and search for relevant literature. Graded pass/fail. May be repeated once for credit.

#### **BOT - BOTANY**

#### **BOT 302G PLANT ANATOMY AND MICROTECHNIQUE**

(3-3-4) (F) (Odd years). A study of the structure and development of vascular plant tissues, regions, and organs. Emphasis will be placed on the Angiosperms. Laboratory work includes preparation of hand and paraffin sections, staining, and observation of plant tissues using various types of light microscopy. PREREQ: BIOL 203 and BIOL 301 or PERM/INST.

BOT 305G SYSTEMATIC BOTANY (2-6-4)(S). Fundamental problems of taxonomy. Discussion of historical developments of classification systems and comparison of recent systems. Instruction on the use of keys and manuals. PREREQ: BIOL 203 or PERM/INST.

BOT 311G PLANT MORPHOLOGY (3-3-4)(F). A comparative study of the structure, function, reproduction, and development of major plant groups. Phylogeny, paleobotany, and economic importance of various plant groups will be considered. PREREQ: BIOL 203 or PERM/INST.

BOT 330G MYCOLOGY (3-3-4) (F). A study of the biology of fungi with emphasis on their classification, morphology and development, identification, ecology, and economic significance. Laboratory work will include projects and field trips. PREREQ: BIOL 203, PERM/INST.

BOT 401G PLANT PHYSIOLOGY (3-3-4) (F) (Odd vears). A study of plant biophysical and biochemical processes. Includes coverage of cell, tissue, and organ function, photosynthesis, water relations, mineral nutrition, transport mechanisms, growth and development, secondary metabolites, and plant responses to the environment. PREREQ: BIOL 203 and CHEM 317 or PERM/INST.

#### BOT 524 PLANT COMMUNITY ECOLOGY (3-3-4)(F)(Even

years). A study of the properties, structure, method of analysis, classification, and dynamic nature of plant communities. Topics for discussion will include the strengths and weaknesses of various sampling techniques, the role of disturbance events and succession on community structure, and the role of biological interaction as factors influencing the assembly of communities. Laboratory work will emphasize vegetation sampling methods and habitat type classification for plant communities in this region as well as methods of analyzing and reporting this data. PREREO: BIOL 323 or PERM/INST.

#### BOT 541 PLANT DEVELOPMENTAL BIOLOGY (3-3-4)(S)

(Even years). A description of plant development from a molecular and cellular perspective. Topics discussed include gene expression and cell signaling pathways, and their roles in the control of embryogenesis, plant growth, flowering, and fruit maturation. Examination of techniques and model systems used in the study of plant development. Each student will complete a project. PREREQ: BIOL 301.

#### **ZOOL - ZOOLOGY**

#### **ZOOL 301G COMPARATIVE VERTEBRATE ANATOMY (2-6-4)**

**(F).** The evolutionary development of vertebrate anatomy, fishes through mammals. Dissection of the shark, salamander, cat plus demonstrations of other vertebrate types. PREREQ: ZOOL 230 or PERM/INST.

ZOOL 305G ENTOMOLOGY (2-6-4)(F). This course examines the general anatomy, physiology and developmental biology of insects, as well as their ecological and evolutionary relationships and interactions with humans. Field trips to collect and identify local species. PREREQ: BIOL 191-192 or PERM/INST.

ZOOL 341G ORNITHOLOGY (2-3-3)(S)(Odd years). Birds as examples of biological principles: classification, identification, ecology, behavior, life histories, distribution, and adaptations of birds. Two weekend field trips. PREREQ: ZOOL 230, PERM/INST.

#### ZOOL 400G VERTEBRATE HISTOLOGY (2-6-4)(S) (Even

years). Microscopic anatomy of cell, tissues, and organ systems of vertebrates. Major emphasis will be on mammalian systems. ZOOL 301 or ZOOL 351 is recommended prior to enrollment. PREREQ: BIOL 191-192 or PERM/INST.

ZOOL 403G HEAD AND NECK ANATOMY (1-3-2)(F). Use of human cadavers to study prosections of head and neck with emphasis on clinical relevance. Integument, osteology, myology, circulatory systems, lymphatics, oral and dental tissues, neuroanatomy, cranial nerves, general innervation, and salivary glands. PREREQ: BIOL 191-192 or BIOL 227-228 or PERM/INST.

#### ZOOL 421G MAMMALOGY (2-3-3)(S)(Offered even-numbered

**years).** The biology of mammals: ecology, life histories, reproduction, classification, identification, distribution, and adaptations. One weekend field trip. PREREQ: BIOL 323 or an upper-division Zoology course.

**ZOOL 501 HUMAN PHYSIOLOGY (3-3-4)(S).** Functional aspects of human tissues and organ systems with emphasis on regulatory and homeostatic mechanisms. PREREQ: BIOL 301 or PERM/INST.

#### **ZOOL 509 GENERAL AND COMPARATIVE PHYSIOLOGY**

(3-3-4)(S). Physiological principles common to all forms of animal life are discussed. Physiological adaptations required to live in a variety of environments are presented. PREREQ: ZOOL 230, CHEM 317 or PERM/INST.

**ZOOL 515 AVIAN PHYSIOLOGY (3-0-3) (F) (Odd years).** The physiology of flight, cardiovascular, pulmonary, digestive, water and electrolyte, egg, and reproductive physiology are covered. Correlations between unique aspects of avian structure and function are emphasized. PREREQ: Graduate standing or PERM/INST.

#### ZOOL 525 AQUATIC ENTOMOLOGY (3-3-4)(F)(Even

**years).** The taxonomy and ecology of the insects most commonly encountered in freshwater environments. Emphasis on identification and biology of individual taxa, aquatic insect community ecology, environmental pollution assessment, and natural resource management. PREREQ: BIOL 323.

**ZOOL 534 ANIMAL BEHAVIOR (3-3-4)(F) (Even years).** This course focuses on the concepts and processes of animal behavior, with particular emphasis on proximate perspectives. The history of the study of animal behavior, behavioral genetics, the nervous system and behavior, hormones and behavior, ontogeny of behavior, learning and motivation, and other aspects of behavior such as migration, orientation, and navigation will be presented. PREREQ: BIOL 323 or PERM/INST.

#### ZOOL 535 BEHAVIORAL ENDOCRINOLOGY (3-0-3)(F) (Even

**years).** An examination of the endocrine system and the hormonal mechanisms associated with social behavior and aggression, reproductive and parental behavior, biological rhythms, etc. Each student is expected to investigate and lead a discussion on an assigned topic. PREREQ: Graduate Standing or PERM/INST.

**SPECIAL TOPICS.** Courses are offered in response to student interest and are in addition to formal courses listed above.

# Department of English

**Department Chair: Michelle Payne** 

Associate Chair: Devan Cook Liberal Arts Building, Room 228 Telephone 208 426-3426 FAX 208 426-4373 http://english.boisestate.edu/

Full Graduate Faculty: Bruce Ballenger, John Battalio, Devan Cook, Martin Corless-Smith, Jon P. Dayley, Matthew Hansen, Janet Holmes, Daryl Jones, Helen Lojek, Mike Markel, Carol A. Martin, Roger Munger, Marcy Newman, Jacqueline O'Connor, Steven Olsen-Smith, Michelle Payne, Tara Penry, Bruce Robbins, Mary Ellen Ryder, Rena Sanderson, Gail Shuck, Tom Trusky, Karen Uehling, Jan Widmayer, Mitchell Wieland, Linda Marie Zaerr

**Associate Graduate Faculty:** Ann Campbell, Michael Mattison, Tom Peele, Russell Willerton

**Adjunct Graduate Faculty:** Yvonne Georgeson, Al Greenberg, Al Heathcock, John Keeble, Kevin Wilson

## **Graduate Degrees Offered**

- Master of Fine Arts in Creative Writing
- · Master of Arts in English
- Master of Arts in English, English Education
- Master of Arts in English, Rhetoric and Composition
- Master of Arts in Technical Communication
- Graduate Certificate in Technical Communication

# Master of Fine Arts in Creative Writing

**Director of Creative Writing:** Mitch Wieland English Annex, Room 102
Telephone 208 426-2669
e-mail: mfacwp@boisestate.edu
http://www.boisestate.edu/english/mfa

#### **General Information**

The program offers maximum flexibility for writers seeking a place to focus on their craft. Students pursuing the degree specialize in either fiction, poetry, or creative nonfiction and work closely with the creative writing faculty in workshop and conference settings.

The M.F.A. in Creative Writing from Boise State University represents a student's mastery of one of the genres of creative writing, as well as a thorough grounding in traditional and contemporary letters. Students work with a faculty of accomplished writers and produce a manuscript of publishable quality during their course of study. While the M.F.A. is the preferred degree for teachers of creative writing, the program at Boise State University also prepares students with courses offered in professional editing and publishing (practicum classes with Ahsahta Press and *The* 

*Idaho Review*), form and theory, and book arts, as well as with invaluable teaching experience in the creative writing classroom.

The Idaho Review, published by the M.F.A. program, offers a chance for students to work on a national literary journal, either as graduate assistants or through course credit or internship. A second literary publication, cold drill, is run entirely by M.F.A. students, and offers extensive experience in designing, managing, and editing a literary magazine. Students can also gain editing experience working for Ahsahta Press, a nationally recognized publisher of poetry. Established in 1974, Ahsahta Press publishes up to three volumes each academic year. The book arts program offers additional opportunities in design and publishing.

The Hemingway Center, administered by the Department of English, is another resource to be found on campus. It is the home of the Idaho Center for the Book, affiliated with the Library of Congress. The Center also oversees the Idaho Writers' Archive.

The Department of English offers a number of Graduate Teaching Assistantships. These assistantships include waivers of tuition and fees, resident or non-resident, and a stipend of over \$9,500. Complete applications are due January 15 for priority consideration. More information is available from the Director of Creative Writing.

## **Application and Admission Requirements**

To be considered for regular status as a graduate student in the Department of English M.F.A. in Creative Writing, an applicant must meet general Graduate College requirements (which includes requesting that official transcripts from all institutions previously attended be sent to the Graduate Admissions Office, MS-1110, Boise State University, Boise Idaho 83725) and the following department requirements:

- A writing sample consisting of thirty manuscript pages of fiction or nonfiction or fifteen poems, sent directly to the Director of Creative Writing.
- A Bachelor of Arts in English. However, an applicant may demonstrate a strong background in an area of study available in the graduate curriculum of the Department of English to be considered for admission into the M.F.A. program.
- 3. Three letters of recommendation from people who know the applicant's academic work, sent directly to the Director of Creative Writing.
- 4. A GPA of at least 3.0 for the last sixty semester credit hours of undergraduate work.
- 5. Scores for the Graduate Record Examination (GRE), sent to the Graduate Admissions Office. The applicant should score at least 500 on the Verbal Section of the GRE. Scores on sections other than the Verbal Section are for information purposes only.

Applicants who do not satisfy one or more of these requirements by the time they wish to begin classes may be admitted with provisional status. They will be advised as to what steps they need to take to qualify for regular status. For more in-depth information, please visit our web site.

#### **Degree Requirements**

The 48-credit Master of Fine Arts in Creative Writing degree offers a combination of creative writing, form and theory, professional editing, book arts, composition and rhetoric, linguistics, literature, and technical communication courses.

Master of Fine Arts in Creative Writing	
Course Number and Title	Credits
Workshops:  ENGL 522 Poetry Writing Workshop ENGL 523 Fiction Writing Workshop ENGL 524 Creative Nonfiction Writing Workshop Students are admitted into the program in one genre of concentration. Four workshops must be taken in this declared genre.	12
MFA Courses:  ENGL 502 Teaching Creative Nonfiction, Poetry, and Fiction Writing ENGL 507 Small Press Production ENGL 508 Writing, Editing, and Designing for Professional Advancement ENGL 509 Book Arts ENGL 532 Form and Theory of Poetry ENGL 533 Form and Theory of Fiction ENGL 534 Form and Theory of Creative Nonfiction Writing ENGL 590 Internship Students must take at least three courses; additional courses may be applied towards English Department Electives.	9
English Department Electives: Students must choose 500 level courses from at least two of the following areas: Composition/Rhetoric, Creative Writing, Linguistics, Literature, Technical Communication, or Internship. One 400-level G writing course allowed. ENGL 598 required for Teaching Assistants.	18
Electives: Graduate courses, any discipline. Note: May include 400-level G courses.	3
ENGL 593 Thesis	6
TOTAL	48

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## Master of Arts in English

Director M.A. in English: Matthew Hansen

Liberal Arts Building, Room 205 Telephone 208 426-1215

e-mail: matthewhansen@boisestate.edu http://english.boisestate.edu/grad/

## **General Information**

The graduate program offered by the Department of English at Boise State University is large enough to provide variety, yet small enough for flexibility in planning a course of study and for a collegial atmosphere. The Department's graduate faculty teach on all levels in addition to pursuing interests in scholarship, writing, editing, publishing, and related activities.

The Master of Arts in English program includes three emphases:

- The original, currently called Master of Arts in English, has a 15-hour core consisting primarily of literature courses, but also includes 15-21 hours of electives that may be drawn from other areas of the English program as well. It serves students interested in going on for a Ph.D. in literature or interested in another career where reading, writing, and analytical skills are needed;
- the Master of Arts in English, English Education, is designed for students who wish to become certified to teach English in secondary schools and who already have an undergraduate degree in English studies or who have taken a significant number of undergraduate English courses after receiving their baccalaureate degree in another field;
- the Master of Arts in English, Rhetoric and Composition is designed for students interested in community college teaching and/or pursuing a doctoral degree in Rhetoric and Composition.

Students should consult with the Director of the M.A. in English to help determine which emphasis meets their career goals.

The Department of English provides excellent computer labs, including three administered by the Department itself, for word processing, desktop publishing, and network access to on-line resources and information about library holdings in the United States and abroad.

The Hemingway Center, administered by the Department of English, is another campus resource. It is the home of the Idaho Center for the Book, affiliated with the Library of Congress. The Center also oversees the Idaho Writers' Archive.

The Department of English offers Graduate Assistantships in Teaching and in the Writing Center. These assistantships offer a waiver of tuition and fees, including out-of-state tuition, and in addition carry a stipend of over \$9,500. Complete applications

for assistantships are due February 1, 2007. In order to be considered for an assistantship, applicants must also submit **all** materials required for admission to the M.A. in English program by that date. Applicants should plan to apply to the program, have all undergraduate transcripts sent, arrange for letters of recommendation, and take the Graduate Record Exam well before this deadline. A list of program requirements is below. Information on assistantship applications can be obtained from the website or by e-mailing the director of the program.

Students who do not wish to enroll in a degree program but would like to take a course of interest should consult with the Director of the MA in English about whether the prerequisite of program admission can be waived.

## **Application and Admission Requirements**

To be considered for regular status as a graduate student in the Department of English, an applicant must meet general Graduate College requirements (which include requesting that official transcripts from all institutions previously attended be sent to the Graduate Admissions Office, MS-1110, Boise State University, Boise Idaho 83725) and the following department requirements:

- 1. A Bachelor of Arts in English. In lieu of this, an applicant must demonstrate a strong background in an area of study available in the graduate curriculum of the Department of English to be considered for admission into the program.
- A GPA of at least 3.0 for the last sixty semester credit hours of undergraduate work.
- Scores for the Graduate Record Examination (GRE), sent to the Graduate Admissions Office. The applicant must score at least 500 on the Verbal Section of the GRE. Scores on sections other than the Verbal Section are for information purposes only.
- An essay of from five hundred to seven hundred words explaining the applicant's goals in pursuing graduate study in English, sent directly to the Director of the M.A. in English.
- A writing sample of 8 to 10 pages, preferably academic writing completed within the past two years. For students who completed their undergraduate work more than one year before their application, professional writing of similar length, such as, but not limited to a grant proposal, a newsletter, or a business report may be submitted to fulfill this requirement. The applicant's writing sample, in all cases, should be accompanied by a brief statement of the context for which the writing was done. This writing sample should be sent directly to the Director of the M.A. in English.
- Three letters of recommendation from people who know the applicant's academic work, sent directly to the Director of the M.A. in English.

## **Degree Requirements**

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Master of Arts in English	6 li
Course Number and Title	Credits
The Master of Arts in English offers two options for completion of the degree. The first is a 33-hour thesis/project option, which requires 15 hours of core courses and 15 hours of general electives plus a 3-credit thesis or project. This option is designed particularly for students who plan to continue their studies in a doctoral program, students whose concentration is in composition and rhetoric, and others who wish to engage in an intensive research and writing experience in their final semester. The other is a 36-hour course work degree, which includes 15 hours of core requirements and 21 hours of general electives. This degree is designed for students who wish to study a wide range of literature, rhetoric and composition, linguistics, English Education and/or Technical Communication courses.	
Core Requirements:  ENGL 500 Research Methods in Literary Studies ENGL 561 Theories of Rhetoric and Composition OR ENGL 588 Survey of Critical Theory	3 3
ENGL 510 Seminar in Major American or English Writer	3
ENGL 530 Studies in a Literary Period	6
Candidates must take at least two period courses. One of these must be in medieval through eighteenth-century literature and one in nineteenth- or twentieth-century literature. Courses will be offered in the following periods:  Studies in Medieval English Literature Studies in Renaissance Literature Studies in Restoration and Eighteenth-Century Literature Studies in English Romanticism Studies in Victorian Literature Studies in Twentieth-Century English Literature Studies in Colonial American Literature Studies in Nineteenth-Century American Literature Studies in Twentieth-Century Postcolonial Literature in English	15
Electives: To be selected from other graduate offerings in Literature, Linguistics, English Education, Rhetoric and Composition, Creative Writing, and Technical Communication. The electives may include ENGL 598 Seminar for Teaching Assistants, a maximum of six credits of ENGL 400G courses, and a maximum of three credits of independent work in ENGL 590, ENGL 595, and/or ENGL 596.	15
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Master of Arts in English (continued)	
Thesis or project option: students take 3 credits of ENGL 591 Project or ENGL 592 Thesis in their final semester. With the help of an advisor, the student selects a thesis or project topic and prepares a prospectus before the student's final semester. After completion of the thesis or project, the student must pass an oral defense.  Course work option: students take six additional hours of electives as described above, for a total of 21 hours of electives.	3-6
Additional information: No credits taken outside the English Department may be applied toward graduation requirements. Only three (3) credits of Thesis or Project may be applied toward graduation requirements. No more than six credits earned in pass/fail or workshop courses may be applied toward a graduate degree (see Graduate Catalog under "Academic Policies, Credit Limits for Pass/Fail Courses, Workshops, and Directed Research").	
TOTAL	33-36

## Master of Arts in English, **English Education**

Director M.A. in English: Matthew Hansen Liberal Arts Building, Room 205 Telephone 208 426-1215 e-mail: matthewhansen@boisestate.edu http://english.boisestate.edu/grad/

## **Degree Requirements**

Master of Arts in English, English Education	
Course Number and Title	Credits
The English Education emphasis offers a combination of English teaching methods courses, English electives, and College of Education master's level courses leading to certification for Secondary English teaching.	
Required courses in English:	
ENGL 500 Research Methods in Literary Studies <b>OR</b>	3
ENGL 554 Introduction to Research Methods in Rhetoric and Composition	
ENGL 501 The Teaching of Writing	3
ENGL 580 English Teaching: Writing, Literature,	3
and Language	
ENGL 581 Literature for Use in Junior and Senior	3
High Schools	

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Master of Arts in English, English Education (continued)	
English Electives: Courses to be selected from graduate offerings in Literature, Linguistics, English Education, Rhetoric and Composition, Creative Writing, and Technical Communication.	6
Culminating Activity. Complete ONE of the following ENGL 591 Project ENGL 593 Thesis ENGL 600 Assessment English Comprehensive Examination	3
College of Education graduate courses:	
ED-CIFS 507 Foundations of American Education	3
ED-CIFS 508 Learning and Development of Students	3
ED-CIFS 509 Curriculum, Instruction, and Assessment in Grades 6-12	3
ED-LTCY 544 Content Literacy in Secondary Schools	3
ED-SPED 550 Secondary Exceptional Needs	3
TOTAL	36
NOTE: Additional College of Education courses not included in the Master of Arts, English Education degree, but required for Idaho teaching certification: ED-TECH 202 Educational Technology ED-CIFS 561 Professional Year—I	3 1-3
ED-CIFS 550 Seminar	3
Professional Year II—ED-CIFS 565 (Junior High) <b>OR</b> ED-CIFS 566 (Senior High)	10

## Master of Arts in English, Rhetoric and Composition

Director M.A. in English: Matthew Hansen

Liberal Arts Building, Room 205

Telephone 208 426-1215

e-mail: matthewhansen@boisestate.edu http://english.boisestate.edu/grad/

## **Degree Requirements**

Master of Arts in English, Rhetoric and Composition	
Course Number and Title	Credits
Required courses:	
ENGL 561 Theories of Rhetoric and Composition	3
ENGL 554 Research Methods in Rhetoric and	3
Composition	

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Master of Arts in English, Rhetoric and Composition (cont	tinued)
Rhetoric and Composition Electives. Courses to be selected from the following:  ENGL 563 The Theory and Teaching of Basic Writing  ENGL 567 Grammar and the Teaching of Writing: Theory and Practice  ENGL 568 The Essay Tradition  ENGL 583 Selected Topics in Rhetoric and Composition  This course may be taken with different focuses for a total of three times. The following are examples of titles that might be offered: Computers and Composition  Argument and Academic Writing Rhetoric and Ethics Cultural Studies and Composition  Adult Learners and Writing/Literacy Instruction Writing Center Theory and Practice Tutoring in the Writing Classroom Rhetoric, Composition, and New Media Feminism and Composition  ENGL 590 Practicum/Internship 1-3 credits	12
English Electives: To be selected from graduate offerings in Literature, Linguistics, Rhetoric and Composition, Creative Writing and English Education. The electives may include ENGL 598 Seminar for Teaching Assistants, a maximum of six credits of ENGL 400G courses, and a maximum of three credits of independent work in ENGL 595, ENGL 596, and ENGL 696.	12
Culminating Activity: ENGL 569 Portfolio for Rhetoric and Composition <b>OR</b> ENGL 591 Project <b>OR</b> ENGL 593 Thesis	3
TOTAL	33

# Master of Arts in Technical Communication

**Director of Technical Communication:** Mike Markel

Liberal Arts Building, Room 234 Telephone 208 426-3088 or 426-1246 e-mail: mmarkel@boisestate.edu http://www.boisestate.edu/techcomm

#### General Information

Technical communication is a humanistic discipline in which people create, shape, and communicate technical information so that other people can use it safely, effectively, and efficiently. Although most of the courses in the program involve high-technology tools, the core of technical communication is clear written and oral communication. Fundamental in our approach to technical communication is ethics: the writer's understanding that the people who read and use the

information must be treated with dignity, as ends rather than merely means. Also fundamental is the writer's awareness that technical communication can affect various constituencies from co-workers to customers to the general public—and even the environment itself.

Against this backdrop of clear, ethical communication, our students learn the theory of technical communication, drawing on such disciplines as reading and writing theory, linguistics, cognitive psychology, sociology, and gender studies. Then students progress through courses in writing, editing, and ethics. A course in visual rhetoric and information design prepares students for subsequent courses in print and on-screen production. Finally, students take a course in oral communication skills, for technical communicators speak and listen far more than they write. Students also complete a 3-credit internship. In addition, there are a number of elective courses.

Students follow one of two tracks, the first of which culminates in a project or thesis, the second of which culminates in a portfolio.

## **Application and Admission Requirements**

You are encouraged to apply if you possess a bachelor's degree with a 3.0 GPA. The full application package will also include official undergraduate transcripts, three letters of reference from employers or professors, and a 1,000-word statement describing your professional goals and the ways in which the program can help you achieve them. Visit our Web site or see the Director of Technical Communication for more information on how to apply.

## **Degree Requirements**

The course of study for the Master of Arts in Technical Communication consists of a minimum of 33 hours to be chosen by you and your advisory committee from one of the two tracks described below. Each track consists of required courses and electives. To fulfill the elective requirements, you may take additional graduate courses in technical communication or another discipline; however, you may apply to the degree no more than 3 credits in subjects other than technical communication. (Note: You may not count ENGL 405G or ENGL 415G toward your degree requirements.)

Master of Arts in Technical Communication Alternative Program 1	
Course Number and Title	Credits
An introductory seminar (Introductory Seminar in Technical Communication), 21 hours of mandatory courses in technical communication, three hours of project or thesis, and three hours of internship. (If you already have professional work experience in technical communication, your advisor may permit you to substitute three additional elective credits for the internship.)	

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Master of Arts in Technical Communication Alternative Program 1 (continued)	
ENGL 511 Introductory Seminar in Technical	3
Communication	
ENGL 512 Technical Rhetoric and Applications	3
ENGL 513 Technical Editing	3
ENGL 514 Technical Communication Ethics	3
ENGL 515 Visual Rhetoric and Information Design	3
ENGL 516 Topics in Print Document Production	3
ENGL 517 Oral Communication for Technical	3
Communicators	
ENGL 521 Topics in On-screen Document Production	3
ENGL 590 Internship	3
ENGL 591 Project <b>OR</b> ENGL 593 Thesis	3
Electives (no more than 3 credits from outside technical communication)	3
TOTAL	33

Master of Arts in Technical Communication Alternative Program 2	
Course Number and Title	Credits
An introductory seminar (Introductory Seminar in Technical Communication), 21 hours of mandatory courses in technical communication, a portfolio, and three hours of internship. (If you already have professional work experience in technical communication, your instructor may permit you to substitute three additional elective credits for the internship.)	
ENGL 511 Introductory Seminar in Technical Communication	3
ENGL 512 Technical Rhetoric and Applications ENGL 513 Technical Editing	3
ENGL 514 Technical Communication Ethics	3
ENGL 515 Visual Rhetoric and Information Design	3
ENGL 516 Topics in Print Document Production	3
ENGL 517 Oral Communication for Technical Communicators	3
ENGL 521 Topics in On-screen Document Production	3
ENGL 590 Internship	3
Electives (no more than 3 credits from outside technical communication)	6
TOTAL	33

See the course descriptions for prerequisites. Selected prerequisites may be waived or taken concurrently with the consent of your committee.

You may petition your committee to be exempted from up to six hours of required course work. This petition will be evaluated on the basis of your demonstrated experience and professional competence. If you receive an exemption, you will substitute an equivalent number of elective credits. (Note that you will still be permitted to apply to your degree no more than 3 credits from outside technical communication.)

# Graduate Certificate in Technical Communication

Director of Technical Communication: Mike Markel

Liberal Arts Building, Room 234 Telephone 208 426-3088 http://www.boisestate.edu/techcomm e-mail: mmarkel@boisestate.edu

## **General Information**

The Graduate Certificate in Technical Communication is intended for students enrolled in any graduate degree program and for local professionals. A graduate student in geophysics, for instance, might wish to earn the certificate because he knows that he will be making presentations at professional conferences and writing journal articles. An accountant might wish to improve her technical communication skills to enhance her work performance. The certificate enables students to choose a unified, coherent group of courses in technical communication and related fields from other disciplines that will improve their understanding of the public role of written communication and their on-the-job skills.

## **Application and Admission Requirements**

The minimum requirement for admission to the certificate program is a baccalaureate degree from a regionally accredited college or university and admission to the Graduate College. In addition, applicants must submit to the Director of Technical Communication a 500-word statement explaining how the Graduate Certificate relates to their broader educational goals.

## **Application Procedures**

An applicant to the certificate program should follow the general application procedures for admission to a graduate program (see Application for Admission to a Graduate Program). Once the applicant's file is complete, it will be reviewed by the Director of Technical Communication, who will provide an admission recommendation to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant.

## **Certificate Requirements**

Graduate Certificate in Technical Communication	ation
Course Number and Title	Credits
Required Courses	9
ENGL 512 Technical Rhetoric and Applications 3	
ENGL 513 Technical Editing3	
ENGL 514 Technical Communication Ethics 3	
<b>Elective Courses</b>	6
Select two of the following:	
EDTECH 574 Instructional Software Development	
and Courseware Design3	
ENGL 511 Introductory Seminar in Technical	
Communication3	
ENGL 515 Visual Rhetoric and Information	
Design3	
ENGL 516 Topics in Print Document Production 3	
ENGL 517 Oral Communication for Technical	
Communicators 3	
ENGL 518 Writing Software Documentation 3	
ENGL 519 Technical Publications Management 3	
ENGL 521 Topics in On-screen Document	
Production3	
IPT 537 Instructional Design	
Students who wish to substitute an alternative course	
for one of the two listed electives may petition the	
Director of Technical Communication.	
TOTAL	15

## **Course Offerings**

**ENGL - ENGLISH** 

#### ENGL 401G ADVANCED NONFICTION WRITING (3-0-3)(F/S).

Advanced practice in nonfiction genres, and study of how writers read and learn from other writers. Experimentation with subjects, voice, organization, and style. Students may take the course twice, for a total of 6 credits. Students seeking graduate credit will produce a greater quantity and higher quality of original work, will have a separate and more extensive reading list, and will be expected to participate more fully in class activities. PREREQ: ENGL 201.

#### ENGL 405G PRINT DOCUMENT PRODUCTION (3-0-3)(F/S).

An advanced study and application of the principles of producing effective technical documents. Topics include the relationship between layout and readability, techniques for combining textual and non-textual information, and the use of desktop publishing and graphics software. Students will produce basic print documents, such as brochures, data sheets, flyers, and manual. PREREQ: ENGL 402 or PERM/INST.

#### ENGL 406G ADVANCED POETRY WRITING (3-0-3)(F/S).

Advanced practice in poetry writing, and the study of how poets read and learn from other poets. Students seeking graduate credit will produce a greater quantity and higher quality of original work, will have a separate and more extensive reading list, and will be expected to participate more fully in class activities. May be repeated for nine credit hours. PREREQ: ENGL 205 or PERM/INST.

## College of Arts and Sciences Department of English

#### ENGL 407G ADVANCED FICTION WRITING (3-0-3)(F/S).

Exploration of narrative technique, dialogue form, and the short story. Students seeking graduate credit will produce a greater quantity and higher quality of original work, will have a separate and more extensive reading list, and will be expected to participate more fully in class activities. Recommended: ENGL 206. May be repeated for nine

#### ENGL 500 RESEARCH METHODS IN LITERARY STUDIES

(3-0-3)(F/S). An introduction to research techniques and resources in advanced literary study. The course includes the use of bound and electronic reference sources, methods of bibliography and textual criticism, the significance of biographical, archival, and historical evidence in literary study, and standard conventions of scholarly documentation. PREREQ: Admission to Master of Arts in English program or PERM/CHAIR.

ENGL 501 THE TEACHING OF WRITING (3-0-3) (F,S). Theories and methods of teaching writing with focus on secondary school. Emphasis on research about the learning process in writing and the teacher's role in creating effective writing instruction. COREQ: ENGL 581.

**ENGL 502 TEACHING CREATIVE NONFICTION, POETRY,** AND FICTION WRITING (3-0-3) (F/S). Theories and practices for teaching secondary school students, college students, and others how to write in genres such as creative nonfiction, poetry, and fiction. Emphasis is on teaching in classroom and workshop settings. PREREQ: Admission to program or PERM/INST.

ENGL 505 LINGUISTICS (3-0-3) (F/S). Modern linguistic theories and their application to literature and teaching English. An examination of how various grammatical models represent the complexities of language sound, sequence, and structure. Application of theory to language at work. Alternate years. PREREQ: LING 305 or equivalent or PERM/CHAIR.

ENGL 507 SMALL PRESS PRODUCTION (3-0-3)(S). A practicum course that studies the manuscript selection and preparation, design, editing, distribution, and promotion practices of small presses with the intention of preparing students to write, design, and submit manuscripts for publication. Students acquire hands-on experience with Ahsahta Press. PREREQ: Admission to program or PERM/INST.

ENGL 508 WRITING, EDITING, AND DESIGNING FOR PROFESSIONAL ADVANCEMENT (3-0-3) (F). A writing course which studies literary journals, trade journals, and little magazines, and which looks at tradebook and electronic publication with the intention of preparing students to write, design, and submit manuscripts, as well as to prepare professional resumes and letters of application. PREREQ: Admission to program or PERM/INST.

ENGL 509 BOOK ARTS (3-0-3)(F/S). A historical survey of various aspects of bookmaking, including papermaking, typography, printing, binding, and desktop publishing, as well as book distribution/ marketing, and production of artist's and eccentric bookworks. Course culminates in production of a classroom edition of each student's original writings or art works in an appropriate format devised by the student. PREREQ: ENGL 309 or PERM/INST.

**ENGL 510 SEMINAR IN MAJOR AMERICAN OR ENGLISH** WRITER (3-0-3) (F/S). A consideration of minor and major artistic creations of an author with attention to major influences on the writer and his/her influences on others. Aspects of investigation to include

the life of the author and its relation to his/her work, the society and culture of the times, his/her place and stature in the genres in which he/she worked, his/her use or disregard of tradition, as well as an investigation of contemporary criticism and critical evaluation since the writer's time. Repeatable for credit. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

#### **ENGL 511 INTRODUCTORY SEMINAR IN TECHNICAL**

**COMMUNICATION (3-0-3) (F/S).** An introduction to the current definitions and theories of technical communication, including approaches from such related fields as rhetoric, linguistics, cognitive psychology, sociology, and philosophy. Students will also study the different job specializations within technical communication.

#### **ENGL 512 TECHNICAL RHETORIC AND APPLICATIONS**

(3-0-3)(F/S). An advanced study of technical communication for those students who are or expect to become professional technical communicators. Topics of study include modern theories of rhetoric, focusing on semantics, syntax, readability, pragmatics, and hypertext. Students will write reports, proposals, manuals, and online documents related to their own backgrounds and fields of interest. PREREO: ENGL 302 or ENGL 402 or ENGL 511 or PERM/INST.

ENGL 513 TECHNICAL EDITING (3-0-3) (F/S). An advanced course in the editing of technical documents. Major projects are related to each student's field of interest. Topics of study include the theory and ethics of editing, content editing, copy editing, developmental editing, production editing, and online editing. PREREQ: ENGL 512 or PERM/INST.

#### **ENGL 514 TECHNICAL COMMUNICATION ETHICS**

(3-0-3)(F/S). An examination of the various ethical issues inherent in the practice of technical communication. Topics include the ancient debate about the claims of philosophy and rhetoric; Kant's categorical imperative; the modern standards of rights, justice, utility, and care; the employee's obligations to the employer, the public, and the environment; and the common ethical issues faced by technical communicators, including plagiarism and copyright violation, the fair use of words and graphics, trade secrets, whistleblowing, and codes of conduct. The course will use the case study method.

**ENGL 515 VISUAL RHETORIC AND INFORMATION DESIGN** (3-0-3)(F/S). A study and application of the rhetorical elements of design, including color, line, form, images, and type. Students will be introduced to desktop publishing, graphics, and Web-authoring software. Students will apply principles of visual rhetoric in creating print and online technical documents. PREREQ: ENGL 513 or PERM/INST.

#### ENGL 516 TOPICS IN PRINT DOCUMENT PRODUCTION

(3-0-3)(F/S). Study and application of the principles and techniques involved in taking print documents from conception to production. Topics will vary but can include desktop publishing, estimating time and cost, selecting paper and binding, working with pre-press and printing companies, and selecting appropriate distribution systems. The course assumes experience with personal computers and desktop publishing software. This course may be taken twice for credit. PREREO: ENGL 515 or PERM/INST.

ENGL 517 ORAL COMMUNICATION FOR TECHNICAL COMMUNICATORS (3-0-3) (F/S). The theory and practice of several major kinds of oral communication modes used by technical communicators, including interviewing of technical experts and

## College of Arts and Sciences Department of English

clients, group discussion, and technical presentations that incorporate presentation software. PREREQ: ENGL 515 or PERM/INST.

#### ENGL 518 WRITING SOFTWARE DOCUMENTATION (3-0-3)

(F/S). The study and application of principles for creating effective print and online documentation. Topics can include content design and organization, writing style, graphic design, hypertext, and usability testing. The course also addresses strategies for working successfully as a technical communicator. PREREQ: ENGL 515 or PERM/INST.

#### ENGL 519 TECHNICAL PUBLICATIONS MANAGEMENT (3-0-3)

(F/S). Analysis and application of the principles of management and organizational behavior as they apply to the technical publications field. In a case-study environment focused on the publications process, students learn the techniques and practices of managing technical publications groups within organizational settings, while studying relevant principles of motivational theory and human behavior. PREREQ: ENGL 512 or PERM/INST.

ENGL 520 GENRE (3-0-3) (F/S). A study of a well defined literary category, such as novel, short story, epic, or tragedy. Examination of representative texts in order to discover the evolution of a specific literary genre while at the same time establishing its typical features. Repeatable for credit. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

#### ENGL 521 TOPICS IN ON-SCREEN DOCUMENT PRODUCTION

(3-0-3)(F/S). Study and application of the principles involved in designing, creating, and managing information on the screen. Topics vary but can include advanced Web design, help systems, and multimedia applications. Students practice effective hypertext and screen-design techniques from the fields of cognitive science, software psychology, and human factors. This course may be taken twice for credit. PREREQ: ENGL 515 or PERM/INST.

ENGL 522 POETRY WRITING WORKSHOP (3-0-3) (F/S). An advanced workshop in poetry. Students will write poems, submit their work for the critique of the workshop and contribute to the discussion of others' writing. Readings may be assigned to address particular issues of craft and genre. Repeatable for credit; course must be taken a minimum of four times if this is the degree candidate's genre. PREREQ: Admission to program or PERM/INST.

ENGL 523 FICTION WRITING WORKSHOP (3-0-3) (F/S). An advanced workshop in fiction. Students will write fiction, submit their work for the critique of the workshop and contribute to the discussion of others' writing. Readings may be assigned to address particular issues of craft and genre. Repeatable for credit; course must be taken a minimum of four times if this is the degree candidate's genre. PREREQ: Admission to program or PERM/INST.

#### **ENGL 524 CREATIVE NONFICTION WRITING WORKSHOP**

(3-0-3)(F/S). An advanced workshop in creative nonfiction. Students will write creative nonfiction, submit their work for the critique of the workshop and contribute to the discussion of others' writing. Readings may be assigned to address particular issues of craft and genre. Repeatable for credit; course must be taken a minimum of four times if this is the degree candidate's genre. PREREQ: Admission to program or PERM/INST.

#### ENGL 530 STUDIES IN A LITERARY PERIOD (3-0-3) (F/S).

A study of a selected chronological period of American or British literature with focus on major authors, genres, or topics. Repeatable for credit. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

#### ENGL 532 FORM AND THEORY OF POETRY (3-0-3)(F/S).

An intensive study of aspects of craft in poetry. Course will expose students to particular methods, approaches, and techniques in poetry and their aesthetic effects. May be taken twice for credit. PREREQ: Admission to program or PERM/INST.

#### ENGL 533 FORM AND THEORY OF FICTION (3-0-3)(F/S).

An intensive study of aspects of craft in fiction. Course will expose students to particular methods, approaches, and techniques in fiction and their aesthetic effects. May be taken twice for credit. PREREQ: Admission to program or PERM/INST.

**ENGL 534 FORM AND THEORY OF CREATIVE NONFICTION** 

(3-0-3)(F/S). An intensive study of aspects of craft in creative nonfiction. Course will expose students to particular methods, approaches, and techniques in creative nonfiction and their aesthetic effects. May be taken twice for credit. PREREQ: Admission to program or PERM/INST.

#### ENGL 550 LITERATURE AND CULTURE (3-0-3) (F/S). The

interaction between a body of literature and the social, economic, and political forces that characterize the culture in which it originates. The influence of culture on literary form and content. Repeatable for credit. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

#### **ENGL 554 INTRODUCTION TO RESEARCH METHODS IN** RHETORIC AND COMPOSITION (3-0-3) (F/S). An introduction

to research methods in Composition and Rhetoric and English Education, including teacher research, ethnography, and case study. Students will learn to develop research questions and choose appropriate research methods, as well as address ethical issues in conducting person-based research. PREREQ: Admission to the Master of Arts in English program or the Master of Fine Arts in Creative Writing program, or PERM/CHAIR.

#### **ENGL 561 THEORIES OF RHETORIC AND COMPOSITION**

(3-0-3) (F/S). A study of the theoretical context of current writing and writing pedagogy. Influential theories of invention, arrangement, and style, from ancient and modern times, are examined and compared. Special attention is paid to the relationships of current rhetorical and cognitive theories to writing processes and written products. PREREQ: Admission to Graduate Program or PERM/CHAIR.

#### ENGL 563 THE THEORY AND TEACHING OF BASIC

**WRITING (3-0-3)(F/S).** A study of the theory and practice of teaching basic writing. Surveys the history and politics of basic writing and remediation while focusing on specific instructional strategies, writing assignments, and assessment. Prepares students to teach basic writing at the college level, in learning centers, and in other adult learning settings. PREREQ: ENGL 561 or PERM/INST.

ENGL 567 GRAMMAR AND THE TEACHING OF WRITING: **THEORY AND PRACTICE (3-0-3) (F/S).** A study of the theory and practice of teaching grammar and usage from rhetoric and composition perspectives. The course examines a variety of approaches to instruction in grammar and conventions of discourse communities. Prepares students for teaching writing in secondary schools and two-and four-year colleges, and for further graduate study. PREREQ: ENGL 561, ENGL 598, or PERM/INST.

## College of Arts and Sciences Department of English

ENGL 568 THE ESSAY TRADITION (3-0-3) (F/S). An examination of the essay tradition from its origins in Montaigne to its continuation in the writing of modern essayists from a variety of national and ethnic backgrounds. Explores theories of the genre, paying particular attention to the ways the essay has been used to teach writing and thinking. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program, or PERM/CHAIR.

#### ENGL 569 PORTFOLIO FOR RHETORIC AND COMPOSITION

(V-0-V). Demonstrates the unique relationship between theory and practice in the field of rhetoric and composition. Must include an introductory statement, a publishable paper, a conference presentation, and a bibliographic essay; may also include teaching materials and work in other genres and styles. PREREQ: PERM/INST.

ENGL 570 LITERARY MOVEMENTS (3-0-3) (F/S). A focus on a significant literary movement, the works of its major and minor contributors, its theories and its practice, its relation to its time, its place in literary history, its influence on writers past and present. Repeatable for credit. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

ENGL 580 ENGLISH TEACHING: WRITING, LITERATURE, AND LANGUAGE (3-0-3) (F/S). Research, theories, issues, and methods of teaching secondary school English language arts; instructional planning; and integration of composition, literature, and language instruction. COREQ: ED-LTCY 544 and ED-CIFS 561.

**ENGL 581 LITERATURE FOR USE IN JUNIOR AND SENIOR** HIGH SCHOOLS (3-0-3) (F,S). A literary content course for prospective teachers of secondary school English. Primary emphasis on critical reading of literature for adolescents in secondary school. Secondary emphasis on methods of analysis appropriate to students. All genres as well as classic and popular authors. PREREQ: Two literature courses or PERM/INST. COREQ: ENGL 501.

**ENGL 582 SELECTED TOPICS IN TEACHING ENGLISH LANGUAGE ARTS (3-0-3) (F/S).** Study of current theories and topics in teaching the English Language Arts in composition, language, or literary theory of special interest to the experienced teacher. A specific focus will be announced each time the course is offered. Although targeted primarily at classroom teachers, the course may be appropriate for others who offer instruction, including technical writing trainers and teachers of literacy in GED centers, workplace literacy projects, and community education projects. Alternate years. PREREQ: ENGL 301 or ENGL 381 or ENGL 481 or teaching experience or PERM/INST.

**ENGL 583 SELECTED TOPICS IN RHETORIC AND COMPOSITION (3-0-3) (F/S).** Investigation of selected theories or topics in rhetoric and composition, drawing from areas such as composition theory; rhetorical theory/history; cultural studies; literacy, media, and race/gender/class/ethnicity studies. Although of primary interest to rhetoric and composition majors, the course may be useful for graduate teaching assistants and for classroom teachers. Repeatable for credit. PREREQ: Admission to the Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

#### ENGL 585 SELECTED TOPICS IN LINGUISTICS (3-0-3)(F/S).

An investigation of a particular topic in linguistics, drawn generally from psycholinguistics, sociolinguistics, semantics, pragmatics,

discourse, syntax, or morphology. Course work will include lecture, discussion, and a paper or project, depending on the nature of the topic. Repeatable once for credit. PREREQ: LING 305 and Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

ENGL 588 SURVEY OF CRITICAL THEORY (3-0-3)(F/S). A survey of major contemporary theories of literary criticism and their effects on literary studies. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR.

ENGL 590 INTERNSHIP (0-10-3) (F/S). For MATC students, an actual work experience during at least one semester in which the student creates a substantial body of work in technical communication for a specific audience. This body of work should demonstrate at a professional level the application of the principles learned in previous course work. MATC students may take course once for credit. For MFA students, an internship in a publishing entity, such as The Idaho Review or Ahsahta Press, MFA students may take course twice for credit.

ENGL 591 PROJECT (V-0-V). A project may include, but is not limited to, classroom-based research or construction of curriculum with related teaching materials; the project should address relationships between practice and theory and may address an appropriate audience within or beyond the academic community. In technical communication, a project may include, but is not limited to, the construction or revision of a substantial information product such as a manual or large Web site. PREREQ: Admission to candidacy and approval of the student's graduate committee.

ENGL 593 THESIS (V-0-V). A scholarly paper containing the results of original research. PREREQ: Admission to candidacy and approval of the student's graduate committee.

ENGL 597 SPECIAL TOPICS. Courses in response to student and faculty interests offered in addition to the formal courses listed above. Examples of Special Topics courses offered by the Department of English include Literature and Film, Teaching Basic Writing, and XML/XHTML.

#### ENGL 598 SEMINAR FOR TEACHING ASSISTANTS (3-0-3)(F).

Focuses on writing theory and practice, the teaching community, and the Department's English Composition courses for first semester Teaching Assistants. The seminar will provide information and support for the assistants while they learn to meet their obligations as classroom teachers. PREREQ: PERM/INST.

**ENGL 600 ASSESSMENT (Comprehensive Examination)** (3-0-3). Based on guidance from their faculty advisory committee, students prepare for and successfully complete their comprehensive essay-style examination.

#### LING - LINGUISTICS

#### LING 407G APPLIED LINGUISTICS IN TEACHING ENGLISH AS A SECOND LANGUAGE (3-0-3)(F/S)(Alternate years).

Designed to help teachers in the bilingual classroom or teachers of students of limited proficiency in speaking English to understand how to deal with the process of learning English. Focuses on identifying, defining, and remedying the specific problems that confront learners of a second language. PREREQ: LING 305.

## **Department of Geosciences**

Chair: C. J. Northrup

Math/Geosciences Building, Room 225 Telephone 208 426-1581 or 426-1631 FAX 208 426-4061 http://earth.boisestate.edu

**Full Graduate Faculty:** Warren Barrash, Shawn Benner, John Bradford, Mitchell Lyle, James McNamara, Paul Michaels, C.J. Northrup, John R. Pelton, Jennifer Pierce, Partha Routh, Mark Schmitz, Walter S. Snyder, Kasper van Wijk, Craig M. White, David Wilkins

Associate Graduate Faculty: Annette Lyle

Adjunct Graduate Faculty: William P. Clement,
Thomas M. Clemo, Vladimir I. Davydov, Virginia Gillerman,
Lee Liberty, Karen Viskupic

## **Graduate Degrees Offered**

- · Doctor of Philosophy in Geophysics
- · Doctor of Philosophy in Geosciences
- Master of Science in Earth Science
- Master of Science in Geology
- Master of Science in Geophysics
- Master of Science in Hydrologic Sciences (See Interdisciplinary Programs)
- Graduate Certificate in Geographical Information Analysis

## **Graduate Program Committee**

The Graduate Program Committee of the Department of Geosciences consists of the graduate program coordinators for geophysics, geology, and earth science education, plus the chair of the Department. The duties of the Graduate Program Committee are defined by the Department and are consistent with policies set by the University. These duties include development of recommendations for admission of prospective graduate students, decisions on transfer credits and required background courses, decisions on the award of departmental graduate fellowships and assistantships, and appointment of Supervisory Committees for graduate students.

## **Graduate College Requirements**

The general requirements of the Boise State Graduate College also govern the geophysics, geology, and earth science degree programs.

# Doctor of Philosophy in Geophysics

**Doctoral Program Coordinator:** Partha Routh Math/Geosciences Building, Room 215 Telephone 208 426-2757 e-mail: prouth@boisestate.edu

#### **General Information**

The Doctor of Philosophy in Geophysics degree requires completion of a prescribed course of study in geophysics and an area of emphasis outside of geophysics, satisfactory performance on a comprehensive examination, and independent completion of original research that results in a publicly defended dissertation that contributes significantly to geophysical knowledge.

### **Graduate Teaching and Research Fellowships**

Graduate fellowships including tuition and fee waivers are funded from three sources: appropriated state funds, endowments, and research grants and contracts. Applicants to the Ph.D. in Geophysics program who submit all documents required by the admission procedure by January 1 of any given year will be considered for a state appropriated or endowed graduate fellowship to start the following fall semester; notification of successful applicants will be during February and March. Information on graduate fellowships funded by research grants and contracts is available from the Coordinator of the geophysics doctoral program.

## **Supervisory Committee**

The Supervisory Committee is charged with general guidance of the doctoral student, including design and approval of the program of study, administration of the comprehensive examination, supervision of the dissertation research, and participation in the dissertation defense. The Supervisory Committee consists of a principal advisor who acts as chair, one member from the student's chosen area of emphasis outside of geophysics (see Credit Requirements below), and at least two additional members, all of whom must be members of the University regular or research faculty and must also be members of the Graduate Faculty. One or more additional members may be appointed when such appointments enhance the function of the Committee. In all cases, regular or research faculty members of the Department of Geosciences must constitute a majority of the Supervisory Committee.

## **Application and Admission Requirements**

Applicants are required to have a Bachelor's or Master's degree in a physical science, engineering, computer science, or mathematics from an accredited college or university. Admission will be competitive and will be based on transcripts, professional references, scores on the general test of the Graduate Record Examination (GRE), and evaluation of a technical manuscript provided by the applicant as evidence of technical writing skills. Students whose native language is not English must submit a TOEFL score of 587 or higher for the written exam and 240 or higher for the computer-based examination. Application materials should be requested from the Coordinator, Geophysics Doctoral Program, Boise State University, 1910 University Drive, Boise, ID 83725, telephone 208 426-2757 or e-mail: prouth@cgiss.boisestate.edu.

## **Degree Requirements**

Doctor of Philosophy in Geophysics	
Course Number and Title	Credits
GEOPH 501 Properties and Processes in Geophysics I GEOPH 502 Properties and Processes in Geophysics II	4 4
Geophysics elective courses approved by the supervisory committee and by the Coordinator of the geophysics doctoral program	18
Area of emphasis outside of geophysics	12
Additional courses in geophysics and/or area of emphasis	10
GEOPH 693 Dissertation (Pass/Fail)	18
TOTAL	66

## **Credit Requirements**

Courses applied to meet the 66-credit minimum requirement must be taken for a letter grade (A-F), except that GEOPH 693 Dissertation is initially graded IP (In Progress) and later graded P (Pass) or F (Fail) depending on the outcome of the dissertation defense. All geophysics electives must be graduate GEOPH courses with at least 12 credits at the 600 level. It is highly recommended that all geophysics graduate students take GEOPH 605 (Inversion Theory and Geophysical Applications) early in their program as one of their geophysics electives. Courses that comprise the area of emphasis outside of geophysics will typically be chosen from geology, physics, chemistry, engineering, computer science, or public policy, and must be approved by the Supervisory Committee. Courses taken to satisfy background requirements are not eligible to meet the credit requirements. On-campus graduate students are required to enroll for GEOPH 598 Graduate Seminar each and every time it is offered but GEOPH 598 may not be applied to meet the geophysics elective requirement.

### **Comprehensive Examination**

The objective of the comprehensive examination is to judge depth and breadth of knowledge in geophysics and the area of emphasis. The examination is to be developed and administered by the Supervisory Committee. A student must take the comprehensive examination in the semester following completion of 36 course credits that are to be applied to the program requirements (exclusive of GEOPH 693 Dissertation but inclusive of transfer credits). The outcome of the examination is determined by the Supervisory Committee and must be pass or fail. A student who fails the comprehensive examination is dismissed from the Ph.D. program.

### **Dissertation Requirements**

The dissertation must be the result of independent and original research by the student and must constitute a significant contribution to geophysical knowledge equivalent to multiple peer-reviewed publications. The style and format of the dissertation are to conform to the standards of the Department of Geosciences and the Graduate College.

#### **Dissertation Defense**

A public defense of the dissertation is scheduled after the Supervisory Committee has reviewed a draft that is considered to be nearly a final version. The date of the defense is determined jointly by the Supervisory Committee and the student and must be consistent with any guidelines provided by the Graduate College. A Defense Committee is formed that consists of a non-voting Graduate Faclty Representative (GFR) and the following voting members: the chair and members of the Supervisory Committee and an external examiner. The GFR chairs the Defense Committee and is appointed by the Dean of the Graduate College in accordance with Graduate College guidelines. The GFR must have Full Graduate Faculty status, must be from outside the student's discipline, and cannot be a member of the Supervisory Committee. The external examiner is a faculty member from another university who is a recognized expert in the field of the dissertation research and is appointed to the Defense Committee by the Dean of the Graduate College. Attendance at the defense by external examiner is not required. A written evaluation of the dissertation must be submitted by the external examiner in the event that he or she does not attend the defense. If a written evaluation is submitted, it must include a pass/fail vote and must be delivered to the chair of the defense committee at least 3 weeks prior to the defense. The written evaluation provided by the external examiner is distributed to the other members of the Defense Committee at least 2 weeks before the defense. The chair of the Defense Committee conducts the defense according to the procedure established for the Department of Geosciences by the Graduate Program Committee. A majority vote is used to decide the outcome (pass or fail). In the event of a split vote, the Dean of the Graduate College will also cast a vote after consultation with

the defense chair and the Supervisory Committee. A student who fails the defense may be permitted to try again but failure a second time will result in dismissal from the program.

### Final Approval of the Dissertation

If the defense is completed with a result of pass, the Supervisory Committee prepares a statement describing final requirements such as additions or modifications to the dissertation and any additional requirements such as archival of data. When these requirements have been met to the satisfaction of the Supervisory Committee, the approval page of the dissertation is signed by the members of the Committee.

# Doctor of Philosophy in Geosciences

Doctoral Program Coordinator: James McNamara

Math/Geosciences Building, Room 217

Telephone: 208 426-1354 FAX: 208 426-4061

e-mail: jmcnamara@boisestate.edu

#### **General Information**

Boise State University offers a Doctor of Philosophy in Geosciences through the Department of Geosciences. The degree requires completion of a prescribed course of study in geosciences, satisfactory performance on a comprehensive examination, and independent completion of original research that results in a publicly defended dissertation that contributes significantly to geoscientific knowledge.

## **Graduate Teaching and Research Fellowships**

Graduate fellowships including tuition and fee waivers are funded from three sources: appropriated state funds, endowments, and research grants and contracts. Applicants to the Ph.D. in Geosciences program who submit all documents required by the admission procedure by February 1 of any given year will be considered for a state appropriated or endowed graduate fellowship to start the following fall semester; notification of successful applicants will be during February and March. Information on graduate fellowships funded by research grants and contracts is available from the coordinator of the doctoral program in geosciences.

## **Graduate Program Committee**

The Graduate Program Committee of the Department of Geosciences consists of the graduate program coordinators for each of the graduate programs in the department, plus the chair of the Department. The duties of the Graduate Program Committee are defined by the Department and are consistent with policies set by the University. These duties include development of recommendations for admission of prospective graduate students, decisions on transfer credits

and required background courses, decisions on the award of departmental graduate fellowships and assistantships, and appointment of Supervisory Committees for graduate students.

### **Supervisory Committee**

The Supervisory Committee is charged with general guidance of the doctoral student, including design and approval of the program of study, administration of the comprehensive examination, supervision of the dissertation research, and participation in the dissertation defense. The composition of the Supervisory Committee is recommended by the Graduate Program Committee and approved and appointed by the Graduate College.

## **Application and Admission Requirements**

An applicant must follow the general application procedures for admission to a graduate program (see Graduate Admission Regulations). Applicants are required to have a Bachelor's or Master's degree in a geosciences or a related discipline from an accredited college or university. Admission will be competitive and will be based on transcripts, professional references, scores on the general test of the Graduate Record Examination (GRE), and evaluation of a letter of intent which describes the applicant's professional interests and plans for the future. Students whose native language is not English must submit a TOEFL score of 587 or higher for the written exam and 240 or higher for the computer-based examination. Application materials should be requested from the coordinator, Geosciences Doctoral Program, Boise State University, 1910 University Drive, Boise, ID 83725, telephone 208 426-1354 or email: jmcnamar@boisestate.edu.

## **Degree Requirements**

Doctor of Philosophy in Geosciences	
Course Number and Title	Credits
Geosciences courses (GEOG, GEOL, or GEOPH) approved by the supervisory committee and by the coordinator of the geosciences doctoral program	32
Additional elective courses in geosciences or related fields as approved by the supervisory committee and by the coordinator of the geosciences doctoral program	16
GEOL 600 Assessment (Comprehensive Examination)	1
GEOL 693 Dissertation (Pass/Fail)	18
TOTAL	67

#### **Graduate Seminar**

On-campus graduate students are required to enroll for GEOL 598 graduate seminar each and every semester it is offered but GEOL 598 may not be applied to meet the Geosciences elective requirement.

### Comprehensive Examination

The objective of the comprehensive examination is to judge depth and breadth of knowledge in Geosciences, and it is developed and administered by the Supervisory Committee. A student must take the comprehensive examination prior to the end of their fourth semester. The outcome of the examination is determined by the Supervisory Committee and must be one of the following: pass or fail.

#### **Dissertation Requirements**

The dissertation must be the result of independent and original research by the student and must constitute a significant contribution to geoscientific knowledge equivalent to multiple peer-reviewed publications. The style and format of the dissertation are to conform to the standards of the Department of Geosciences and the Graduate College.

#### **Dissertation Defense**

A public defense of the dissertation is scheduled after the Supervisory Committee has reviewed a draft that is considered to be nearly a final version. The Supervisory Committee and the student determine the date of the defense jointly and must be consistent with any guidelines provided by the Graduate College. The defense is conducted according to the procedure established by the Department of Geosciences and governed by the policies of the Graduate College.

## Final Approval of the Dissertation

If the defense is completed with a result of pass, the Supervisory Committee prepares a statement describing final requirements such as additions or modifications to the dissertation and any additional requirements. When these requirements have been met to the satisfaction of the Supervisory Committee, the members of the Committee sign the approval page of the dissertation.

## **Graduate College Requirements**

The general requirements of the Boise State Graduate College also govern the Doctor of Philosophy in Geosciences degree program.

## Master of Science in Earth Science

Graduate Program Coordinator: David Wilkins Math/Geosciences Building, Room 223 Telephone 208 426-2390 e-mail: dwilkins@boisestate.edu

## **General Information**

The curriculum for the Master of Science in Earth Science is targeted towards in-service teachers and stresses current developments in the earth science disciplines. In addition to subject matter knowledge, emphasis is placed on the varied methods that can be used for teaching earth science. Because of the varied backgrounds of candidates, the student's degree program can be designed to allow flexibility in choosing course offerings. Special Topics courses and seminars are frequently offered, expanding the program choices. Programs of study for each student are designed in consultation with the Earth Science Graduate Program Coordinator and the student's supervisory committee.

## **Application and Admission Requirements**

Application for admission may be made by graduates of accredited institutions holding a baccalaureate degree in earth science education, geology, or related discipline. Regular admission may be awarded to applicants who have earned a minimum grade point average of 3.0 during the last two years of academic work; admission will be based on grade point, GRE scores, and letters of recommendation. Continued enrollment in the program requires a minimum of 3.0 grade point (B) average and satisfactory progress toward the degree.

## **Degree Requirements**

Master of Science in Earth Science	
Course Number and Title	Credits
Required courses: Graduate Core ED-CIFS 503 Fundamentals of Educational Research	6
All other courses to be taken in the degree program are planned by the student and the graduate committee.	
Content Area Courses	14
Approved Electives	7
GEOL 591 Project or GEOL 593 Thesis A final comprehensive oral and/or written examination over course work and the thesis or project is required.	6
TOTAL	33

#### **Credit Requirements**

All 33 credits must be taken for a letter grade, except for GEOL 591 Project or 593 Thesis credits which will be graded Pass/Fail.

## Master of Science in Geology

**Graduate Program Coordinator:** James McNamara Math/Geosciences Building, Room 217 Telephone 208-426-1354 e-mail: jmcnamar@boisestate.edu

### **General Information**

The program leading to the degree of Master of Science (M.S.) in geology is designed to prepare students for professional careers or further graduate studies in earth, environmental, or hydrological sciences. Completion of the program requires completion of an individually tailored curriculum approved by the graduate program committee, and original research that culminates in a publicly defended thesis. Opportunities for research span a wide range of fundamental and applied science topics in earth, environmental and hydrological sciences. Students are encouraged to contact individual faculty members for further information.

## **Application and Admission Requirements**

Application for admission may be made by graduates of accredited institutions holding a baccalaureate degree in geology or related discipline. Regular admission may be awarded to applicants who have earned a minimum grade point average of 3.0 during the last two years of academic work; admission will be based on grade point, GRE scores, and letters of recommendation. Continued enrollment in the program requires a minimum 3.0 grade point (B) average and satisfactory progress toward the degree.

## **Degree Requirements**

Master of Science in Geology	
Course Number and Title	Credits
Degree requirements for the Master of Science in Geology are the same as for the Graduate College. The student must complete a minimum of 30 credits, of which 20 or more are required to be at the 500-level.	
The following courses are mandatory for the first year in residence for all students:  GEOL 601 Graduate Orientation	3
GEOL 598 Graduate Seminar  Enrollment in Graduate Seminar is required each semester of all graduate students in residence; one credit may be applied towards graduation.	1
GEOL 593 Thesis  A maximum of 6 graduate thesis credits may be applied towards graduation.	6
The student, the major professor, and the thesis committee, determine the courses recommended for each student's area of specialization. Recent students have specialized in the following areas: Biostratigraphy; Economic Geology; General Regional Geology; Environmental Geology; Hydrogeology; Neotectonics; Sedimentology; Stratigraphy; Structural Geology.	20
TOTAL	30

## **Credit Requirements**

All 30 credits must be taken for a letter grade, except for GEOL 593 Thesis credit which will be graded Pass/Fail.

## **Thesis Requirements**

A thesis representing research of sufficient quality to warrant publication in a peer-reviewed journal is required of all candidates for the Master of Science in Geology. Actual publication is not required, but is held out as a goal for all graduate students. The research results must be presented at a formal public defense, and the final written thesis must be approved by the supervisory committee, by the Coordinator of the geology graduate program, and by the Dean of the Graduate College. In order to provide sufficient time for thorough evaluation of thesis research, a student should allow 3-6 months between preparation of the first draft of the thesis and the day of the formal defense. Frequent communication between the student, the supervisory committee, and the Coordinator is essential throughout this period.

## Master of Science in Geophysics

Graduate Program Coordinator: Partha Routh

Department of Geosciences Math/Geosciences Building, Room 215 Telephone 208 426-2757 e-mail: prouth@boisestate.edu

### **General Information**

The Master of Science in Geophysics degree requires 30 total credits distributed as follows: 12 graduate geophysics course credits, 12 credits in approved science or engineering courses, and at least 6 thesis research credits leading to an approved thesis. The overall goal of the graduate geophysics program is to provide a balanced education in the following areas:

- geophysical theory and methods including the quantification of error and resolution;
- problem definition, characteristics of an acceptable scientific solution, and an understanding of the effort required to reach an acceptable solution;
- the interrelationship of geophysics with other scientific and engineering disciplines;
- oral and written technical communication;
- project management and teamwork;
- an introduction to the geoscience profession beyond the classroom including the establishment of professional contacts.

Achievement of these educational objectives requires that a graduate student be exposed to classroom and laboratory instruction, thesis research, seminars, field trips, preparation of proposals and papers, presentations at professional meetings, short-term work assignments on sponsored projects, and interaction with a wide variety of faculty, research staff, students, and off-campus scientists and engineers. Current research emphases at Boise State include the following:

- applications of surface and borehole geophysical methods to hydrogeological, environmental, and engineering problems;
- geophysical measurement of the engineering properties of earth materials;
- determination of the relationship between geophysical and hydrological parameters;
- use of marine sedimentology and borehole geophysics to study the interaction between the oceans and continental climate:
- investigation of physical process dynamics during cold season flooding.

The geophysics program is well equipped with modern digital field instrumentation and computational facilities, and is closely tied to the Center for Geophysical Investigation of the Shallow Subsurface (CGISS) at Boise State.

The Boise State University Master of Science program in geophysics interacts cooperatively with Idaho State University (ISU) in that up to 12 credits earned in approved courses at ISU can be applied to a Master of Science in Geophysics at BSU or ISU. In addition, faculty at BSU and ISU may form joint supervisory committees when expertise from outside of the student's resident institution is judged to be beneficial. These cooperative efforts by BSU and ISU add flexibility and geographic accessibility to graduate education in geophysics within Idaho.

## Graduate Assistantships, Teaching and Research Fellowships

Graduate assistantships and fellowships including tuition and fee waivers are funded from three sources: appropriated state funds, endowments, and research grants and contracts. Applicants to the M.S. Geophysics program who submit all documents required by the admission procedure by February 1 of any given year will be considered for a state appropriated or endowed graduate assistantships and fellowships to start the following fall semester; notification of successful applicants will be during February and March. Information on graduate fellowships funded by research grants and contracts is available from the Coordinator of the geophysics graduate program.

## **Supervisory Committee**

Each admitted student will be assigned a supervisory committee whose purpose is to design the program of courses, guide the student's research, conduct the thesis defense, and approve the final thesis. The supervisory committee consists of at least three members: a chair from BSU who takes on the primary advising role, and at least two members chosen in any combination from BSU, ISU, or other institutions (selection based on a direct interest in the student's research). The Coordinator of the geophysics graduate program works closely with each supervisory committee and will serve as temporary advisor to each new student until a supervisory committee can be assigned.

## **Application and Admission Requirements**

Applicants should have a B.S. or equivalent degree from an accredited institution in one of the following fields: geophysics, geology, hydrology, physics, chemistry, mathematics, or engineering. Evaluation for admission requires three personal references, transcripts from all colleges and universities attended, and scores on the GRE General Test. Students whose native language is not English must submit a TOEFL score of 587 or higher for the written exam and 240 or higher for the computer-based examination. A copy of a report resulting from a previous university course, professional position, or research experience is also requested as evidence of the applicant's ability to complete a significant

project and write an acceptable scientific report. Preference is given to those applicants whose records indicate a high probability for successful completion of publishable graduate research. Application materials should be requested from the Coordinator, Geophysics Graduate Program, Boise State University, 1910 University Drive, Boise, ID 83725.

## **Degree Requirements**

Master of Science in Geophysics	
Course Number and Title	Credits
Credit Requirements:  The Boise State University Master of Science in Geophysics requires 30 semester credits distributed as follows:	
A. GEOPH 501 Properties and Processes in Geophysics I	4
B. GEOPH 502 Properties and Processes in Geophysics II	4
C. Elective courses approved by the supervisory committee and by the Coordinator of the geophysics graduate program (at least 6 credits must be at the GEOPH 500-level or GEOPH 600-level)	16
D. GEOPH 593 Thesis (Pass/Fail)	6
TOTAL	30

## **Credit Requirements**

All 30 credits must be taken for a letter grade, except for GEOPH 593 Thesis credit which will be graded Pass/Fail. On-campus geophysics graduate students are required to take GEOPH 598 Graduate Seminar for a letter grade each and every semester it is offered. Credit for GEOPH 598 does not count toward the total degree requirement of 30 credits. Transfer credits may not be used for requirements A, B, or D. A maximum of 9 transfer credits may be applied to meet requirement C except that up to 12 credits of requirement C may be satisfied with transfer credits from the University of Idaho and/or Idaho State University. Certain courses are ineligible for requirement C including courses applied to a previously obtained degree, courses used to meet admission requirements, and courses required to remedy background deficiencies.

The purpose of requirement C is to provide an opportunity for elective courses within geophysics or in an associated field of science or engineering; these are often courses which are appropriate to a student's thesis or future employment goals. In all cases, the courses applied to meet requirement C must be approved by the student's supervisory committee and by the Coordinator of the geophysics graduate program, and the majority of the 30-credit total requirement (i.e., at least 16 credits) must be earned in residence at Boise State.

### Thesis Requirements

A thesis representing research of sufficient quality to warrant publication in a peer-reviewed journal is required of all candidates for the Master of Science in Geophysics. Actual publication is not required, but is held out as a goal for all graduate students. The research results must be presented at a formal public defense, and the final written thesis must be approved by the supervisory committee, by the Coordinator of the geophysics graduate program, and by the Dean of the Graduate College. In order to provide sufficient time for thorough evaluation of thesis research, a student should allow 3-6 months between preparation of the first draft of the thesis and the day of the formal defense. Frequent communication between the student, the supervisory committee, and the Coordinator is essential throughout this period.

## Master of Science in Hydrologic Sciences

(See Section on Interdisciplinary Programs)

# Graduate Certificate in Geographical Information Analysis

**Graduate Program Coordinator:** David Wilkins Math/Geosciences Building, Room 223 Telephone 208 426-2390 e-mail: dwilkins@boisestate.edu

## **General Information**

This certificate program is interdisciplinary in its application of geospatial technologies towards solving problems with spatial elements, and is open to graduate students of any major where geospatial information technologies and analysis may be applied. This alignment of courses is designed to meet the demands in industry and research where demonstrable literacy in these technologies and software is required.

## **Degree Requirements**

Graduate Certificate in Geographical Information Analysis	
Course Number and Title	Credits
Core Courses	6
GEOG 560 Introduction to Geographic	
Information3	
GEOG 561 Remote Sensing and Image	
Processing3	

— continued —

Graduate Certificate in Geographical Information Ana (continued)	lysis
<b>Elective Courses</b>	9
Nine credits in courses that represent a	
disciplinary or interdisciplinary focus area.	
Courses must be approved by the graduate	
program coordinator and cannot include more	
than 3 undergraduate credits. Examples of focus	
areas include Landscape Ecology, Watershed	
Processes, Geologic Hazards, Resource	
Management and Land Use, Environmental	
Quality, Crime, and Urban and Regional Planning.	
TOTAL	15

## **Course Offerings**

Additional course work will be required to receive graduate credit for undergraduate G courses.

#### GENSCI - GENERAL SCIENCE

**GENSCI 501 HISTORY OF SCIENCE (3-0-3) (F/S).** This is a survey of humanity's efforts to understand the natural world. "Ancient Science" is presented as an introduction to the evolution of science since the 16th century. "Modern Science" is presented with emphasis on the development of modern scientific thought. Historical illustrations of the nature of scientific research in the evolution of science are presented.

#### **GEOG - GEOGRAPHY**

#### GEOG 560 INTRODUCTION TO GEOGRAPHIC

**INFORMATION SYSTEMS (2-2-3) (F/S).** Designed for graduate students with no background in geographic information systems, or GIS, who wish to use these techniques in their research. Introduces the student to GIS concepts and principles. Lab fee. PREREQ: PERM/INST.

#### GEOG 561 REMOTE SENSING AND IMAGE PROCESSING

(2-2-3) (F/S). Introduces students to acquisition, interpretation, and analysis of digital imagery. Applications presented in different contexts including forestry, geology, ecology, and urban planning. Lab exercises focus on digital image processing, georeferencing, and image interpretation and analysis. Lab fee. PREREQ: GEOG 560 or PERM/INST.

#### GEOG 562 GEOGRAPHIC INFORMATION ANALYSIS (2-2-3)

**(F/S).** For graduate students with previous GIS experience or course work. Covers the operations and spatial analysis capabilities of a GIS, including spatial data models and data structure, spatial data management, and the spatial statistical analyses used to solve various problems. Lab fee. PREREQ: GEOG 561 or PERM/INST.

**GEOG 563 GEOSPATIAL PROJECT (1-6-3) (F/S).** For graduate students with extensive previous GIS experience or course work. Students will independently identify a problem, design, implement and complete a project utilizing geospatial techniques and analysis of that problem. This course and the project are intended to supplement thesis or dissertation research. Lab fee. PREREQ: GEOG 562 or PERM/INST.

**GEOG 570 (GEOL 570) EARTH SYSTEM SCIENCE AND GLOBAL WARMING (3-0-3) (F/S).** Survey of interactions among physical biogeochemical processes involved in climate and climate feed back. Explore in detail scenarios of global warming for the next century and their reliability. May be taken for GEOG or GEOL credit but not both. PREREQ: PERM/INST.

#### **GEOL - GEOLOGY**

#### **GEOL 511 ADVANCED ENVIRONMENTAL GEOLOGY**

(3-0-3)(S). Land-use planning, techniques for investigation of surficial materials and water resources. Geologic hazards, surficial deposits and their engineering and hydrologic properties, ground and surface water, waste disposal. Term reports required, field trips required. PREREQ: GEOL 221 or PHYS 220.

**GEOL 512 (CE 512) HYDROGEOLOGY (3-0-3)(F).** The study of subsurface water and its relationship to surface water, the hydrologic cycle, and the physical properties of aquifer systems. Flow nets and flow through porous and fractured media. Methods of determination of aquifer characteristics and performance and groundwater modeling. May be taken for either GEOG or CE credit, but not both. PREREQ: MATH 175

#### GEOL 516 (GEOPH 516) PHYSICAL HYDROLOGY (3-0-3)(S).

Introduction to all aspects of physical hydrology with emphasis on the dynamics of watersheds. Topics include global circulation, precipitation, evapotranspiration, snow and snowmelt, streamflow, rainfall-runoff relations, and watershed hydrology. Course may be taken for either GEOL or GEOPH credit, but not both PREREQ: GEOL 101, MATH 170.

**GEOL 517 WATERSHED PROCESSES (3-0-3) (F).** In this course we will investigate the theoretical and empirical foundations of physical processes that govern the morphology of watersheds focusing on hillslope and fluvial processes. Our objective is to extract basic physical concepts from laws and equations that are used to describe and model various geomorphic phenomena. The course will involve a mix of lectures, student led discussion, and fieldwork. PREREQ: GEOL 313, MATH 175, PHYS 211.

**GEOL 518 HYDROLOGIC MEASUREMENTS AND MODELING (3-0-3) (F) (Alternate years).** An introduction to hydrologic data acquisition techniques with an emphasis on electronic logging systems, and an overview of computer models commonly used to simulate hydrologic processes. PREREQ: GEOL 416 or PERM/INST.

**GEOL 519 (GEOPH 519) FIELD METHODS IN MARINE GEOLOGY AND GEOPHYSICS (4-0-4) (F/S/SU).** Participation in a research oceanographic cruise. Modern navigation methods, geophysical data acquisition, and sediment sampling. Offered only as research cruises are available. Will require 15-60 days at sea. May be taken for GEOL or GEOPH credit, but not both. PREREQ: PERM/INST.

#### GEOL 525 WHOLE EARTH GEOCHEMISTRY (3-0-3)(F/S).

Basic tools and topics of modern geochemistry with an emphasis on solid-earth applications. Essentials of thermodynamics, kinetics, radiogenic and stable isotopes, and trace element chemistry necessary to study Earth processes in the crust, mantle, hydrosphere and atmosphere. PREREQ: PERM/INST.

#### GEOL 526 (CE 527) AQUEOUS GEOCHEMISTRY (3-0-3)(F/S).

Basic tools and topics of aqueous geochemistry with an emphasis on low temperature processes in natural waters. Essentials of thermodynamics, kinetics, aqueous speciation, mineral-water

interaction, and elemental cycling as applied to surficial earth processes and environmental challenges. May be taken for either GEOL or CE credit, but not both. PREREQ: PERM/INST.

#### GEOL 530 (CE 530) VADOSE ZONE HYDROLOGY

(3-0-3)(F). Laboratory and field methods for characterizing physical and hydraulic properties of soils, solution of variably saturated flow problems using analytical and numerical techniques. Computer simulations of flow and transport in variably saturated soils. May be taken for either GEOL or CE credit, but not both. PREREQ: CE 412, or GEOL 412, or CE 512, or GEOL 512, or PERM/INSTR.

## **GEOL 531 REGIONAL GEOLOGY OF NORTH AMERICA** (3-0-3) (F/S). A systematic study of the geologic provinces of North

**(3-0-3)(F/S).** A systematic study of the geologic provinces of North America with special emphasis on geological relationships and tectonic evolution. Each province is investigated in terms of its structural and geologic history and mineral resources. PREREQ: Graduate status or PERM/INST.

#### GEOL 533 (CE 533) CONTAMINANT TRANSPORT (3-0-3)(S).

The fate and transport of dissolved solutes and non-aqueous phase liquids in groundwater systems. Students will analyze field data and develop conceptual models for contaminated sites. The role of engineers and hydrologists in environmental litigation will be addressed through case studies. May be taken for either GEOL or CE credit, but not both. PREREQ: CE 412, or CE 512, or GEOL 412, or GEOL 512, or PERM/INST.

**GEOL 534 GRADUATE FIELD STUDY (1-2-1) (F).** Design and completion of a narrowly-focused field investigation in the first semester of graduate study in geological sciences. Work with faculty to choose topic, guidance on data collection and presentation, scientific illustration and report writing.

**GEOL 540 TECTONICS SEMINAR (2-0-2) (F/S).** Examination of specific orogenic systems, tectonic environments, and tectonic processes. PREREQ: GEOL 314 and 323, or PERM/INST.

**GEOL 541 PLATE TECTONICS (3-0-3) (F/S).** Reviews and clarifies geologic and geophysical foundations of plate tectonic theory. Characteristics of modern tectonic environments and their use in interpreting the Earth's geologic history. Offered upon sufficient student interest. PREREQ: PERM/INST.

**GEOL 542 CURRENT LITERATURE IN STRUCTURE AND TECTONICS (1-0-1) (F/S).** Examination, presentation, and discussion of current literature in structure and tectonics. PREREQ: GEOL 314 or PERM/INST.

**GEOL 552 NATURE OF SCIENCE (3-0-3) (F/S).** Explores basic questions of how the Earth works from the perspective of the scientist. Emphasis on the conceptual approach to science. Interactive lectures and short writing assignments. Open to students with varied backgrounds. PREREQ: GEOL 103.

#### GEOL 560 VOLCANOLOGY (3-0-3)(F)(Alternate years).

Study of volcanic processes and deposits, with focus on advances in volcanology since 1980 eruption of Mt. St. Helens. Course content aimed at students desiring to improve skills in working with volcanic rocks in the context of the geologic record, as well as students interested in volcanic hazards assessment. Field trip required. PREREQ: Graduate standing in geosciences or PERM/INST.

**GEOL 561 EARTH SCIENCE TEACHING TECHNIQUES (3-0-3 or 4-0-4) (F/S).** This course is a study of the objectives, methods, and materials of instruction in Earth Sciences. Emphasis will be placed on

the preparation and presentation of lectures, laboratory exercises and field trips. This course provides the student with internship experience in the laboratory and lecture classroom. PREREQ: Graduate status or PERM/INST.

**GEOL 570 (GEOG 570) EARTH SYSTEM SCIENCE AND GLOBAL WARMING (3-0-3) (F/S).** Survey of interactions among physical biogeochemical processes involved in climate and climate feed back. Explore in detail scenarios of global warming for the next century and their reliability. May be taken for either GEOG or GEOL credit, but not both. PREREQ: PERM/INST.

#### GEOL 580 SELECTED TOPICS IN WATERSHED HYDROLOGY

(1-3 credits)(F). Detailed investigation of select hydrologic processes and applications. Topics will vary each year and may include runoff generation, snow hydrology, watershed management, hydrologic modeling, sediment transport, land-use hydrology and field methods among others. Repeatable for credit. PREREQ: PERM/INST.

**GEOL 591 PROJECT (7-3 to 0-6).** Identification and presentation of an educational need through systematic study and the fulfillment of that need by the development of a usable product; such as, an audio-visual unit, a curriculum guide or resource unit, a collection of teaching strategies, or the preparation of a handbook or computer software. Graded A through F or Pass/Fail.

**GEOL 593 THESIS (0-3 to 0-5).** The scholarly pursuit of original work on a field or laboratory project or the formulation of new and logical interpretations of existing data collected through library research. A final report suitable for presentation at a meeting of Earth Science professionals is required. PREREQ: Admission to candidacy.

**GEOL 596 DIRECTED RESEARCH (0-1 to 0-4).** Field, laboratory or library research project. Students may work on an individual problem or select a problem from a list provided by the instructor. Weekly progress meetings, final report. PREREQ: PERM/INST.

**GEOL 597 SPECIAL TOPICS (V-V-V) (F/S).** A selection of classes that deal with specialized topics and are designed for small groups of students.

**GEOL 598 GRADUATE SEMINAR (0-1 to 0-3).** The preparation and presentation of oral and written reports on topics in earth science and/or science education. Presentation of oral reports may take the form of debate. Preparation of visual aids and geologic illustrations will be emphasized. PREREQ: Admission to candidacy or PERM/INST.

**GEOL 600 ASSESSMENT (Comprehensive Examination) (0-0-1).** Culminating assessment activity comprising a comprehensive examination to judge depth and breadth of knowledge in Geosciences. Graded Pass/Fail.

**GEOL 601 GRADUATE ORIENTATION (2-0-2) (F).** General orientation to the graduate program in Geology. Introduction to the necessary forms and requirements of the program and development of technical writing skills through the preparation of abstracts, proposals for research funding, and thesis proposals. PREREQ: PERM/INST.

#### GEOL 603 (GEOPH 603) SURFICIAL PROCESSES (2-2-3)

**(F/S).** Investigation of the fundamental physics of major geomorphic, hydrologic and thermal processes operating at the surface of the Earth. The objective is to deduce basic physical behavior from mathematical laws and models used to describe various surficial phenomena. Some student-led discussion and field work required.

May be taken for either GEOL or GEOPH credit, but not both. PREREQ: GEOPH 502, or PERM/INST.

GEOL 605 ADVANCED GEOMORPHOLOGY (3-0-3)(F/S). Investigation and quantitative analysis of the processes that shape the surface of the earth. Topics include the influences of geology, hydrology, biology, climate, tectonics, and time on landscape evolution and ecosystems development. Course includes field investigations of geomorphic topics. PREREQ: PERM/INST.

GEOL 607 (GEOPH 607) PALAEOCLIMATOLOGY AND PALAEOOCEANOGRAPHY (3-0-3)(F)(Alternate years). Will survey the driving forces of atmospheric and oceanic circulation, their effect on the distribution of life on earth, and how this information can be retrieved from the geological record. May be taken for either GEOL or GEOPH credit, but not both. PREREQ: GEOL 201 or PERM/INST.

**GEOL 611 BASIN ANALYSIS (3-0-3) (S).** Study of the formation and evolution of sedimentary basins. Emphasis on the concepts and qualitative tools necessary to understand how sedimentary basins are formed, their specific stratigraphic architectures, and modern approaches to correlation. PREREQ: PERM/INST.

GEOL 615 TIME-SERIES ANALYSIS OF THE GEOLOGIC **RECORD** (3-0-3) (F/S). Analysis of modern methods for the quantification of time in the geologic record, including bio-, chemo-, magneto- and physical stratigraphy, high precision geochronology, and orbital tuning. Application to elucidating the records of tectonic reconstruction, paleobiological evolution, and paleoclimate change. PREREQ: PERM/INST.

GEOL 623 (CE 623) (GEOPH 623) ADVANCED HYDROGEOLOGY (3-0-3) (F). Treatment of groundwater occurrence and flow, theory fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls, Course may be taken for either GEOL, GEOPH, or CE credit, but not for more than one department. PREREO: MATH 275, MATH 333, and GEOL 412 or GEOL 512 or CE 412 or CE 512, or PERM/INST.

GEOL 624 (CE 624) (GEOPH 624) APPLIED HYDROGEOLOGY (3-0-3)(S). Quantitative determination of hydrologic parameter values and groundwater flow conditions. Conceptual models and geologic context, boundary condition, analytical and numerical solution techniques, measurement methods, applications to engineering and environmental problems. Course may be taken for either GEOL, GEOPH, or CE credit, but not for more than one department. PREREQ: GEOL 623 or GEOPH 623 or CE 623 or PERM/INST.

GEOL 632 (GEOPH 632) INTERPRETATION OF DEEP SEA SEDIMENTS (3-0-3)(F/S). Reconstruction of past ocean conditions through interpretation of deep sea sediments in terms of their composition and depositional environment. Links to ocean circulation, chemistry, and biological productivity. Course may be taken for either GEOL or GEOPH credit, but not both. PREREQ: PERM/INST.

#### GEOL 636 STABLE ISOTOPE GEOCHEMISTRY (3-0-3) (F/S).

Comprehensive overview of theory, methods, and applications of stable isotope geochemistry to a wide range of earth science problems. PREREQ: PERM/INST.

GEOL 638 RADIOGENIC ISOTOPE GEOCHEMISTRY AND **GEOCHRONOLOGY (3-0-3) (F/S).** Comprehensive overview of theory, methods, and applications of radiogenic isotope geochemistry and geochronology to a wide range of earth science problems. PREREQ: PERM/INST.

GEOL 641 (GEOPH 641) GEODYNAMICS (3-0-3) (F/S). Identifies and quantitatively analyzes the processes governing the dynamic behavior of Earth at a variety of spatial and temporal scales. Course can be taken for GEOPH or GEOL credit, but not both. PREREQ: PERM/INST.

#### **GEOL 643 ADVANCED STRUCTURAL GEOLOGY**

(2-3-3)(F)(Alternate years). Geometric, kinematic and dynamic analysis of plutonic rocks and metamorphic tectonites. Structural elements in plutons, their formation and interpretation as indicators of the tectonic environment during emplacement. Mesoscopic and microscopic study of rock fabrics, the mechanisms and processes of their formation and deformation, and their use as kinematic and strain indicators. PREREQ: PERM/INST.

GEOL 645 PHYSICS AND CHEMISTRY OF MOUNTAIN **BUILDING** (3-0-3) (F/S). An introduction to modern methods for analyzing the pressure-temperature-time paths and histories of metamorphic terrains comprising modern and ancient mountain belts; subjects to include quantitative geothermobarometry, chemical diffusion and closure temperature theory, geochronology and thermochronology, the thermal structure and evolution of mountain belts. PREREQ: PERM/INST.

GEOL 647 ADVANCED IGNEOUS PETROLOGY (3-0-3)(S)(Odd years). A study of igneous rocks with emphasis on their origin and the processes responsible for their diversity. Exercises will make use of the petrographic microscope and the departmental computer facilities. A field trip is required. PREREQ: PERM/INST.

GEOL 651 BIOGEOCHEMICAL CYCLES (3-0-3) (F/S). A detailed investigation of the global cycling of elements and water and the coupled physical, chemical and biological processes and controls. PREREO: PERM/INST.

#### GEOL 653 GROUNDWATER MICROBIOLOGY (3-0-3) (F/S).

An exploration of the interface of microbiology and hydrogeology and aqueous geochemistry with an emphasis microbial processes and ecology and redox transformations produced by natural and contaminant-related disequilibrium in the subsurface. PREREQ: PERM/INST.

GEOL 655 COUPLED BIOGEOCHEMICAL KINETICS AND **TRANSPORT** (3-0-3) (F/S). A detailed investigation of the smaller scale (kilometer to micrometer) flow of elements and water through coupled physical, chemical and biological processes, with an emphasis on the interplay of mass and energy transfer rates and biogeochemical kinetic constraints. PREREQ: PERM/INST.

#### GEOL 657 REACTIVE TRANSPORT MODELING (3-0-3) (F/S).

The application of geochemical and reactive transport computer codes to coupled flow and reactive transport problems with an emphasis on subsurface systems. PREREQ: PERM/INST.

GEOL 693 DISSERTATION (0-V-V). Original research and analysis of results culminating in the preparation of a dissertation. Graded Pass/Fail.

#### **GEOPH - GEOPHYSICS**

GEOPH 501 PROPERTIES AND PROCESSES IN GEOPHYSICS I (3-2-4)(F). Study of the physical processes that operate within the solid Earth and the subsurface properties that govern those

processes. Emphasis on mechanical deformation and seismic and electromagnetic wave propagation. Required core class for all geophysics graduate students. PREREQ: GEOPH 303 or PERM/INST.

**GEOPH 502 PROPERTIES AND PROCESSES IN GEOPHYSICS II** (3-2-4)(S). Study of the physical processes that operate within the solid Earth and the subsurface properties that govern those processes. Emphasis on thermal processes and the dynamics of fluids. Required core class for all geophysics graduate students. PREREQ: GEOL 412 and GEOPH 501; or PERM/INST.

**GEOPH 515 STRATIGRAPHIC INTERPRETATION OF SEISMIC DATA (3-0-3) (S).** Seismic sequence and seismic facies analysis, isochronous reflections, seismic stratigraphy of depositional systems, sea level cycles, seismic modeling, hydrocarbon indicators, lithology from velocity and seismic amplitude variation with offset, use of shear waves and vertical seismic profiling. Interpretation project involving seismic modeling. PREREQ: GEOPH 465 or GEOPH 565.

**GEOPH 516 (GEOL 516) PHYSICAL HYDROLOGY (3-0-3)(S).** Introduction to all aspects of physical hydrology with emphasis on the dynamics of watersheds. Topics include global circulation, precipitation, evapotranspiration, snow and snowmelt, streamflow, rainfall-runoff relations, and watershed hydrology. Course may be taken for either GEOL or GEOPH credit, but not both PREREQ: GEOL 101, MATH 170.

**GEOPH 517 WATERSHED PROCESSES (3-0-3) (F).** In this course we will investigate the theoretical and empirical foundations of physical processes that govern the morphology of watersheds focusing on hillslope and fluvial processes. Our objective is to extract basic physical concepts from laws and equations that are used to describe and model various geomorphic phenomena. The course will involve a mix of lectures, student led discussion, and fieldwork. PREREQ: GEOL 313, MATH 175, PHYS 211.

**GEOPH 519 (GEOL 519) FIELD METHODS IN MARINE GEOLOGY AND GEOPHYSICS (4-0-4) (F/S/SU).** Participation in a research oceanographic cruise. Modern navigation methods, geophysical data acquisition, and sediment sampling. Offered only as research cruises are available. Will require 15-60 days at sea. May be taken for GEOL or GEOPH credit, but not both. PREREQ: PERM/INST.

#### GEOPH 525 EARTHQUAKE SEISMOLOGY (3-0-3)(F).

Earthquake source theory, waves from a point dislocation source in a radially symmetric Earth, reflection and refraction at a plane interface, surface waves, free oscillations, theory of the seismograph, interpretation of seismograms, travel-time curves, hypocenter determination, fault-plane solutions, magnitude, properties of the Earth's interior, seismotectonics and seismic hazards. Field and laboratory exercises. PREREQ: GEOL 101, MATH 333.

**GEOPH 535 TECTONOPHYSICS (3-0-3) (F).** Application of physics and mathematics to investigation of tectonic processes. Basic continuum mechanics, heat transfer, and fluid mechanics. Elastic flexure of the lithosphere, cooling of oceanic lithosphere, thermal and subsidence history of sedimentary basins, frictional heating on faults, thermal structure of subducted lithosphere

**GEOPH 540 ELECTROMAGNETIC AND SEISMIC WAVE PROPAGATION (3-0-3) (S).** Derivation of wave equations and solutions in idealized media including layered media. Source effects. Attenuation in earth materials. Numerical computation of wave fields including finite-element and finite-difference methods. Computer

laboratory exercises. PREREQ: GEOPH 301, MATH 333. Offered alternate years.

**GEOPH 555 GRAVIMETRIC AND MAGNETIC METHODS (2-2-3) (F/S).** Comprehensive discussion of modern gravimetric and magnetic methods of subsurface investigation. Applications to exploration geology (mining and petroleum), engineering geology, hydrogeology, and crustal geology. PREREQ: GEOL 101, GEOPH 303 or PERM/INST.

# **GEOPH 560 ELECTRICAL AND ELECTROMAGNETIC METHODS (2-2-3) (F/S).** Comprehensive discussion of modern electrical and electromagnetic methods of subsurface investigation, including ground penetrating radar. Applications to exploration geology (mining and petroleum), engineering geology, hydrogeology,

and crustal geology. PREREQ: GEOL 101, GEOPH 303 or PERM/INST.

**GEOPH 565 SEISMIC METHODS (2-2-3) (F/S).** Comprehensive discussion of modern seismic methods of subsurface investigation. Applications to exploration geology (mining and petroleum), engineering geology, hydrogeology, and crustal geology. PREREQ: GEOL 101, GEOPH 303 or PERM/INST.

GEOPH 575 GEOPHYSICAL APPLICATIONS OF DIGITAL SIGNAL PROCESSING (2-2-3) (F/S). Review of digital linear system theory. Digital representation of geophysical data. Geophysical applications of convolution, fast-Fourier transform (FFT), correlations, least squares filters, deconvolution, multi-channel and two-dimensional operations. Emphasis is on processing of seismic reflection data, potential field maps, and earthquake seismograms. Computer laboratory exercises. PREREQ: GEOPH 301 or GEOPH 305, EE 222 or PERM/INST.

**GEOPH 603 SURFICIAL PROCESSES (2-2-3) (F/S).** Investigation of the fundamental physics of major geomorphic, hydrologic, and thermal processes operating at the surface of the Earth. The objective is to deduce basic physical behavior from mathematical laws and models used to describe various surficial phenomena. Some studentled discussion and field work required. PREREQ: GEOL 313, GEOPH 502; or PERM/INST.

**GEOPH 605 INVERSION THEORY AND GEOPHYSICAL APPLICATIONS (3-0-3) (F).** Application of the concepts of inverse theory to problems in geophysics and geophysical imaging. Continuous (integral) and discrete methods, with emphasis on latter. Review of linear algebra, eigenvalue decomposition, basis functions, basis vectors, metrics, objective functions, transformation and representation, error analysis, linear and nonlinear inverse methods, gradient descent methods, grid searches, simulated annealing. Computer laboratory exercises. PREREQ: MATH 301.

**GEOPH 607 (GEOL 607) PALAEOCLIMATOLOGY AND PALAEOOCEANOGRAPHY (3-0-3) (F) (Alternate years).** Will survey the driving forces of atmospheric and oceanic circulation, their effect on the distribution of life on earth, and how this information can be retrieved from the geological record. May be taken for either GEOL or GEOPH credit, but not both. PREREQ: GEOL 201 or PERM/INST.

**GEOPH 610 GEOPHYSICAL METHODS IN GEOTECHNICAL ENGINEERING (2-2-3) (F/S).** Application of geophysical methods to problems in geotechnical engineering including in situ measurement of the mechanical properties of soil and rock, depth and rippability of bedrock, prediction of seismic ground amplification, nondestructive testing of foundations and roadways, location of underground utilities,

and detection of tunnels, caves, impending sinkholes or collapse features, and fracture zones. Scheduled offering based on student interest. PREREQ: GEOPH 305, CE 360, GEOPH 605; or PERM/INST.

**GEOPH 613 GEOPHYSICAL METHODS IN GROUNDWATER HYDROLOGY (2-2-3) (F/S).** Application of geophysical methods to problems in groundwater hydrology including in situ estimation of aquifer parameters, evaluation of groundwater resources, delineation of thermal and chemical pollution of groundwater, and mapping of salt water intrusion. Scheduled offering based on student interest. PREREQ: GEOPH 305, GEOL 412, GEOPH 605; or PERM/INST.

**GEOPH 623 (CE 623) (GEOL 623) ADVANCED HYDROGEOLOGY (3-0-3) (F).** Treatment of groundwater occurrence and flow, theory fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls. May be taken for either GEOL, GEOPH, or CE credit, but not for more than one department. PREREQ: MATH 275, MATH 333, and GEOL 412 or GEOL 512 or CE 412 or CE 512, or PERM/INST.

**GEOPH 624 (CE 624) (GEOL 624) APPLIED HYDROGEOLOGY (3-0-3) (S).** Quantitative determination of hydrologic parameter values and groundwater flow conditions. Conceptual models and geologic context, boundary condition, analytical and numerical solution techniques, measurement methods, applications to engineering and environmental problems. May be taken for either GEOL, GEOPH, or CE credit, but not for more than one department. PREREQ: GEOL 623 or GEOPH 623 or CE 623 or PERM/INST.

**GEOPH 630 ESTIMATION OF EARTHQUAKE GROUND MOTION (2-2-3) (F/S).** Procedures for estimation of earthquake ground motion for applications such as the siting and design of critical facilities, city and land use planning, building codes, and evaluation of insurance needs. Topics include seismicity, seismotectonic features, regional seismic attenuation, ground motion parameters, response spectra, local amplification, and estimation of uncertainty. Students interested in earthquake ground motion are also encouraged to consider GEOPH 610 as a related course. Scheduled offering based on student interest. PREREQ: GEOL 314, GEOPH 525; or PERM/INST.

**GEOPH 632 (GEOL 632) INTERPRETATION OF DEEP SEA SEDIMENTS (3-0-3)(F/S).** Reconstruction of past ocean conditions through interpretation of deep sea sediments in terms of their composition and depositional environment. Links to ocean

circulation, chemistry, and biological productivity. May be taken for either GEOL or GEOPH credit, but not both. PREREQ: PERM/INST.

**GEOPH 633 CLIMATE CHANGE AND WATER RESOURCES** (2-2-3) (F/S). Review of the current understanding of climate change with emphasis on the known causes and critical evaluation of historical and prehistoric data. Techniques for climate prediction and verification; common predictions of various climate models. Extension of climate predictions to impacts on groundwater resources. Scheduled offering based on student interest. PREREQ: PERM/INST.

**GEOPH 641 (GEOL 641) GEODYNAMICS (3-0-3) (F/S).** Identifies and quantitatively analyzes the processes governing the dynamic behavior of Earth at a variety of spatial and temporal scales. Offered upon sufficient student interest. May be taken for GEOPH or GEOL credit, but not both. PREREQ: PERM/INST.

**GEOPH 650 DESIGN OF GEOPHYSICAL WASTE SITE CHARACTERIZATION PROGRAMS (2-2-3) (F/S).** Application of design principles to geophysical characterization of sites for landfills and hazardous waste disposal. Discussion includes an introduction to governmental policies, procedures, and regulations. Scheduled offering based on student interest. PREREQ: GEOPH 305, CE 320, GEOL 412, GEOPH 605; or PERM/INST.

#### GEOPH 653 DESIGN OF GEOPHYSICAL MONITORING SYSTEMS FOR SURFACE OR SUBSURFACE PROCESSES

**(2-2-3) (F/S).** Application of design principles to in situ geophysical monitoring systems for time-dependent surface or subsurface processes such as slope instabilities and migration of contaminants in groundwater. Scheduled offering based on student interest. PREREQ: GEOPH 305-305G, GEOPH 502, GEOPH 605; or PERM/INST.

**GEOPH 680 SELECTED TOPICS IN GEOPHYSICAL DATA ANALYSIS (2-2-3) (F/S).** Theory and implementation of one or more methods of geophysical data analysis. Methods are chosen based on class interest from the large number of modern processing, modeling, and statistical methods. Scheduled offering based on student interest. PREREQ: GEOPH 605 or PERM/INST.

#### **GEOPH 693 DISSERTATION**

**Idaho State University Courses:** 

GEOL 648 Research Problems GEOL 650 Thesis

## **Department of Mathematics**

#### Chair: Alan Hausrath

Math/Geosciences Building, Room 235 Telephone 208 426-1172 FAX 208 426-1356 http://math.boisestate.edu e-mail: office@math.boisestate.edu

Full Graduate Faculty: Tomek Bartoszynski, Stephen Brill, Douglas Bullock, Alex Feldman, Alan Hausrath,

Randall Holmes, Uwe Kaiser, Margaret Kinzel, Joanna Kania-Bartoszynska, Otis Kenny, Charles Kerr, Jodi Mead, Kathleen Rohrig, Marion Scheepers, Mary Jarratt Smith, Sharon Walen

Associate Graduate Faculty: Cynthia Hernon, Kyungduk Ko, Jaechoul Lee, Justin Moore, Leming Qu, Barbara Zubik-Kowal

## **Graduate Degrees Offered**

- Master of Science in Mathematics
- Master of Science in Mathematics Education

## Master of Science in Mathematics

Graduate Program Coordinator: Uwe Kaiser Math/Geosciences Building, Room 238 Telephone 208 426-2653 e-mail: kaiser@math.boisestate.edu

#### General Information

The Master of Science in Mathematics degree provides a solid foundation in the theoretical and applied aspects of mathematics and the opportunity for concentration in an area of special interest. Students complete a required core sequence in mathematics and choose electives from a selection of graduate courses that reflect faculty expertise. The choice of culminating activity depends on student goals and may be a comprehensive examination, a project, or a thesis. Students interested in applying for a graduate teaching or research assistantship should contact the graduate program coordinator for further information.

## **Application and Admission Procedures**

An applicant must follow the general application procedures for degree-seeking students (see the Graduate Admission Regulations section of this catalog) and must (1) arrange to have three letters of recommendation submitted directly by the references to the graduate program coordinator and (2) submit GRE general test scores. In addition, all applicants interested in consideration for a graduate teaching assistantship must submit scores for the GRE subject test in mathematics. Applicants whose native language is not English must submit TOEFL scores and may be interviewed if applying for a graduate teaching assistantship. Once the file for an

applicant is complete, it will be evaluated by the Mathematics Graduate Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the dean of the Graduate College who will make the final admission decision and notify the applicant.

Conditions for Admission. The conditions for admission are the minimum admission requirements of the Graduate College (see the Graduate Admission Regulations section of this catalog) where the required baccalaureate degree must be in mathematics or a closely related field involving substantial course work in mathematics. These conditions are necessary for admission to the program but do not guarantee admission.

## **Supervisory Committee**

Each admitted student intending to do a thesis will be assigned a three-member supervisory committee consisting of a major advisor who serves as chair and two additional members. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study. All other admitted students will be assigned an advisor who carries out the same role. The Mathematics Graduate Committee maintains oversight of the program by monitoring the academic progress of each student and the performance of the graduate teaching assistants.

## **Degree Requirements**

The Master of Science in Mathematics degree requires completion of a two-course graduate core sequence in mathematics, a prescribed number of additional graduate courses, and a culminating activity that may be a comprehensive examination, a project, or a thesis. An individual program may include no more than 10 credits representing dual-listed courses and G-courses. All courses must be approved for application to the degree requirements by the supervisory committee working within constraints developed by the Mathematics Graduate Committee.

Master of Science in Mathematics	
Course Number and Title	Credits
Required core graduate mathematics courses:  MATH 515 Real Analysis	6
Additional graduate courses and a culminating activity chosen from one of the following possibilities:  Comprehensive Examination  Eight courses totaling at least 24 credits	24-25
TOTAL	30-31

Comprehensive Examination. The comprehensive examination consists of two written two-hour tests (one test covering the content of MATH 515 and MATH 516 and one test covering the content of another two related courses) and a one-hour oral test over material drawn from any of the courses completed by the student. These three tests cannot be taken until after the student is admitted to candidacy and must be taken in the same semester.

**Project.** The project must be related to the internship experience and must be presented and discussed at a public oral presentation.

**Thesis.** The thesis must be an original contribution by the student to mathematical knowledge. The student must present and defend the thesis research at a final oral examination.

## Master of Science in **Mathematics Education**

Graduate Program Coordinator: Sharon Walen Math/Geosciences Building, Room 233 Telephone 208 426-4095 e-mail: swalen@boisestate.edu

## **General Information**

The curriculum of the Master of Science in Mathematics Education is designed to enhance the preparation of middle school, junior high school, and high school mathematics teachers. Since high quality preparation of teachers requires the integration of mathematical content and pedagogy, courses within the program are designed to extend candidates' understanding of both mathematical content and issues related to the teaching and learning of that content. Because of the varied backgrounds of the candidates, a student's course of study will be individually designed in consultation with the graduate committee to expand his or her existing knowledge and to assist the candidate in situating his or her particular grade-level content within the larger body of mathematics.

Because of the differing goals of candidates for the degree, there are two options available to students. The High School option is available to all candidates who meet admission requirements and the Junior High School option, directed primarily at junior high school and middle school teachers, is available to all candidates meeting admission requirements except those holding Standard Certification in Mathematics.

This degree will not lead to certification in Mathematics. Persons seeking secondary certification should consult with the Associate Chair of the Department of Mathematics to design a program leading to certification.

## **Application and Admission Requirements**

An applicant should follow the general application procedures for graduate degree-seeking students (see the Graduate Admission Regulations section of this catalog). A candidate's

letter of application should indicate the desired program and area of specific interest within mathematics education. In addition, an applicant must arrange to have three letters of recommendation submitted directly by the references to the Graduate Program Coordinator. Once the applicant's file is complete, it will be evaluated by the Mathematics Education Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the Dean of the Graduate College. Provisional admission may be granted to students whose background is deemed deficient. In the case of a recommendation for provisional admission, the Committee will also recommend the stipulations that must be satisfied by the student to advance to regular status. The Dean will make the final admission decision and notify the applicant and the Committee.

**Conditions for Admission.** The conditions for admission are the minimum admission requirements of the Graduate College (see the Graduate Admission Regulations section of this catalog) where the required baccalaureate degree must be in mathematics secondary education, mathematics, elementary education or a closely related field. These conditions are necessary for admission but do not guarantee admission.

## **Supervisory Committee**

The Mathematics Education Committee will assign each admitted student intending to do a thesis a three-member supervisory committee consisting of an advisor who will serve as chair and two additional members. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study, including choice of course work to meet the degree requirements, and design, execution, and final evaluation of the thesis. All other admitted students will be assigned an advisor who carries out the same role. The Mathematics Education Committee maintains oversight of the program by monitoring the academic progress of each student.

## **Degree Requirements**

General M. S. requirements as stated in Boise State University's Graduate Catalog apply. Any transfer credits, whether from another university or from another graduate program at Boise State University, must be approved by the Mathematics Education Committee. A 400/500 cross-listed course cannot apply towards the degree if already taken for an undergraduate degree.

The Master of Science in Mathematics Education requires course work and a culminating experience consisting of either a thesis or a project.

**Thesis Option.** The thesis option is for those students particularly interested in research and who may want to pursue a doctorate in the future. It requires 30-33 graduate credits comprised of at least 27 course credits and 3-6 credits of thesis work. The thesis must be an original contribution by the student to the state of mathematics education or mathematical knowledge. Each student choosing the thesis

option must pass a public oral defense of the completed thesis.

**Project Option.** The project option is designed for most practicing teachers. It requires 30-33 graduate credits comprised of at least 27 course credits and a 3-6 credit project. Each student choosing the project option must give a public oral presentation about the completed project.

Course Number and Title	Credits
Required Mathematics Education Courses:  MATHED 510 Mathematics Curriculum 7-12	7
Required Education Courses:  ED-CIFS 503 Fundamentals of Educational Research	6
All other courses to be taken in the degree program will be planned by the student and the graduate committee. It is expected that this schedule of courses will extend the candidate's mathematical preparation; therefore, content for which the candidate has received prior credit toward a degree may generally not be repeated.	
Choose ONE of the following options: <b>High School Option</b> MATH Content Courses:  Courses with a MATH prefix less than 500 require the G option	8
All candidates who do not have content in their previous education equivalent to MATH 254, MATH 360, or MATH 361 must take a statistics course equivalent to one of these. (This requirement is in addition to the required 8 credits of MATH.)  Junior High School Option  MATH OR MATHED Content Courses:  Must include at least one course with MATH prefix, G option permitted.  Must include one of:  MATHED 523 The Teaching of Algebra	
Free Electives: MATHED, Education, or another area (MATH G option permitted)	6

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Master of Science in Mathematics Education (continued)	
Project or Thesis in MATH or MATHED	3-6
TOTAL	30-33

Note: The total number of G credits may be no more than one-third of the total credits.

## **Course Offerings**

#### **MATH - MATHEMATICS**

Additional work will be required to receive graduate credit for undergraduate G courses.

Graduate offerings in mathematics are limited to those courses for which there is sufficient student demand as determined by the Department of Mathematics.

#### MATH 490G MATHEMATICS IN SECONDARY SCHOOLS

**(3-0-3)(F).** Objectives, content, and methods of secondary school mathematics programs. PREREQ: MATH 270 and six hours of mathematics completed at or above the 300-level or PERM/INST.

#### MATH 501 FOUNDATIONS OF MATHEMATICS (3-0-3)(SU).

An introduction to the language and methods of reasoning used throughout mathematics, and to selected topics in discrete mathematics. May not be used for the master's degree in Mathematics. PREREQ: MATH 143, MATH 147.

#### MATH 502 LOGIC AND SET THEORY (3-0-3)(S)(Even years).

This course is structured as three five-week components: formal logic, set **theory**, and topics to be determined by the instructor. The logic component will include: formalization of language and proof, the completeness theorem, the Lowenheim-Skolem theorem. The set theory component will include: cardinality, Cantor's theorem, well orderings, ordinals, the transfinite recursion theorem, the Axiom of Choice and its equivalents. PREREQ: MATH 314.

MATH 505 ABSTRACT ALGEBRA (3-0-3) (F) (Odd years). Topics in group theory, ring theory and field theory with emphasis on finite and solvable groups, polynomials and factorization, extensions of fields. PREREQ: MATH 301 and MATH 305.

MATH 506 ADVANCED ALGEBRA (3-0-3) (S) (Even years). The study of algebraic topics taken from mappings, semi-groups, groups, Sylow Theorems, group actions, rings, ascending and descending chain conditions, polynomial rings, fields, field extensions, Galois theory, Modules, Tensor products. PREREQ: MATH 405 or MATH 505.

#### MATH 507 COMPUTATIONAL NUMBER THEORY

(3-0-3)(S)(Odd years). Foundations and contemporary applications of number theory including basic concepts of computational mathematics (probabilistic algorithms versus deterministic algorithms, computational complexity), fundamental algorithms, fundamental hypothesis of computational number theory – the Extended Riemann Hypothesis, quantifying number theoretic results, open problems, and applications. PREREQ: MATH 306.

#### MATH 509 FOUNDATIONS OF PUBLIC KEY CRYPTOLOGY

**(3-0-3)(S)(Even years).** One-way functions, pseudo-random number generators, and zero-knowledge proofs. Applications to encryption schemas whose security is based on computing the order of a group, encryption schemas whose security is based on solving an equation in a group, signature schemas. PREREQ: MATH 305 or MATH 306.

#### MATH 511 INTRODUCTION TO TOPOLOGY (3-0-3)(S)(Even

**years).** Sets, metric and topological spaces, product and quotient topology, continuous mappings, connectedness and compactness, homeomorphisms, fundamental group, covering spaces. PREREQ: MATH 314.

#### MATH 512 ALGEBRAIC TOPOLOGY (3-0-3)(S)(Odd years).

The first part of the course covers basic concepts of algebraic topology including polyhedra, cell and CW complexes, homology theory and homotopy theory, covering spaces, van Kampen and Mayer-Vietoris theorems and Hurewicz theorem. The second part of the course will be devoted to optional topics from advanced topology, determined by student and instructor interests. PREREQ: MATH 301 and MATH 411 or MATH 511.

#### MATH 513 DIFFERENTIABLE MANIFOLDS (3-0-3)(F)(Even

**years).** Survey of differential topology and geometry, manifolds, vector bundles, transversality, isotopy, connections, curvatures. Special topics could be characteristic classes, cobordism theory, immersion theory, the Gauss-Bonnet theorem. PREREQ: MATH 275, MATH 333 and MATH 414 or MATH 514.

**MATH 514 ADVANCED CALCULUS (4-0-4)(F).** Infinite series, sequences and series of functions, uniform convergence, theory of integration (Riemann and Stieltjes), further topics as time permits. PREREQ: MATH 275, MATH 301, MATH 314.

MATH 515 REAL ANALYSIS (3-0-3) (S). Introduction to the fundamental elements of real analysis and a foundation for writing graduate level proofs. Topics may include: Banach spaces, Lebesgue measure and integration, metric and topological spaces. The exact content is to be determined by the instructor. PREREQ: MATH 414 or MATH 514.

MATH 516 FUNCTIONAL ANALYSIS (3-0-3) (F). Introduction to the fundamental elements in functional analysis relevant to the following areas of mathematics: differential equations, mathematical physics, numerical analysis, set theory, and topology. Topics may include Banach spaces, Hilbert spaces, Fourier analysis, and operator theory. The exact content is to be determined by the instructor. PREREQ: MATH 414 or MATH 514.

#### MATH 526 COMPLEX VARIABLES (3-0-3)(F)(Odd years).

Proofs and applications of basic results of complex analysis. Topics include the Cauchy integral formulas and the residue theorem, the Riemann mapping theorem and conformal mappings, infinite products. Special topics included could be: value distribution theory, Riemann surfaces, Fourier and Laplace theory, complex differential equations. PREREQ: MATH 314 and MATH 326.

#### MATH 533 ORDINARY DIFFERENTIAL EQUATIONS (3-0-3)(S)

(**Odd years**). Theory of linear and nonlinear ordinary differential equations and their systems. Properties of solutions including existence, uniqueness, asymptotic behavior, stability, singularities and boundedness. Initial and boundary value problems, eigenvalues, eigenfunctions, power series solutions, Green's functions, Sturm-Liouville problems. PREREQ: MATH 333.

#### MATH 534 DYNAMICAL SYSTEMS (3-0-3)(F)(Odd years).

Dynamical systems theory for both linear and nonlinear systems. Topics may include Poincare-Bendixson theory, Poincare maps, attractors, structural stability, elementary bifurcations and chaos. Programming assignments. PREREQ: MATH 275 and MATH 333.

#### MATH 536 PARTIAL DIFFERENTIAL EQUATIONS (3-0-3)(F)

**(Even years).** Theory of partial differential equations and boundary value problems with applications to the physical sciences and engineering. Detailed analysis of the wave equation, the heat equation, and Laplace's equation using Fourier series and other tools. PREREQ: MATH 333 or MATH 433 or MATH 533.

#### MATH 537 APPLIED MATHEMATICS (3-0-3)(F)(Even years).

Survey of mathematical models for problems in the applied sciences and engineering, coming from areas such as fluid dynamics, solid mechanics, and electromagnetism. Ordinary and partial differential equations modeling physical problems will be studied. Mathematical techniques may include perturbation analysis, calculus of variations, stability theory and simple numerical methods. Programming assignments. PREREQ: MATH 275 and MATH 333.

MATH 547 HISTORY OF MATHEMATICS (3-0-3) (F/S/SU). The course is designed for mathematics teachers in the secondary school. The course consists of two parts: the first part traces the development of algebra, geometry, analytic geometry and calculus to the 19th century; the second part gives a brief introduction to, and history of, some of the developments in mathematics during the last century. May not be used for the Master's degree in Mathematics. PREREQ: PERM/INST.

#### MATH 556 LINEAR PROGRAMMING (3-0-3)(S) (Even years).

Linear optimization problems and systems of linear inequalities. Algorithms include simplex method, two-phase method, duality theory, and interior point methods. Programming assignments. PREREO: MATH 301.

#### MATH 562 PROBABILITY AND STATISTICS (4-0-4)(F)(Odd

**years).** Provides a solid foundation in statistical theory and its use in solving practical problems in the real world. Topics include moment-generating functions, multivariate probability distributions, hierarchical models and mixture distributions, functions of random variables, central limit theorems, estimation, hypothesis testing, multiple linear regression, the analysis of variance, analysis of categorical data, non-parametric statistics. PREREQ: MATH 301, MATH 361 and MATH 275.

#### MATH 564 MATHEMATICAL MODELING (3-0-3) (F/SU).

Introduction to mathematical modeling through case studies.

Deterministic and probabilistic models; optimization. Examples will be drawn from the physical, biological, and social sciences. A modeling project will be required. May not be used for the master's degree in Mathematics. PREREQ: MATH 361 or PERM/INST.

#### MATH 565 NUMERICAL ANALYSIS (4-0-4)(S)(Odd years).

Round-off errors and computer arithmetic. Solution of equations in one variable. Polynomial, cubic spline, and trigonometric interpolation. Approximation of functions. Optimization. Numerical differentiation and integration. Programming assignments. PREREQ: MATH 301 or MATH 333.

#### MATH 566 NUMERICAL LINEAR ALGEBRA (3-0-3)(F)(Odd

**years).** Direct and iterative methods for the solution of linear systems. Least-squares solutions of linear systems. Numerical techniques for finding eigenvalues and eigenvectors. Programming assignments PREREO: MATH 301.

MATH 567 NUMERICAL METHODS FOR ORDINARY DIFFERENTIAL EQUATIONS (3-0-3) (S) (Even years). Techniques for finding approximate solutions of ordinary differential equations using MATLAB or other technical computing environment, including

multistep and Runge-Kutta methods for non-stiff and stiff problems. Programming assignments. PREREQ: MATH 333 or MATH 433 or MATH 533.

MATH 568 NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS (3-0-3) (F) (Even years). Finite difference, finite element, and spectral methods for solving elliptic, parabolic, and hyperbolic partial differential equations numerically. Programming assignments. PREREQ: MATH 436 or MATH 536.

MATH 571 DATA ANALYSIS (4-0-4) (S) (Even years). The application of probability and statistical theory to the analysis of a wide range of data. Elements of the topic include: data preparation, data cleaning, dimension reduction, outlier detection, regression, classification, basis expansions and regularization, kernel methods, model selection and model averaging, tree-based methods, neural networks, clustering, inference, prediction, missing value. PREREQ: MATH 361.

MATH 572 COMPUTATIONAL STATISTICS (3-0-3) (F) (Even years). Introduction to the trend in modern statistics of basic methodology supported by state-of-art computational and graphical facilities, with attention to statistical theories and complex real world problems. Includes: data visualization, data partitioning and resampling, data fitting, random number generation, stochastic simulation, Markov chain Monte Carlo, the EM algorithm, simulated annealing, model building and evaluation. A statistical computing environment will be used for students to gain hands-on experience of practical programming techniques. PREREQ: MATH 361.

MATH 573 TIME SERIES ANALYSIS (3-0-3)(S)(Odd years). Introduction to time series analysis with an emphasis on application to interdisciplinary projects using SAS/ETS; autoregressive-moving average models, seasonal models, model identification, parameter estimation, model checking, forecasting, estimation of trends and seasonal effects, transfer function models, and spectral analysis. PREREQ: MATH 361.

MATH 574 LINEAR MODELS (3-0-3) (F) (Odd years). Introduction to the Gauss-Markov model with use of relevant statistical software. Includes linear regression, analysis of variance, parameter estimation, hypothesis testing, model building and variable selection, multicollinearity, regression diagnostics, prediction, general linear models, split plot designs, repeated measures analyses, random effects models. PREREQ: MATH 361.

#### MATH 579 TEACHING COLLEGE MATHEMATICS (1-0-1).

Development of skills in the teaching of college mathematics. Effective use of class time, syllabus and test construction, learning styles, and disability issues. Lecturing, use of group work, and other teaching techniques. Graded Pass/Fail. PREREQ: PERM/INST.

#### **SELECTED TOPICS SERIES:**

MATH 580 TOPICS IN SET THEORY.

MATH 581 TOPICS IN LOGIC.

MATH 582 TOPICS IN TOPOLOGY.

MATH 583 TOPICS IN COMPUTATIONAL MATHEMATICS.

MATH 584 TOPICS IN COMPUTATIONAL ALGEBRA.

MATH 585 TOPICS IN CRYPTOLOGY.

MATH 586 TOPICS IN STATISTICS.

MATH 587 TOPICS IN DIFFERENTIAL EQUATIONS.

MATH 588 TOPICS IN INVERSE THEORY.

**MATH 598 SEMINAR IN MATHEMATICS (3-0-3).** The content will vary within a format of student presentation and discussion of relatively advanced mathematical topics selected from texts or mathematical journals. This will not be a seminar in mathematics education.

#### **MATHED - MATHEMATICS EDUCATION**

**MATHED courses are designed to provide extra experience in mathematics for practicing teachers.** They may be used to meet course requirements for master's degrees in education. They are not available for undergraduate credit.

#### MATHED 510 MATHEMATICS CURRICULUM 7-12 (2-0-2)(SU).

The history of the 7-12 mathematics curriculum; content, special problems, and trends in mathematics programs; organization of the curriculum. Study of reports and recommendations; curriculum development projects. PREREQ: At least one year's experience teaching in middle or secondary school mathematics.

MATHED 511 SURVEY OF RESEARCH IN MATHEMATICS EDUCATION I (2-0-2) (SU). Survey of current research in and discussion of issues relating to the teaching and learning of mathematics. PREREQ: Teaching certification or PERM/INST.

MATH 512 SURVEY OF RESEARCH IN MATHEMATICS EDUCATION II (2-0-2) (SU). Continuation of MATHED 511. PREREQ: MATHED 511.

#### MATHED 523 THE TEACHING OF ALGEBRA (2-0-2)(SU).

Contemporary approaches to teaching secondary school algebra; treatment of selected topics in secondary school algebra; methods and materials; research relevant to the teaching of algebra. PREREQ: MATH 257 or MATH 147 or teaching certification in mathematics.

#### MATHED 524 THE TEACHING OF GEOMETRY (2-0-2)(SU).

Contemporary approaches to teaching secondary school geometry; treatment of selected topics in geometry; methods and materials; research relevant to the teaching of geometry. PREREQ: MATH 257 or MATH 147 or teaching certification in mathematics.

#### MATHED 525 THE TEACHING OF CALCULUS (2-0-2)(SU).

Contemporary approaches to teaching secondary school calculus; use of symbolic algebra and graphing software; treatment of selected topics in calculus including limit, derivative, and integral. PREREQ: MATH 175.

MATHED 557 ADVANCED PROBLEM SOLVING AND NUMBER THEORY FOR TEACHERS (3-0-3) (SU). Advanced study of number systems from whole numbers through the reals with an emphasis on problem solving and number theory. The course will make use of appropriate models to support the development of the content. This course is appropriate for teachers seeking to strengthen and extend their mathematical knowledge. PREREQ: MATH 257 or MATH 147 or teaching certification in mathematics.

MATHED 558 ADVANCED GEOMETRY AND PROBABILITY FOR TEACHERS (3-0-3) (SU). In-depth study of geometry and probability, including work with mathematical models. This course is appropriate for teachers seeking to strengthen and extend their mathematical knowledge. PREREQ: MATH 257 or MATH 147 or teaching certification in mathematics.

#### MATHED 570 ADVANCED MATHEMATICS THROUGH

**TECHNOLOGY (3-0-3)(SU).** This course focuses on selecting and using appropriate technology in teaching P-12 mathematics and places an emphasis on instructional design and implementation of technology specific to the mathematical classroom. This course is appropriate for teachers seeking to strengthen and extend their mathematical knowledge. PREREQ: MATH 257 or MATH 147 or teaching certification in mathematics.

## MATHED 598 SEMINAR IN MATHEMATICS EDUCATION (2-0-2) (SU). The content will vary within a format of student

presentation and discussion of relatively advanced mathematics education topics selected from texts or journals. This will not be a seminar in mathematics.

## **Department of Music**

#### **Chair: James Cook**

Morrison Center for the Performing Arts, Room C-100 Telephone 208 426-1596 FAX 208 426-1771 http://www.boisestate.edu

**Full Graduate Faculty:** Joe Baldassarre, John B. Baldwin, Jeanne M. Belfy, Lynn Berg, Marcellus Brown, James Cook, Linda Kline-Lamar, David Mathie, Del Parkinson, Craig Purdy, Laura Rushing-Raynes, Michael Samball, David Saunders

**Associate Graduate Faculty:** J. Wallis Bratt, Michael Fischer, James Jirak, Ritchard Maynard,

**Adjunct Graduate Faculty:** Irena Ravitskaya, Samuel Smith, Peggy Jo Wilhelm

## **Graduate Degrees Offered**

- Master of Music, Music Education
- Master of Music, Performance
- · Master of Music, Pedagogy

## Master of Music

**Graduate Program Coordinator:** Jeanne Belfy Morrison Center for the Performing Arts, Room C-309 Telephone 208 426-1216 e-mail: jbelfy@boisestate.edu

## **General Information**

The Master of Music is a professional degree in music with emphasis in either 1) music education 2) performance or 3) pedagogy. The emphasis in education is designed to meet the needs of music education specialists who work in the public school system, grades K-12, or who aspire to further graduate study and teaching in music education. Music education students take courses specifically related to research and current trends, history, and philosophy in music education, as well as graduate courses in music theory and history. They are also required to progress in an applied area and participate in a music ensemble. Declaring an area of emphasis of either elementary, choral, or secondary instrumental, students structure elective credits to reflect their area, and conclude their studies with a culminating activity related to their emphasis.

Performance and pedagogy majors seek to improve their performance and studio teaching skills, possibly in preparation for a performance career, further graduate study, private studio teaching, and/or collegiate applied teaching. Their course work centers around applied study, music theory and history, and pedagogy and literature courses, and culminates in a graduate recital or other appropriate culminating project.

The Department offers four full graduate teaching and service assistantships, and a flexible number of additional assistantships are available through the Blue Thunder Marching Band program. A cooperative program for string students exists with the Boise Philharmonic Orchestra. Contact the Graduate Program Coordinator for further information.

## **Application and Admission Requirements**

Admission will be granted to applicants who hold a Bachelor's degree in music (BM, BA, or BS with a music major) from an accredited college or university, and who give promise of meeting the standards set by the Department of Music and the University. Students seeking Music Education Emphasis must possess the B.M.Ed. or equivalent with certification, and submit a teaching portfolio to include a formal writing sample, lesson plan samples including assessment tools, program sample, teaching video, and three letters of reference from professionals who are familiar with the applicant's teaching. Students seeking admission to the Performance or Pedagogy Emphases must perform a satisfactory audition, in person, before the performance faculty of his/her major performance area (keyboard, winds, strings, etc.). Audition details are available from the Department of Music.

Before a graduate student can be admitted to Regular Status, predictive examinations in music history and music theory must be completed. The purpose of predictive examinations is to determine the student's strengths and weaknesses so that an individual academic program can be formulated that will best serve the student's needs. Any course used to remove deficiencies does not count toward the degree. A student who has deficiencies will be granted Provisional Status in the graduate program. When deficiencies have been removed, the student may then seek Regular Status. A description of material covered on these examinations is available from the Department of Music.

## **Degree Requirements**

Master of Music, Music Education	
Course Number and Title	Credits
<b>Graduation Requirements:</b> 33-36 credits minimum, stipulated below, are required for graduation. The actual number of credit hours may vary depending on the needs of individual students as determined by the results of predictive examinations. Candidates are required to establish an area of emphasis in one of the following: elementary, choral, or instrumental music education.	
1. Core Courses:  MUS 503 Introduction to Music Research	9
2. Non-Music Education Courses:  *Music Theory	12
<ul> <li>3. Music Electives:</li> <li>A. 6 credits in the student's area of emphasis: 6 elementary general music, choral music, or instrumental music. No more than four (4) workshop elective credits, of which one may be a music conference credit, may be applied towards the degree.</li> <li>B. 3 credits additional approved electives in music 3</li> </ul>	9
4. Comprehensive Examination: A written comprehensive examination in music must be completed prior to completion of the student's culminating activity. This exam will be tailored to each student's graduate course work. The comprehensive exam may be taken after the completion of 27 hours of required course work to include 6 credits of the core courses and the 3 hours each in music history and music theory.	
5. Oral Examination: If needed, an oral examination relating to the written comprehensive examination or to the culminating activity may be requested at the discretion of the candidate's Committee.	
6. Culminating Activity (3-6 credits from one of the choices listed below):  A. MUS-APL 544 Lecture-Recital	3-6
TOTAL	33-36

\*Total Music Theory and Music History credits earned may include but not be limited to Special Topics.

Master of Music, Performance	
Course Number and Title	
<b>Graduation Requirements:</b> 32 credits minimum, stipulated below, are required for graduation. The actual number of credit hours may vary, depending on the needs of individual students as determined by the results of predictive examinations.	
Core Courses:  MUS 503 Introduction to Music Research	12
Performance Courses:  MUS 563, 564 Pedagogy I, II, or additional Music 6  *History and/or Music Theory  **MUS 465G, 466G Diction for Singers I, II	17-18
Performance Culminating Project: MUS-APL 546 Graduate Solo Performance Recital	3
Performance Comprehensive Review:  After successful completion of the culminating project, the student's committee will administer a written examination consisting of three questions, one from each committee member. The questions will cover areas of the student's recital or culminating project and course work taken toward the degree. After satisfactory completion of the written examination, the committee will meet with the student for an oral examination.	
TOTAL	32-33

<sup>\*</sup>Total Music Theory and Music History credits earned may include but not be limited to Special Topics.

<sup>\*\*</sup>Required of all vocal performance majors.

Master of Music, Pedagogy	
Course Number and Title	Credits
<b>Graduation Requirements:</b> 31 credits minimum, stipulated below, are required for graduation. The actual number of credit hours may vary, depending on the needs of individual students as determined by the results of predictive examinations.	
Core Courses:  MUS 503 Introduction to Music Research	12

<sup>—</sup> continued —

Master of Music, Pedagogy (continued)	
Pedagogy Courses:  MUS 563, 564 Pedagogy I, II	13-16
Pedagogy Option Culminating Project (A, B, or C) A) MUS-APL 546 Graduate Solo Performance Recital by special permission	3-6
Pedagogy Comprehensive Review: After successful completion of the culminating project, the student's committee will administer a written examination consisting of three questions, one from each committee member. The questions will cover areas of the student's recital or culminating project and course work taken toward the degree. After satisfactory completion of the written examination, the committee will meet with the student for an oral examination.	
TOTAL	31

\*Total Music Theory and Music History credits earned may include but not be limited to Special Topics.

## **Course Offerings**

#### MUS-APL - MUSIC APPLIED, PERFORMANCE CLASSES, RECITALS

MUS-APL 529 JAZZ IMPROVISATION (1-0-1) (F/S). Private lessons in jazz improvisation. Intended primarily for instrumental majors, this performance-oriented course deals with the principles of jazz harmony and scaler theory. These principles will be applied to selected exercises and standard jazz literature. Students should possess above-average technical facility on their instrument and should have a working knowledge of music theory. Extra fee, non-waivable, per private lesson fee schedule, required. PREREQ: Graduate Standing and MUS 103 or PERM/INST.

MUS-APL 544 LECTURE/RECITAL (0-V-3). A full lecture/recital elected as the culminating project for the Master of Music degree, Music Education or Performance/Pedagogy emphasis major. The lecture is to demonstrate scholarly study on a selected topic and the recital is to present supportive musical examples. Graded Pass/Fail. PREREQ: PERM/INST/CHAIR.

MUS-APL 546 GRADUATE SOLO PERFORMANCE RECITAL (0-V-3). A full recital to be presented as the culminating project for the Master of Music degree, Performance/ Pedagogy emphasis. Graded

#### MUS-PRV - MUSIC PRIVATE LESSONS PERFORMANCE STUDIES

Students will be assigned on the basis of an audition. Performance, Technical Study, Musical Interpretation, Literature, and Teaching Technique will be stressed.

Pass/Fail. PREREQ: PERM/INST/CHAIR.

All 500-level MUS-PRV courses are repeatable. See undergraduate Private Lesson Performance Studies course numbering system for explanation of course numbers.

**MUS-PRV 501 (0-.5-1), 502 (0-.5-2), 504 (0-1-4).** Woodwind instruments private lessons.

**MUS-PRV 511 (0-.5-1), 512 (0-.5-2), 514 (0-1-4).** Brass instruments private lessons.

**MUS-PRV 521 (0-.5-1), 522 (0-.5-2), 524 (0-1-4).** Percussion instruments private lessons.

MUS-PRV 531 (0-.5-1), 532 (0-.5-2), 534 (0-1-4). Voice private lessons.

**MUS-PRV 541 (0-.5-1), 542 (0-.5-2), 544 (0-1-4).** Keyboard instruments private lessons.

**MUS-PRV 551 (0-.5-1), 552 (0-.5-2), 554 (0-1-4).** Fretted string instruments private lessons.

**MUS-PRV 561 (0-.5-1), 562 (0-.5-2), 564 (0-1-4).** Bowed string instruments private lessons.

#### **MUS-ENS - MUSIC ENSEMBLE**

All MUS-ENS courses may be repeated for credit.

MUS-ENS 321G MARCHING BAND (0-V-1)(F). Designed to promote participation in an repertoire knowledge of literature for marching bands, the marching band performs at all home and at least one away football game and occasionally at other university or civic events. Open to all students with the approval of the director. Graduate music students will be expected to assume leadership roles or will be assigned extra duties within the band and/or its organization.

MUS-ENS 501 UNIVERSITY SINGERS (0-2-1)(F,S). Open to all, a campus and community choir that focuses on improving vocal technique and musicianship skills. Not audition. Major choral works from all periods, public performances.

**MUS-ENS 503 CHAMBER SINGERS (0-2-1) (F,S).** Ten select singers specializing in vocal chamber music, emphasizing Medieval, Renaissance, and Baroque music. Active performance schedule both on campus and in the community. Membership by audition. PREREQ: Audition and/or PERM/INST.

MUS-ENS 505 MEISTERSINGERS (0-2-1) (F,S). Advanced 42-voice concert-touring chorus, highest standards, very active performing schedule. Membership by audition. PREREQ: Audition and/or PERM/INST.

**MUS-ENS 511 VOCAL JAZZ CHOIR (0-2-1)(F,S).** Designed to promote participation in and repertoire knowledge of literature for vocal jazz choirs. Public performances. PREREQ: Audition and/or PERM/INST.

MUS-ENS 512 WOMEN'S CHORALE (0-2-1) (F,S). Specializing in choral literature for treble voices from all time periods, teaching vocal technique, musicianship, and sight-reading. Public performances. Membership by minimal audition. Public performances are given each semester. PREREQ: Audition and/or PERM/INST.

**MUS-ENS 515 OPERA THEATER (0-5-1).** Advanced study/ experience in singing-acting technique and movement through performing in productions from the opera and/or musical theater repertoire. May be repeated for up to 4 credits maximum. PREREQ: PERM/INST.

MUS-ENS 518 EARLY MUSIC ENSEMBLE (0-3-1) (F,S). Course explores European vocal and instrumental music from the Middle Ages, Renaissance and Baroque periods through performance. Graduate music students will be expected to assume leadership roles or will be assigned extra duties within the ensemble. Concert performances by students enrolled in the course are expected each semester.

MUS-ENS 520 SYMPHONIC WINDS (0-5-1) (F,S). Rehearsal attendance and performance with the select concert band of the University. PREREQ: Audition and/or PERM/INST.

**MUS-ENS 522 TREASURE VALLEY CONCERT BAND (0-3-1) (F,S).** Rehearsal attendance and multiple performances with this full symphonic band comprising professionals and advanced adult musicians. PREREO: PERM/INST.

MUS-ENS 526 JAZZ ENSEMBLE (0-3-1) (F,S). Rehearsal attendance and performance with the University big band jazz ensemble. PREREQ: Audition and/or PERM/INST.

MUS-ENS 540 PERCUSSION ENSEMBLE (0-2-1) (F,S). Rehearsal attendance and performance with the University percussion ensemble. PREREQ: PERM/INST.

**MUS-ENS 550 ORCHESTRA (0-5-1) (F,S).** Rehearsal attendance and performance with the University Orchestra. Graduate students are expected to assume leadership roles or will be assigned extra duties within the orchestra and/or its organization. Audition required for new students. PREREQ: PERM/INST.

**MUS-ENS 560 CHAMBER ENSEMBLE (0-V-1) (F,S).** Participation in a faculty coached, official departmental chamber ensemble, resulting in a minimum of one public performance per semester. PREREQ: PERM/INST.

**MUS-ENS 570 TROMBONE CHOIR (0-2-1) (F,S).** Study and performance of the literature, including original and transcribed works for multiple tenor and bass trombones. Public performances each semester. PREREQ: PERM/INST.

**MUS-ENS 585 DUO PIANO ENSEMBLE (0-2-1) (F,S).** Survey of duo-piano literature, rehearsal and performance problems, resulting in public performance each semester. PREREQ: PERM/INST.

#### MUS - MUSIC, GENERAL

MUS 355G ROCK MUSIC: ITS PERFORMANCE AND HISTORY (3-0-3) (F/S) (Odd years). Survey of history and theory of rock music from primitive beginnings in nineteenth century to the present with primary focus on music from 1950 through 1970. Includes a final performance component. Graduate students will be expected to engage in current research on the subject matter. History elective. PREREQ: MUS 220 and PERM/INST.

MUS 423G SIXTEENTH-CENTURY COUNTERPOINT (3-0-3) (F) (Odd years). Study of 16th-century compositional techniques. Compositions will be written in 2 to 4 voices, 5 species, C clefs and Latin texts. Analysis/listening of music of the period. Additional compositions and/or research for graduate credit. Theory elective. PREREQ: MUS 220 or equivalent.

MUS 424G COUNTERPOINT SINCE 1600 (3-0-3) (F) (Even years). Study and writing in contrapuntal styles from Baroque Period to present day. Invertible counterpoint, canon, fugue, invention, analysis of procedures in representative works. Additional

compositions and/or research for graduate credit. Theory elective. PREREQ: MUS 220 or equivalent.

MUS 454G SECONDARY GENERAL MUSIC METHODS (2-0-2) (S)(Odd years). Methods and materials emphasizing the development of discriminating listening skills, expressive singing, reading and notating music, creating music, and understanding music's role in contemporary society.

MUS 465G DICTION FOR SINGERS I (2-0-2)(F)(Even years). A course designed for singers, devoted to the understanding of the IPA (International Phonetic Alphabet) system and the learning of the rules of pronunciation in Italian, Latin and Spanish languages. Graduate students will additionally transcribe an entire song cycle or the songs of a proposed graduation recital. Required for all Master of Music vocal performance majors and strongly recommended for all voice emphasis majors. PREREQ: 1 year of MUS-PRV voice performance

#### MUS 466G DICTION FOR SINGERS II (2-0-2)(S) (Even years).

A continuation of MUS 465G Diction for Singers I, with emphasis on German, French and English languages. Graduate students will additionally transcribe an entire song cycle or the songs of a proposed graduation recital. Required for all Master of Music vocal performance majors and strongly recommended for all voice emphasis majors. PREREQ: MUS 465G or PERM/INST.

MUS 472G ADVANCED METHODS FOR ELEMENTARY MUSIC TEACHING (3-0-3)(F) (Even years). Primarily for music majors. Emphasis on methods and materials for individualized instruction, special education, related arts, and listening lessons, as well as a study of the major contributions made to music education from the fields of educational philosophy and psychology. PREREQ: MUS 372 or MUS 374.

#### MUS 501 HISTORY OF MUSIC IN THE UNITED STATES

(3-0-3)(F/S). Designed for either the non-specialist or specialist in music, this course will survey the role which music has played in the development of American culture. Vernacular and art music, as well as social and historical interrelationships with music will be examined and discussed. History elective.

MUS 502 SURVEY OF JAZZ (3-0-3) (F). Explores interpretation of America's original musical art form through listening and through discussion of socio-cultural contexts of jazz. Survey covers stylistic influences of nineteenth-century Africa and western Europe through current living exponents of jazz. In-depth book reviews and research papers on the subject are required. History elective. PREREQ: MUS 100 or MUS 101.

#### MUS 503 INTRODUCTION TO MUSIC RESEARCH (3-0-3)

**(F/S).** This course will provide an introduction to the basic research literature pertinent to the student's major area of emphasis; an interpretation of research findings; and the means to develop skills and techniques needed for the writing of an extended research paper, thesis and/or dissertation, articles for publication and book/ performance reviews.

MUS 504 SURVEY OF ETHNOMUSICOLOGY AND WORLD MUSIC (3-0-3)(S) (Even years). This course considers the role of music in society and culture, and examines several musical traditions

beyond the scope of Western art music. History elective. PREREQ: Admission to Master of Music program or PERM/INST.

MUS 505 SEMINAR IN CHORAL MUSIC: PERFORMANCE PRACTICES AND STYLES (3-0-3) (F/S). An historical, generic survey of the repertoire in choral literature. Emphasis will be placed on facets of interpretation through a study of representative compositions from the standpoint of performance practice, analytic techniques, and the reading of primary sources of pertinent information.

#### MUS 506 SEMINAR IN INSTRUMENTAL MUSIC: PERFORMANCE PRACTICES AND STYLES (3-0-3) (F/S).

Analysis and study of works from the Baroque through the present era. Particular attention will be paid to performance practices of ornamentation, style, tempo, scoring, dynamics, etc. Band transcriptions also included.

MUS 510 ADVANCED FORM AND ANALYSIS (3-0-3)(S). Analysis of harmonic and formal structures of the larger binary and ternary forms; the sonata, the symphony, the concerto, Baroque forms. Theory elective.

MUS 511 20th-CENTURY MUSICAL STUDIES (3-0-3) (F/S). A study of 20th-century compositional techniques and performance practices through analysis, discussion of aesthetics, listening, performance, and creative writing. Contemporary techniques (and their notation), such as quartal harmonies, serialization, improvisation, electronic music, microtones, and multi-media will be explored, and their application to the secondary school music

classroom will be discussed. Theory elective.

MUS 512 ELECTRONIC MUSIC APPLICATIONS (3-0-3) (F/S). A historical overview of electronic music and music technology. Handson experience with digital and analog synthesizers, effects processors, sampling, tape decks, computers and related software, and MIDI. Emphasis will be placed on the application of fundamental techniques of electronic music to creative composition. Theory elective.

MUS 551 SEMINAR IN MEDIEVAL THROUGH BAROQUE **PERFORMANCE PRACTICES (3-0-3)(F/S).** The study of music literature in Western Europe from the late Middle Ages through the Baroque period through the historical survey of performance practices and their practical application. History elective.

MUS 552 SEMINAR IN MODERN MUSIC: FORM AND STYLE (1750-1980)(3-0-3)(F/S). The study of art music in the Western World from 1750 through the present, with emphasis on selected masterworks, including score analysis, performance practice, textual background and historical context. History elective.

#### MUS 557 MAJOR INSTRUMENT LITERATURE (3-0-3)(F/S).

Advanced survey of the major instrument literature. The student will prepare a research paper on several typical or important works in the repertoire. Repeatable for credit for different instruments.



**MUS 561 ADVANCED CONDUCTING (3-0-3)(F/S).** Designed for secondary music teachers, this course provides opportunity to discover and analyze technical conducting problems, both instrumental and choral, in music of the various historical eras, which forms a significant part of the secondary school repertoire.

MUS 563 MAJOR INSTRUMENT PEDAGOGY I (3-0-3) (F). An advanced and in-depth investigation of pedagogical techniques, materials and principles used in the private teaching studio. Readings in the philosophy of teaching will be included. Repeatable for credit for different instruments.

#### MUS 564 MAJOR INSTRUMENT PEDAGOGY II (3-0-3)(S).

Development of lesson plans and supervised studio teaching in both private and group settings. Recommended preparation: MUS 563. Repeatable for credit for different instruments.

MUS 567 CHORAL LITERATURE (2-0-2) (F). Survey course exploring choral works from all time periods. Though secular works will be discussed, special emphasis will be placed on tracing the development of the Mass, Motet and Requiem throughout history. Strategies for teaching and performing these works will be discussed. Special projects include programming for elementary, secondary and collegiate choirs.

MUS 570 NEW DEVELOPMENTS IN MUSIC EDUCATION (3-0-3)(F/S). Designed to acquaint the music specialist with recent ideas in music education, including major trends in curriculum, new methodology, music in integrated courses, and reports of major conferences and symposia.

## MUS 571 ADVANCED PRACTICES AND PRINCIPLES IN TEACHING MUSIC IN THE ELEMENTARY SCHOOL (3-0-3)

**(F/S).** Designed for the general classroom teacher or music specialist, the course deals with old and new approaches to teaching music in the classroom, teaching materials, current research on problem singers, creative musical activities, and the development of music reading skills. PREREQ: MUS 374 or PERM/INST.

MUS 572 LISTENING AND SINGING EXPERIENCES FOR THE ELEMENTARY SCHOOL (3-0-3) (F/S). Designed for the general classroom teacher or music specialist, the course deals with the study of singing and listening materials relevant to classroom music, K-6. Sequential curriculum plans will be developed for singing and listening experiences. PREREQ: MUS 374 or PERM/INST.

MUS 573 ADVANCED METHODS AND TECHNIQUES FOR THE INSTRUMENTAL INSTRUCTOR (3-0-3)(F/S). A study of causes and solutions for problems occurring in the instrumental rehearsal. Areas to be covered include instrumental methods and techniques, organization and repertoire planning.

MUS 574 ADVANCED METHODS AND TECHNIQUES FOR THE CHORAL INSTRUCTOR (3-0-3) (F/S). A study of causes and solutions for problems occurring in the choral rehearsal. Areas to be covered include vocal methods and techniques, organization and repertoire planning.

#### MUS 575 ADMINISTRATION OF SCHOOL MUSIC (3-0-3) (F/S).

A seminar in problems of music supervision and administration covering areas such as budget, scheduling, curriculum, personnel and philosophy.

MUS 576 HISTORY AND PHILOSOPHY OF MUSIC EDUCATION (3-0-3) (F/S). Includes both an introduction to the history of music education in the United States, from colonial New England to the present; and alternate views about the philosophy of music, including aesthetic experience, aesthetic education, and the nature and meaning of music.

## College of Business and Economics

Dean: Howard L. Smith

Business Building, Room 310 Telephone 208 426-1125

**Associate Dean: Diane Schooley-Pettis** 

Business Building, Room 211 Telephone 208 426-3110 FAX 208 426-3637 http://cobe.boisestate.edu/graduate

**Associate Dean for Graduate Studies** and Executive Education: Kirk Smith

Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135 http://cobe.boisestate.edu/graduate

## **Graduate Degrees Offered**

- · Master of Business Administration
- Executive Master of Business Administration
- Master of Science in Accountancy
- Master of Science in Accountancy, Taxation
- Master of Science in Management Information Systems
- Master in Management Information Systems
- Graduate Certificate in Supply Chain Management

### **General Information**

The College of Business and Economics at Boise State University offers graduate programs in business administration, accountancy and management information systems through its five academic departments:

- Department of Accountancy
- Department of Economics
- Department of Management
- Department of Marketing and Finance
- Department of Networking, Operations, and Information Systems

These graduate programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business. This is a distinction held by approximately 35% of the 1,200 institutions in the U.S. that grant business degrees. The College's accountancy programs are also accredited by AACSB International - The Association to Advance Collegiate Schools of Business. Only about 20% of accounting programs have attained this recognition.

## Master of Business Administration

**Graduate Studies Director:** Kirk Smith

Program Administrator: J. Renee Anchustegui

Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135

http://cobe.boisestate.edu/graduate e-mail: graduatebusiness@boisestate.edu

#### **Accountancy**

Full Graduate Faculty: Paul Bahnson, Denise M. English, Thomas J. English, David R. Koeppen, William C. Lathen, E. Shawn Novak

**Associate Graduate Faculty:** Mark Cowan,

Kip Krumwiede

Adjunct Graduate Faculty: Frank llett Jr.

Networking, Operations, and Information Systems

Full Graduate Faculty: Robert Anson, Tim Chenoweth, Phillip Fry, Lyman Gallup, Gary Green, Jerry LaCava, Robert Minch, Murli Nagasundaram, Patrick Shannon, Sharon Tabor, Gregory Wojtkowski, Wita Wojtkowski

Associate Graduate Faculty: Thomas Gattiker,

Emerson Maxson

#### **Economics**

Full Graduate Faculty: Peter Lichtenstein, Christine Loucks, Richard Payne, Larry Reynolds, Chuck Skoro, Charlotte Twight

#### **Management**

Full Graduate Faculty: John Bigelow, Michael B. Bixby, Roy Glen, Newell Gough, Nancy K. Napier

Associate Graduate Faculty: Christopher Baughn, Mark Buchanan, James E. Wanek

#### **Marketing and Finance**

Full Graduate Faculty: Dwayne Barney, Alan Frankle, Douglas J. Lincoln, Matthew Maher, K. G. McCain, Nina Ray, Diane Schooley, Kirk Smith, Harry White

Associate Graduate Faculty: Keith Harvey, Jason MacDonald

#### **General Information**

The Master of Business Administration at Boise State University is designed to provide a high quality academic program to assist in the development of tomorrow's business leaders.

Emphasizing the needs of fully employed students, the program strives to provide students with a thorough grounding in each of the functional business areas. Integration of student's knowledge across these functional disciplines is one of the program's key objectives.

The MBA program provides a general management perspective that requires students to consider the social, environmental, and ethical context of managerial actions and enables them to target problems, select viable alternatives, and take appropriate action.

Teaching styles among the faculty range from formal textbook and supplementary syllabus readings to case methods, simulation and fieldwork. In addition to lectures, research projects, case analysis, discussion groups and guest speakers, several courses incorporate group projects as an integral part of the learning.

Graduate Assistantships are available and cover the student's tuition and fees plus a stipend. Applicants must be admitted to the MBA program during their year of service. Application deadlines: Fall – February 1; Spring – September 20.

Under certain conditions, and with approval of the MBA program director and the department head concerned, MBA students may earn up to a maximum of 3 credit hours of Directed Research and/or internship credits which apply to graduation requirements.

Students are asked to subscribe to a listserv and submit a proposed schedule of study on an access database during their first semester of study. Listserv instructions and a link are at http://cobe.boisestate.edu/graduate.

## **Application and Admission Requirements**

Application for admission, transcripts, and fees should be sent to the Graduate Admission and Degree Services, Room 141, Math/Geosciences Building, Boise State University, 1910 University Drive, Boise, ID 83725-1110. All other admission materials required for the MBA should be sent to the Business Graduate Studies office, Room 318, Business Building, Boise State University, 1910 University Drive, Boise, ID 83725.

Initial acceptance in order to take MBA classes is based on the applicant's prior academic performance, leadership experience, professional experience, aptitude for graduate study, general motivation, and managerial attributes. All applicants must fulfill the following requirements prior to enrolling in MBA classes:

- Applicants to the MBA program must have graduated from an accredited college or university with a Bachelor degree. Copies of official transcripts are also required upon initial application.
- 2. A GMAT score of 500 and a cumulative GPA of 3.0 (C = 2.0) are generally considered minimal. New applicants for the program should furnish documentary evidence of GMAT scores at the same time official transcripts are provided. For fall enrollment, students should arrange

- to take the GMAT by January. For spring enrollment, the GMAT should be taken no later than August.
- 3. Students with English as a second language (ESL) must score a minimum of 587/240 on the TOEFL or its equivalent. ESL students may also be asked to take and pass an English proficiency exam at Boise State before taking any graduate courses beyond their first semester.
- 4. Two years of significant work experience. This may be waived if the applicant has a GMAT score of 600 or higher.
- 5. Current detailed professional resume which accurately reflects professional work experience.
- 6. Two letters of reference (one preferably from an academic source) which address the applicant's strengths, weaknesses, benefits the applicant may receive from our MBA program, and what the applicant can contribute to our MBA program.
- 7. A brief response (maximum 2 pages, double spaced) discussing one of the following:
  - A. Career goals, both short-term and long-term. What role does an MBA program, in general, and Boise State's MBA program in particular, play in helping the applicant achieve these goals?
  - B. Two or three situations in the past three years where the applicant has taken a leadership role. How do these events demonstrate the applicant's managerial potential?
  - C. A brief, candid self evaluation. Include some discussion of the abilities and other attributes the applicant believes are their strengths and some discussion of areas where the applicant would like to develop more fully. What does the applicant consider most unique or distinctive about themselves?
- 8. A student must be accepted to either the MBA program or another Master's program to take MBA classes.

Final acceptance leading to a Master degree is based upon the Graduate College evaluation and acceptance of the applicant.

**Note:** A good understanding of algebra and computer competency are essential to successful progress in the MBA program. Students may wish to brush up on these skills prior to admission as they will be required to pass math and computer competency exams prior to enrollment in their first semester of graduate course work.

Undergraduate students will no longer be allowed in MBA classes under the University's Permit for Seniors to Take Graduate Courses policy.

For priority processing, complete application packets must be received no later than:

Summer entry	March 1
Fall entry	June 1
Spring entry	

Students will typically be notified of their admittance status by March 31, June 30 or October 31.

## **Degree Requirements**

The MBA requires a minimum of 37 semester credit hours and a maximum of 49 semester credit hours. The exact number of credits required depends upon the student's prior academic experience.

Specialization: While there is no major available in the MBA program, once students satisfy the functional core of courses, they can emphasize an area of concentration with their elective credits. This specialization includes accounting and finance, information technology, or high-tech marketing, and can expand beyond business to such areas as health policy or public administration.

Master of Business Administration	
Course Number and Title	Credits
Business Essentials Courses: The business essentials courses assume the student has had no previous course work in business. Conversely, any or all of these courses may be waived if the student has already taken them at an accredited business school, such as would be the case if the student had completed a baccalaureate degree in business within the last five years.	12
MBA 512 Business Statistics	
Advanced Courses:  MBA 531 Strategic Perspectives	28

— continued —

Master of Business Administration (continued)	
Electives:	9
ECON 560 Economics of Public Policy	J
MGMT 541 Human Resource Management	
MBA 561 Marketing High-Technology Products 3	
MBA 563 Customer Behavior	
MBA 564 Internet Marketing Strategy	
MBA 566 Customer Relationship Management 3	
MBA 574 Financial Modeling3	
MBA 580 Selected Topics - Accounting 3	
MBA 581 Selected Topics - Information Systems 3	
MBA 582 Selected Topics - Economics	
MBA 583 Selected Topics - Finance 3	
MBA 584 Selected Topics - Operations/	
Production3	
MBA 585 Selected Topics - Management 3	
MBA 586 Selected Topics - Marketing	
MBA 587 Selected Topics - International Business 3	
MBA 590 Internship	
MBA 596 Independent Study 1-3	
Two undergraduate "G" courses may be taken for	
graduate credit if cleared by the Graduate Program	
Director.	
TOTAL	37-49

## **Course Offerings**

#### **BUSINESS ESSENTIALS COURSES**

#### **MBA - MASTER OF BUSINESS**

**MBA 512 BUSINESS STATISTICS (3-0-3) (F).** Examines the use of statistics in business decision-making. Summarizing, analyzing, and presenting data to support managerial decisions will be emphasized. Topics may include descriptive statistics, inferential statistics, analysis of variance, regression analysis, forecasting, and nonparametric techniques.

#### MBA 514 ECONOMIC THEORY AND ANALYSIS (3-0-3)(S).

Offers an accelerated, integrated introduction to economic analysis of the price system and the aggregate performance of developed economies, including supply and demand, basic market structures, income distribution, employment, inflation, growth and international trade.

#### MBA 522 ACCOUNTING AND FINANCIAL ANALYSIS

(3-0-3)(F). Introduces basic concepts, standards, and practices of financial reporting so students can read and understand published financial statements. Fundamentals of accounting and finance as it relates to developing a framework for analyzing a firm's investment and financing decisions are emphasized. Topics may include income statement and balance sheet preparation, as well as valuation and capital budgeting techniques.

#### MBA 527 CREATION AND DISTRIBUTION OF GOODS

**AND SERVICES (3-0-3)(S).** An introduction to the creation and distribution of goods and services. Course integrates both marketing and operations management concepts and will discuss the activities associated with product pricing, product promotion, and the manufacturing and delivery of goods and services.

#### ADVANCED COURSES

**MBA 531 STRATEGIC PERSPECTIVES (1-0-1) (F,S).** Examines the five major forces transforming business: boundaries of the firm, market and competitive analysis, dynamics of developing and sustaining advantages, internal organization, major forces in the environment. MBA students should take MBA 531 the first semester of their advanced course work. PREREQ: MBA 512, MBA 514, MBA 522, MBA 527.

#### MBA 532 ACCOUNTING FOR DECISION MAKING AND

**CONTROL** (3-0-3)(S). Explains how accounting concepts are used to manage costs and other aspects of a business to create profits. PREREQ: MBA 522 or equivalent. PREREQ/COREQ: MBA 531.

#### MBA 533 ADVANCED OPERATIONS MANAGEMENT (3-0-3)(F).

Concepts and issues related to managing the operations function of an organization. Topics include forecasting, production planning, materials management, quality management, and supply chain management as they relate to developing a competitive operations strategy. The role of information technology as it relates to operations management and the relationships between operations and other business functional areas are also discussed. PREREQ: MBA 527 or equivalent.

#### MBA 534 INFORMATION TECHNOLOGY FOR MANAGERS

**(3-0-3)(S).** Examines management's role in designing, implementing, and managing information systems, and the role of information and information technology for achieving a competitive advantage. PREREQ/COREQ: MBA 531.

#### MBA 535 LEGAL ISSUES IN BUSINESS RELATIONSHIPS (3-

**0-3)(S).** Exposes future managers to the major legal issues involved in intellectual property, private and public equity financing, cyber law, and product liability. Emphasis will be on what managers should know in order to make decisions that will not trigger legal problems. PREREO/COREO: MBA 531.

#### MBA 536 GLOBAL ECONOMIC & BUSINESS ANALYSIS

(3-0-3)(F). Analyzes the relationships between business and economic, ethical, legal, political, and social systems and the effects of these relationships on management decisions from both national and international perspectives. PREREQ: MBA 531, MBA 514, or equivalents.

#### **MBA 537 MANAGING PEOPLE IN ORGANIZATIONS**

(2-0-2)(F). Provides an opportunity to acquire knowledge and refine basic skills for managing the flow of employees into, through, and out of organizations. Human resource planning, employee recruitment, selection, performance coaching, and appraisal topics will be covered in the context of how policies and decisions support and further a company's strategic goals. The impact of changing technology and demographics on "best" practices for managers dealing with employees will be discussed.

**MBA 538 ORGANIZATIONAL ISSUES (2-0-2)(S).** Application of behavioral science principles and skills in an organizational setting. Emphasis is on an interactionist perspective (individual, group, and organizational dynamics), towards understanding behavior in organizations. Topics include team building, motivation, leadership, problem solving, negotiation, and self-management. The course is geared towards managers and the application of concepts to experience. PREREQ/COREQ: MBA 531.

#### MBA 539 ADVANCED MARKETING MANAGEMENT

(3-0-3)(F). Examines the best allocation of marketing resources in order to achieve the organization's strategic objectives. Focus is on understanding market reactions to current and anticipated marketing programs. Learn to recognize and how to capitalize upon new product opportunities while concurrently managing existing products. PREREQ: MBA 531, MBA 522, MBA 527, or equivalents.

#### MBA 545 ADVANCED FINANCIAL MANAGEMENT (3-0-3)(S).

Reviews dynamic financial analysis with emphasis on the current practical applications and complexities of capital budgeting, arbitrage arguments, risk-return models and financing alternatives. PREREQ: MBA 514, MBA 522, or equivalents.

MBA 546 STRATEGIC MANAGEMENT (2-0-2) (F,S). Examines how organizations obtain and deploy resources within a changing environment to gain and sustain a competitive advantage. Topics include analysis, formulation and implementation of business and corporate strategy. Integration of student's prior course work across functional areas is a major component of this course. Should be taken in the student's last semester of study. PREREQ: MBA 532, MBA 533, MBA 534, MBA 535, MBA 539.

#### **ELECTIVES**

#### **ECON - ECONOMICS**

#### **ECON 560 ECONOMICS OF PUBLIC POLICY (3-0-3)**

(Intermittent). Contribution of economic analysis to the justification, design and implementation of economic policy, especially as it relates to the market economy and the benefits and costs associated with government intervention. PREREQ: MBA 514.

#### **MGMT - MANAGEMENT**

#### MGMT 541 HUMAN RESOURCE MANAGEMENT (3-0-3)

(Intermittent). Effective management of human resources including discussion of the supervisory processes conducive to reducing labor costs and increasing productivity. Special attention is given the human, organizational, and environmental constraints which limit managerial actions.

#### **MBA - MASTER OF BUSINESS**

#### MBA 561 MARKETING HIGH-TECHNOLOGY PRODUCTS

**(3-0-3)(F).** This class will explore concepts and practices related to marketing the fast-paced environment of high-technology industries.

**MBA 563 CUSTOMER BEHAVIOR (3-0-3) (F).** Concepts in and analysis of consumer and group buying behavior, methods of measurement, and processes to guide decisions using this knowledge. Special emphasis will be placed on the buying high-tech products.

**MBA 564 INTERNET MARKETING STRATEGY (3-0-3)(S).** This course explores how the integration of Internet based technology is changing the business environment. Key topics covered in the class will include network infrastructure, Internet buyer behavior, integrated market communication, e-business model construction. Analysis, and valuation.

#### MBA 566 CUSTOMER RELATIONSHIP MANAGEMENT (3-0-3)

**(S).** This course will focus on how marketing managers can use technology in customer relationship management (CRM). A key topic in the course will be the use of customer information files in managing communication to and from customers. PREREQ: MBA 512, MBA 527, or equivalents.

**MBA 574 FINANCIAL MODELING (3-0-3) (F/S).** Course introduces quantitative techniques useful for modeling and analyzing problems in finance. Topics include capital budgeting, dynamic financial planning models, portfolio optimization, and options. The emphasis is on formulating and solving models using a computer. PREREQ: MBA 545.

**SELECTED TOPICS:** Contemporary topics courses offered intermittently.

MBA 580 SELECTED TOPICS - ACCOUNTING
MBA 581 SELECTED TOPICS - INFORMATION SYSTEMS
MBA 582 SELECTED TOPICS - ECONOMICS
MBA 583 SELECTED TOPICS - FINANCE
MBA 584 SELECTED TOPICS - OPERATIONS/
PRODUCTION
MBA 585 SELECTED TOPICS - MANAGEMENT
MBA 586 SELECTED TOPICS - MARKETING
MBA 587 SELECTED TOPICS - INTERNATIONAL
BUSINESS

**MBA 590 INTERNSHIP.** Available on a selective, limited basis. MBA students should consult with Director.

**MBA 596 INDEPENDENT STUDY (1-3 credits).** Involves special projects undertaken by the student, consisting of individual work suited to the needs and interests of the student. The course embodies research, discussions of the subject matter and procedures with a designated professor, and a documented paper covering the subject.

#### **UNDERGRADUATE "G" COURSES**

At most two of the following courses may be taken for graduate credit if cleared by the Graduate Program Coordinator.

#### **ACCT - ACCOUNTANCY**

ACCT 440G ACCOUNTING THEORY (3-0-3) (F/S). This course covers measurement theory and its implications for asset valuation and income determination. Specialized study of revenue recognition, accounting for changing prices, and basic financial analysis. Emphasizes development of analytical and written communication skills. Computer applications are also used throughout the course. PREREQ: ACCT 306.

#### **ECON - ECONOMICS**

#### **ECON 421G QUANTITATIVE METHODS IN ECONOMICS**

(3-0-3)(F). The first of a two semester sequence in quantitative economic analysis, this course emphasizes the application of mathematics to the construction of economic models. Topics will include equilibrium analysis, input-output analysis, comparative static analysis, optimization techniques, and dynamic analysis. The methodological issues surrounding the use of quantitative techniques in economics are also strongly emphasized. May be taken for graduate credit. PREREQ: ECON 201, 202, MATH 160 or equivalent and BUSSTAT 207.

**ECON 422G ECONOMETRICS (3-0-3) (S).** The second of a two semester sequence in quantitative economic analysis. This course emphasizes the application of statistics to the construction, estimation and evaluation of econometric models. Other related topics will include: history and methodology of econometrics, forecasting, computer applications, and the use of econometrics in business and government. May be taken for graduate credit. PREREQ: MATH 160 or equivalent, BUSSTAT 207, and ECON 421.

**ECON 440G HEALTH ECONOMICS (3-0-3)(S).** This course examines the economic issues associated with those individual and social decisions that influence the health of particular groups. The course also examines the production and delivery of health care and the economic and ethical aspects of health policy issues. Various economic approaches to the analysis of health policy are presented and evaluated. The focus of the course is the U.S. health care system. Comparisons will also be made to the health care systems of other nations. PREREQ: ECON 201 and ECON 202 and upper-division Business standing; or PERM/INST.

#### **ECON 480G SEMINAR IN INTERNATIONAL ECONOMICS**

(3-0-3) (F/S). An in depth study of a particular subject of restricted scope in international economics. Students will survey the literature, discuss assigned topics, and prepare and present research papers. Consult current class schedule for specific selection offered. Seminar may be repeated. PREREQ: ECON 201 and ECON 202 and upperdivision Business standing; or PERM/INST.

#### FINAN - FINANCE

#### FINAN 410G WORKING CAPITAL MANAGEMENT (3-0-3)(S).

This course considers the short-term financial management of a firm. Financial analysis of past, present, and future operations is emphasized. Cash flow analysis, management of current accounts, and cost benefit analysis are stressed. Case discussions provide a merging of theoretical concepts and practical application. PREREQ: FINAN 303.

#### FINAN 411G CAPITAL BUDGETING AND PLANNING

(3-0-3)(F). Acquisition and allocation of long-term sources of funds are the subject of this course. Emphasis is placed on fund raising and the problems associated with measurement and structural influences on the firm's cost of capital. Cash-flow analysis and alternative investment decision rules are examined. Cases are used for classroom discussion as a link between theory and practice. PREREQ: FINAN 303, BUSSTAT 208.

#### FINAN 420G MANAGEMENT OF FINANCIAL INSTITUTIONS

(3-0-3) (F). The interaction between financial markets are examined, and their roles in the economy are discussed. Emphasis is placed on the changes taking place within the financial community and the effects on financial institutions in general and commercial banking in particular. PREREO: FINAN 303.

#### FINAN 421G DECISION PROCESSES IN BANKING

(3-0-3)(S). The topics included in this course are those which involve the specific decision-making areas faced by participants in the banking industry. These decision areas include the management of liquidity reserves and securities portfolios; consumer, business, and real estate loans; liability control; asset-liability management; trust banking; and international banking. PREREQ: FINAN 303 and FINAN 420G.

#### FINAN 430G INTERNATIONAL FINANCE (3-0-3) (F). Build

a strong foundation on the relationship among international financial markets. Included is exchange rate determination and parity conditions across countries. Once the foundation is built, the multinational firm is examined in this framework. Included is working capital management, capital budgeting, and cost of capital for the multinational firm. PREREQ: FINAN 303.

#### FINAN 450G INVESTMENT MANAGEMENT (3-0-3)(F).

Examines the U.S. Securities markets from both a theoretical and a

practical viewpoint. Topics include: mechanics of direct investment, measurement and management of risk and return, the Efficient Market Hypothesis, Modern Portfolio Theory, the Capital Asset Pricing Model, and analysis of investment performance. Class format incorporates lecture and readings and may include guest lecturers. PREREQ: FINAN 303 BUSSTAT 208.

#### FINAN 451G FRONTIERS IN FINANCIAL MARKETS

(3-0-3)(S). Focuses on both recent and past innovations in the securities markets. Futures contracts and options and the theory of hedging using both agricultural and financial futures contracts options writing and index options are stressed. A combination of theory and practice will be sought relying on lecture, text material, and journal and trade articles and may include guest speakers. PREREQ: FINAN 303 and BUSSTAT 208.

#### **GENBUS - GENERAL BUSINESS**

#### GENBUS 441G BUSINESS, GOVERNMENT AND SOCIETY

(3-0-3)(S). Intensive study of and student research into the scope of government control and regulation of business. Specific major statutes and their implementing rules and regulations are researched and analyzed as well as selected federal and state regulatory agencies. May be taken for graduate credit. PREREQ: GENBUS 202 (GENBUS 302 recommended).

#### INTBUS - INTERNATIONAL BUSINESS

#### INTBUS 445G INTERNATIONAL TRADE AND INVESTMENT

**LAW** (3-0-3)(S). The law and policy of international economic institutions (e.g. World Trade Organization, NAFTA), national government regulation and private law affecting international transactions in trade in goods, services, technology and investment. Also selected issues in US foreign/trade policy and ethical/social responsibility. PREREQ: Senior standing or PERM/INST.

#### SPECIALIZATION COURSES

#### **Health Policy**

HLTHST 540 Health Information Management

MHLTHSCI 520 Medical Care Systems ECON 440G Health Economics

MHLTHSCI 550 Current Issues in Health Policy

#### **Public Administration**

PUBADM 504 Public Budgeting and Financial Administration

PUBADM 521 Intergovernmental Relations

PUBADM 550 The Executive and The Administrative Process

PUBADM 580-589 Selected Topics

# Executive Master of Business Administration

**Graduate Studies Director:** Kirk Smith **Program Information:** Cheryl Maille

Business Building, Room 318 Telephone 208 426-4034 FAX 208 426-1135

http://emba.boisestate.edu e-mail: emba.boisestate.edu

### **General Information**

The Executive Master of Business Administration (EMBA) program is a cohort-based graduate business program designed for employed professionals with considerable midlevel or higher business experience. Students in the EMBA program earn an M.B.A. degree by completing a lock-step curriculum of specified duration. The program provides advanced business education in an executive setting through a partnership between the College of Business and Economics and local companies and agencies. Participation by the partner organizations is a distinctive aspect of the program, and includes instruction in areas of special expertise, identification of illuminating projects and class experiences, and the hosting of class sessions. The unique design of the EMBA program, coupled with the wealth of diverse professional experience of the faculty and students, fosters a very effective educational environment.

## **Application and Admission Requirements**

Application and Admission Procedures. An applicant must follow the general application procedures for admission to a graduate program (see Graduate Admission Regulations). An applicant must also submit three letters of recommendation and an essay (describing his or her background and career goals) to the graduate program coordinator, and must participate in an interview with the coordinator or designee. Although GMAT scores are not required in general, the coordinator may require them for a particular applicant if the scores are likely to contribute to the evaluation for admission. Once the file for an applicant is complete, it will be reviewed by the EMBA admissions committee, and an admission recommendation (regular, provisional, or denial) will be forwarded to the graduate dean. The dean will make the final admission decision and notify the applicant.

Conditions for Admission. Applicants must satisfy the minimum admission requirements of the Graduate College and should have six or more years of mid-level to senior-level managerial or professional experience. The admissions process favors applicants who can contribute to the education of all program participants and have the potential for significant professional growth. Admission is competitive and is not guaranteed to any applicant. Each cohort is limited to a maximum of 35 students, and smaller cohort sizes may be imposed at the discretion of the EMBA admissions committee.

## **Degree Requirements**

Students enter as a cohort in the fall and finish the program together in two academic years. In the first year, students complete an integrated program of courses intended to give broad exposure to areas such as accounting, economics, finance, human resource management, information systems, marketing, operations management, and strategy formulation. A theme of innovation is incorporated with a strong emphasis on communication, leadership, ethics, and problem solving. The second year requires additional courses that emphasize the application of knowledge and development of depth in specialized areas. A project is also required in the second year as a culminating activity.

Executive Master of Business Administration	
Course Number and Title	Credits
First Year Courses	20
EMBA 511 Business Perspectives2	
EMBA 512 Assessing Business Opportunities 5	
EMBA 513 Creating Competitive Advantage I 3	
EMBA 514 Creating Competitive Advantage II 3	
EMBA 515 Fostering Innovation 4	
EMBA 516 Leadership and Teamwork Skills 2	
EMBA 517 Issues in Leadership I 1	
Second Year Courses	12
EMBA 521 Business in a Global Environment 5	
EMBA 522 Introducing New Products	
and Services2	
EMBA 523 Forging Business Partnerships	
and Alliances2	
EMBA 524 Rescuing Distressed Business Units 2	
EMBA 525 Issues in Leadership II1	
Culminating Activity (Second Year)	8
EMBA 591 Project8	
TOTAL	40

## **Course Offerings**

EMBA - EXECUTIVE MASTER OF BUSINESS ADMINISTRATION

Courses with the EMBA prefix are available only to students enrolled in the EMBA program, and are offered according to a schedule determined by the start semester of each cohort.

**EMBA 511 BUSINESS PERSPECTIVES (V-V-2)(F).** Provides an introduction to how managers can assess business opportunities,

create competitive advantage, and foster innovation throughout the life cycle of products and organizations. PREREQ: EMBA PROGRAM ADMISSION.

#### EMBA 512 ASSESSING BUSINESS OPPORTUNITIES (V-V-5)

**(F).** Provides an integrated foundation in accounting, economics, operations management, marketing, and strategic planning in the context of assessing business opportunities while operating in a global environment. PREREQ: EMBA 511.

#### EMBA 513 CREATING COMPETITIVE ADVANTAGE I (V-V-3)

**(S).** Provides an initial integrated foundation in finance, human resource management, marketing, operations management, and strategic planning in the context of creating competitive advantage while operating in a global environment. PREREQ: EMBA 512.

#### EMBA 514 CREATING COMPETITIVE ADVANTAGE II

**(V-V-3)(S).** Continues the integrated foundation in finance, human resource management, marketing, operations management, and strategic planning in the context of creating competitive advantage while operating in a global environment. PREREQ: EMBA 513.

**EMBA 515 FOSTERING INNOVATION (V-V-4)(S).** Provides an integrated foundation in finance, legal and ethical issues, organizational behavior, business modeling, and strategic planning methods in the context of fostering innovation within organizations. PREREQ: EMBA 514.

#### EMBA 516 LEADERSHIP AND TEAMWORK SKILLS (V-V-2)

**(F).** Examines personal styles in the workplace with emphasis on group dynamics. Also includes a personalized assessment of each participant's leadership strengths and weaknesses followed by the creation of a customized development plan. (Pass/Fail). PREREQ: EMBA PROGRAM ADMISSION.

**EMBA 517 ISSUES IN LEADERSHIP I (V-V-1)(S).** Continues execution of the leadership development goals identified in EMBA 516. (Pass/Fail). PREREO: EMBA 516.

#### EMBA 521 BUSINESS IN A GLOBAL ENVIRONMENT (V-V-5)

**(F).** Builds communication skills and provides the opportunity to solve business problems with executives from other cultures. Requires a passport and travel out of the United States for one week. PREREQ: EMBA 515, EMBA 517.

#### EMBA 522 INTRODUCING NEW PRODUCTS AND SERVICES

**(V-V-2)(F).** Project-focused deep examination of new product and service introductions. Particular emphasis on marketing and supply chain issues. PREREO: EMBA 521.

#### EMBA 523 FORGING BUSINESS PARTNERSHIPS AND

**ALLIANCES (V-V-2)(F).** Project-focused deep examination of growth strategies centering on business partnerships, alliances, mergers, and acquisitions. Particular emphasis on organizational behavior and business modeling/decision making. PREREQ: EMBA 521.

#### EMBA 524 RESCUING DISTRESSED BUSINESS UNITS (V-V-2)

**(F).** Project-focused deep examination of strategies to return distressed business units to effectiveness. Particular emphasis on finance and information systems. PREREQ: EMBA 521.

**EMBA 525 ISSUES IN LEADERSHIP II (V-V-1)(S).** Continues execution of the leadership development goals identified in EMBA 516. (Pass/Fail) PREREQ: EMBA 517.

## **Department of Accountancy**

#### **Chair: Paul Bahnson**

Business Building, Room 214 Telephone 208 426-2190 FAX 208 426-3637 http://cobe.boisestate.edu/graduate

**Full Graduate Faculty:** Paul Bahnson, Denise M. English, Thomas J. English, David R. Koeppen, William C. Lathen, E. Shawn Novak

**Associate Graduate Faculty:** Mark Cowan, Kip Krumwiede **Adjunct Graduate Faculty:** Frank llett Jr.

## Master of Science in Accountancy

Graduate Studies Director: Kirk Smith Program Administrator: J. Renee Anchustegui Business Building, Room 318
Telephone 208 426-1126
FAX 208 426-1135
http://cobe.boisestate.edu/graduate
e-mail: graduatebusiness@boisestate.edu

## **General Information**

The Master of Science in Accountancy is designed to provide individuals, seeking to enhance their professional competence, the skills necessary to offer value-added services. The program builds upon student's previously acquired knowledge and skills acquired in the undergraduate program and focuses on providing value-added services and solving real world business problems.

This degree program is designed to serve both professionals looking to expand their accounting knowledge and traditional undergraduate students seeking to complete the CPA requirements through the acquisition of a graduate degree. The program will serve the accounting profession by preparing accounting professionals to offer value-added services to their clients and employers.

Students may apply for Graduate Assistantships covering tuition and fees plus a stipend. Application must be received in the Business Graduate Studies office by February 15 of each year. Typical assignments include research assistantships, teaching assistantships, or specific project assignments.

Under certain conditions, and with approval of the MSA program director and the department head concerned, MSA students may earn up to a maximum of 3 credit hours of Directed Research or internship credits that apply to graduation requirements.

Students are asked to subscribe to a listserv during their first semester of study. Listserv instructions and a link are at http://cobe.boisestate.edu/graduate.

## **Application and Admission Requirements**

Application for admission, fees, and transcripts should be sent to the Graduate Admissions Office, Room 141, Math/Geosciences Building, Boise State University, 1910 University Drive, Boise, ID 83725-1110. All other materials should be sent to the Business Graduate Studies Office, B318, Business Building, Boise State University, 1910 University Drive, Boise, ID 83725

Initial acceptance in order to take MSA classes is based on the applicant's academic performance, leadership experience, professional experience, aptitude for graduate study, and managerial attributes. All applicants must fulfill the following requirements.

- Applicants to the MSA program must have graduated from an accredited college or university with a Bachelor's degree. Applicants to the MSA must complete all accounting classes required for an undergraduate degree in accountancy in addition to 15 credit hours of course work from the Boise State College of Business undergraduate core. Applicants to the MSA, Taxation emphasis need not have a degree in accountancy, but must have completed the equivalent of ACCT 302, Survey of Federal Income Taxation. Copies of official transcripts are also required upon initial application. Undergraduate students intending to enter the MSA program immediately upon completion of their Bachelor's degree programs should plan to take the Graduate Management Admission Test (GMAT) and apply to the program during the first semester of their senior year.
- 2. A score of 500 on the Graduate Management Admission Test (GMAT) and a cumulative GPA of 3.0 (C = 2.0) are generally considered minimal. For fall enrollment, students should arrange to take the GMAT by January. For spring enrollment, the GMAT should be taken no later than August. Undergraduate students should plan to take the GMAT by the middle of the first semester of their senior year. The GMAT may be waived for applicants who are currently CPAs, certified management accountants (CMAs), or certified internal auditors (CIAs). Applicants should request a letter be sent directly to the Graduate Admissions Office from the appropriate state board or national organization verifying their certification status.
- 3. Students with English as a second language (ESL) must score a minimum of 587/240 on the TOEFL or its equivalent. ESL students must also take and pass an English proficiency exam at Boise State before taking any graduate courses beyond their first semester.
- 4. Current professional resume which accurately reflects educational and professional work experience.
- 5. Two letters of reference (one preferably from an academic source) addressing the applicant's strengths and weaknesses, the benefits the applicant may receive from the MSA program, and what the applicant can contribute to the MSA program.
- 6. A brief response (maximum 2 pages, double spaced) discussing one of the following:

## College of Business and Economics Department of Accountancy

- A. Career goals both short-term and long term. What role does an MSA program, in general, and Boise State's MSA program in particular, play in helping the applicant achieve these goals?
- B. Two or three situations in the past three years where the applicant has taken a leadership role. How do these events demonstrate the applicant's managerial potential?
- C. A brief, candid self evaluation. Include some discussion of the abilities and attributes the applicant believes are their strengths and some discussion of areas where the applicant would like to develop more fully. What does the applicant consider most unique or distinctive about themselves?
- 7. There is limited space available in the graduate program. Meeting the minimum admission standards does not guarantee acceptance into the program. Final acceptance leading to a Master's degree is based upon the Graduate College's evaluation and acceptance of the applicant.

## For priority processing, complete application packets must be received no later than:

Summer, Fall entryMa	arch 1
Spring entryOcto	ober 1

## **Degree Requirements**

Master of Science in Accountancy	
Course Number and Title	Credits
The MSA degree requires a minimum of 30 hours of study.	
<b>Accountancy/Taxation Courses</b>	21
Select From:	
ACCT 502 Advanced Tax Topics3	
ACCT 505 Perspectives in Auditing 3	
ACCT 510 Advanced Financial Reporting 3	
ACCT 512 Financial Reporting Theory	
ACCT 514 Advanced Managerial Accounting 3	
ACCT 515 Business Valuation	
ACCT 516 Financial Statement Analysis 3	
ACCT 517 Environmental Accounting and	
Taxation3	
ACCT 518 International Financial Reporting 3	
ACCT 520 Research in Federal Taxation 3	
ACCT 525 Partnership Tax Law3	
ACCT 530 Corporate Tax Law I	
ACCT 533 Corporate Tax Law II	
ACCT 535 Estate & Gift Taxation3	
ACCT 545 Real Estate Tax Law3	
ACCT 555 Farm & Natural Resource Taxation 3	
ACCT 560 Income Taxation of Trusts & Estates 3	
ACCT 565 Deferred Compensation Taxation 3	

— continued —

Master of Science in Accountancy	
ACCT 570 State Taxation & Procedures	
Non-Accountancy Electives: Electives chosen from non-accountancy graduate courses	9
TOTAL	30

Non-Accountancy Electives must be approved by the student's graduate advisor. Business Essentials courses in the MBA program are not available for credit towards the MSA degree requirements, nor are courses that are essentially courses in accountancy (such as MBA 532).

# Master of Science in Accountancy, Taxation

**Graduate Studies Director:** Kirk Smith **Program Administrator:** J. Renee Anchustegui Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135 http://cobe.boisestate.edu/graduate e-mail: graduatebusiness@boisestate.edu

## **General Information**

The Master of Science in Accountancy, Taxation is designed to provide the curriculum and forum where individuals can obtain focused instruction in advanced taxation issues. Similar to the Master of Science in Accountancy degree, the Master of Science in Accountancy, Taxation degree builds upon the student's previously acquired knowledge and provides the skills necessary to provide value added services in the complex taxation environment.

This program will fulfill the needs of those individuals that desire to specialize in taxation (in addition to the objectives of the Master of Science in Accountancy). It serves Business professionals that desire to expand their knowledge in Taxation and value-added services as well as traditional students that desire an entry level position in the tax area.

Application and admission requirements and information on how to apply for Graduate Assistantships are described in the Master of Science in Accountancy.

### **Degree Requirements**

Master of Science in Accountancy, Taxatio	n
Course Number and Title	Credits
The MSAT degree requires a minimum of 30 hours.	
Taxation Courses  Selections From:  ACCT 502 Advanced Tax Topics	15-21
ACCT 590 Practicum/Internship	0-6
ACCT 510 Advanced Financial Reporting	
Subtotal Taxation and Accountancy Classes	21
Non-Accountancy Electives: Elective chosen from non-accountancy graduate courses.	9
TOTAL	30

Non-Accountancy Electives must be approved by the student's graduate advisor. Business Essentials courses in the MBA program are not available for credit towards the MSA degree requirements, nor are courses that are essentially courses in accountancy (such as MBA 532)

## **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

#### **ACCT - ACCOUNTANCY**

ACCT 450G Information Systems Auditing (3-0-3). Theory and application of auditing in a computerized accounting system environment. Course coverage emphasizes the standards by which information systems auditors should perform. Those standards address the evaluation of computer security, program development, program modification, computer processing, and source data controls. Current issues in auditing are addressed. Hands-on projects focusing on the review of security and the use of computer-assisted audit tools are utilized. PREREQ: ACCT 350, ACCT 405.

#### ACCT 451G MANAGERIAL ACCOUNTING (3-0-3). The

development and use of cost information for strategic cost management is emphasized. The uses of accounting information for management planning, production, and control decisions are covered. Examples include operations and capital budgeting, computer applications, and an in-depth application of cost accounting concepts. Emphasis is placed on the understanding and use of current cost management techniques. PREREQ: ACCT 351 and OPERMGT 345.

ACCT 502 ADVANCED TAX TOPICS (3-0-3). Theory and application of federal income taxation to corporations, partnerships, limited liability companies, S corporations, fiduciaries, and tax-exempt organizations. Specific topics include the tax effects of forming and operating these various entities. The course includes an introduction to estate and gift taxation, the tax consequences of international transactions, and tax research techniques.

**ACCT 505 PERSPECTIVES IN AUDITING (3-0-3).** In-depth study of auditing from both internal and external auditors' perspectives. Topics include substantive testing, evidence, planning, reporting, documentation, and case studies. The course includes a major project in either internal or external auditing.

**ACCT 510 ADVANCED FINANCIAL REPORTING (3-0-3).** Topics include financial reporting for partnerships, estates and trusts, and insolvency. Comprehensive study of complex business combinations, consolidated financial statements, and foreign currency transactions, PREREQ: ACCT 306.

**ACCT 512 FINANCIAL REPORTING THEORY (3-0-3).** Study of measurement theory and its implications for asset valuation and income determination. Emphasizes development of analytical and written communication skills.

#### ACCT 514 ADVANCED MANAGERIAL ACCOUNTING (3-0-3)

**(F/S).** Advanced applications of managerial accounting information for strategic management decisions. Coverage includes specialized tools for planning, operating and control decisions such as strategic cost management, strategic performance measurement and incentive systems, and activity- and resource-based costing. Emphasis is placed on the understanding and use of state of the art managerial accounting techniques. PREREQ: ACCT 314 or MBA 532 and OPERMGT 345 or MBA 527 or PERM/INST.

**ACCT 515 BUSINESS VALUATION (3-0-3) (F/S).** Study of the theory and practice of financial statement analysis and business valuation. Methods of fundamental analysis and business valuation are examined in detail and applied in problems, cases and projects.

**ACCT 516 FINANCIAL STATEMENT ANALYSIS (3-0-3).** The analysis of published financial reports from the perspectives of investors, creditors, competitors, and potential business partners. Emphasis is on the communication of information obtained from a rigorous and comprehensive analysis of the statements.

### ACCT 517 ENVIRONMENTAL ACCOUNTING AND TAXATION

(3-0-3). A theoretical and practical examination of the impact of environmental considerations in financial, managerial, and tax reporting. The interdisciplinary nature of environmental study, especially environmental science and environmental law, will be the starting point for developing information. The course emphasizes oral and written communication of accounting information for decision-making.

## College of Business and Economics Department of Networking, Operations, and Information Systems

#### ACCT 518 INTERNATIONAL FINANCIAL REPORTING (3-0-3).

Contemporary accounting practices of the major national economies. Includes directives of the European Community affecting financial reporting and pronouncements and activities of the International Accounting Standards Board.

#### ACCT 520 RESEARCH IN FEDERAL TAXATION (3-0-3).

Instruction in all aspects of tax research including legislative, administrative and judicial sources; major tax services; tax planning software and LEXIS; writing and negotiation skills.

**ACCT 525 PARTNERSHIP TAX LAW (3-0-3).** Tax meaning of partnership, formation transactions between partner and partnership; determination and treatment of partnership income; sales and exchanges of partnership interest; distributions; retirement; death of a partner; drafting the partnership agreement.

**ACCT 530 CORPORATE TAX LAW I (3-0-3).** Tax considerations in corporate formation, distributions, redemptions, and liquidations. The accumulated earnings tax, personal holding company tax, and S corporations are included.

**ACCT 533 CORPORATE TAX LAW II (3-0-3).** Advanced topics in corporate taxation including reorganizations, taxation of affiliated groups, and professional service corporations.

**ACCT 535 ESTATE AND GIFT TAXATION (3-0-3).** Federal estate and gift taxes, including estate planning.

**ACCT 545 REAL ESTATE TAX LAW (3-0-3).** Basis considerations, depreciation, and problems incident to the sale, exchange, and other disposition of property, including recognition and characterization concepts.

**ACCT 555 FARM AND NATURAL RESOURCE TAXATION** (3-0-3). Farm, forestry, mining, and oil and gas tax practices and issues

#### ACCT 560 INCOME TAXATION OF TRUSTS AND ESTATES

**(3-0-3).** Taxation of income of trusts and estates, with emphasis of income required to be distributed currently, equivocal distributions of income corpus, and accumulation distributions; other fiduciary tax problems, including the treatment of income in respect of decedents.

#### ACCT 565 DEFERRED COMPENSATION TAXATION (3-0-3).

Study begins with the ERISA rules and includes changes and updates for deferred compensation to the current date.

**ACCT 570 STATE TAXATION AND PROCEDURES (3-0-3).** State income tax issues, sales and use taxes, state and federal income tax procedures.

**ACCT 575 INTERNATIONAL TAXATION (3-0-3).** Multinational tax law for domestic corporations with operations abroad and nonresident citizens.

#### **ACCT 577 COMPUTER APPLICATIONS IN TAXATION**

**(3-0-3).** State of the art tax computer software applications including emphasis on tax planning considerations; writing and negotiation skills.

#### ACCT 579 PERSONAL FINANCIAL PLANNING (3-0-3)(F).

The course focuses on the tools to help individuals reach their personal financial goals. There will be five main areas of emphasis: investments, insurance coverage/asset protection, income tax planning, retirement planning and estate planning. The areas will be covered in the personal finance framework.

ACCT 590 PRACTICUM/INTERNSHIP (3-0-3).

## Department of Networking, Operations, and Information Systems

**Chair: Sharon Tabor** 

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Telephone 208 426-1181
FAX 208 426-1135
http://cobe.boisestate.edu/graduate
e-mail: cispomgen@boisestate.edu

**Full Graduate Faculty:** Robert Anson, Tim Chenoweth, Phillip Fry, Lyman Gallup, Gary Green, Jerry LaCava, Robert Minch, Murli Nagasundaram, Patrick Shannon, Sharon Tabor, Gregory Wojtkowski, Wita Wojtkowski

**Associate Graduate Faculty:** Thomas Gattiker, Emerson Maxson

## **Graduate Degrees Offered**

- · Master of Science in Management Information Systems
- Master in Management Information Systems
- · Graduate Certificate in Supply Chain Management

#### **General Information**

The Department of Networking, Operation and Information Systems offers two distinct graduate degree programs. The program leading to the Master of Science in Master of Science in Management Information Systems (M.S. MIS) is a thesis-based program designed to prepare students for research and further study at the doctoral level. The program leading to the Master in Management Information Systems (M. MIS) is a non-thesis program with a focus on professional development.

In the MIS master programs a minimum of 33 credits will be required for graduation. The M.S. MIS or M. MIS student who attends full-time will normally be enrolled for a two-year sequence excluding summers. Typically, however, students will maintain their current employment positions and attend the program part-time, thereby extending the length of time required to obtain the degree; the program length may not be longer than five years, except under exceptional circumstances.

These Master level programs will also be available to the Boise State University College of Business and Economics undergraduate students. These students will able to complete the undergraduate and graduate degree in five years. Undergraduate students will be admitted after their third year of study. In their senior year they will take 3 graduate courses (9 credits) as approved by their advisor. The remaining 24 credits are to be taken in their fifth year. Students, counseled by her/his graduate advisor will select the elective courses depending on the desired specialization. Admission to the program will be limited to 35 students a year.

# College of Business and Economics Department of Networking, Operations, and Information Systems

Although the requirements of the Boise State University Graduate College also govern the M. S. MIS and M. MIS degree program, the Certificate of Admission to enroll in graduate courses at Boise State does not guarantee admission into the M.S. MIS and M. MIS program. Enrollment in the program is limited. In order to enroll in required courses, students must first be admitted to the M.S. MIS or M. MIS program or obtain permission of the program advisor.

Students are asked to subscribe to a listsery during their first semester of study. Instructions and a link are at http://nois.boisestate.edu.

#### **Graduate Assistantships**

Graduate assistantships covering tuition and fee waivers may be available through research grants and contracts. Contact MIS director for information on assistantships which may be available from these sources.

Application deadlines for priority processing:

## **Application and Admission Requirements**

A prospective student may apply at any time and should follow the general graduate application procedure for degree-seeking students (see Applying as a Degree-Seeking Student in this catalog). The application for admission, transcripts, and fees should be sent to the Graduate Admissions office, Room 141, Math/Geosciences Building, Boise State University, 1910 University Drive, Boise, ID 83725. All other admission materials required for the MIS should be sent to the Business Graduate Studies office, Room 318.

Applicants should have a demonstrated interest in the application of information technology to organizational betterment and should be adept in at least two procedural programming languages.

To be considered for admission to the MIS program with regular status, an applicant must satisfy Graduate College requirement and the following program requirements:

- 1. Education and Work Experience
  - Applicants with at least a baccalaureate degree from an accredited college or university may be considered for admission. At a minimum, candidates for admission must have completed formal coursework in each of the following areas:

Operating Systems
Data Communications and Networking
Database Management
Systems Analysis and Design
Programming Languages

Applicants who are deficient in these areas may be considered for provisional admission to the program, but will be required to remedy any deficiencies by

- completing the equivalent undergraduate courses as prerequisites to the degree program. **Or**
- b. The current Boise State University student with at least three years of undergraduate study in Business can also be considered for admission. At a minimum, candidates for admission must have completed formal coursework in each of the following areas:

Operating Systems
Data Communications and Networking
Database Management
Systems Analysis and Design
Programming Languages

and received at least 3.0 or better in these courses (to be checked by Admissions Committee).

#### 2. Required Tests

The Admissions Committee will evaluate performance on the GMAT or GRE examinations. A GMAT score of 500 or GRE Verbal and Quantitative score of 1000 are generally considered minimal. Students whose native language is not English must submit a TOEFL score of 587/240 or higher. Students that are currently enrolled at Boise State University as undergraduates in Business do not have to take those exams.

- Official transcript of all post-secondary institutions attended.
- Current expanded professional resume which accurately reflects professional work experience.
- 5. Prerequisites
  - Admitted students must satisfy prerequisites of graduate courses that they are planning to take in areas of Computer Science and Master of Business Administration. Students who do not have these prerequisites but are otherwise qualified for admission will be advised to take relevant courses either at Boise State or another accredited institution. These courses are not counted for the graduation requirements in this program.
- 6. An essay discussing professional goals and reasons for desiring to study in the Management Information Systems program at Boise State.
- 7. Three letters of reference (one from an academic source) which address the applicant's strengths, weaknesses, benefits the applicant may receive from our MIS programs, and what the applicant can contribute to our MIS programs. Undergraduate Boise State students applying to the five year program must submit three letters of reference only from Boise State MIS faculty.
- 8. A student must be accepted to either the MIS program or another master's program to take MIS classes.

Final acceptance to MIS program is based upon the Admissions Committee evaluation of applicant on academic and professional accomplishments, performance on the GMAT or GRE examination, individual career goals, written recommendations, responses to interview (if performed), and personal essay.

## Master of Science in Management Information Systems

**Graduate Studies Director:** Kirk Smith **Program Administrator:** J. Renee Anchustegui

Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135

http://cobe.boisestate.edu/graduate e-mail: ranchust@boisestate.edu

### **Degree Requirements**

Master of Science in Management Information S	
Course Number and Title	Credits
Required Courses  MIS 517 Data Communications and Networking 3  MIS 520 Advanced Systems Development 3  MIS 550 Management of Information Technology 3  MIS 560 Data Communications and Networking 3  MIS 570 Project Management 3  MIS 571 Research Principles and Methods 3  MIS 593 Thesis 6	24
Elective Courses  MIS 525 Information Engineering	9
The purpose of the elective courses is to provide an opportunity for specialization in an area of interest related to the management information systems field. Courses are selected that are germane to the student's employment goals or thesis. The student's graduate advisor must approve these electives. The student will demonstrate, to the advisor's satisfaction, how the electives are to fit into the student's program of study and career objectives.	
TOTAL	33

#### **Thesis**

Students must be registered for the thesis course in the semester in which they are planning to defend the thesis. MIS 571 is the prerequisite for registration for the thesis.

# Master in Management Information Systems

**Graduate Studies Director:** Kirk Smith **Program Administrator:** J. Renee Anchustegui

Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135

http://cobe.boisestate.edu/graduate e-mail: ranchust@boisestate.edu

## **Degree Requirements**

Master in Management Information System	
Course Number and Title	Credits
Required Courses  MIS 517 Data Base Management	15
Elective Courses  MIS 525 Information Engineering	18
The purpose of the elective courses is to provide an opportunity for specialization in an area of interest related to the management information systems field. Courses are selected that are germane to the student's employment goals or thesis. The student's graduate advisor must approve these electives. The student will demonstrate, to the advisor's satisfaction, how the electives are to fit into the student's program of study and career objectives.	
TOTAL	33

# College of Business and Economics Department of Networking, Operations, and Information Systems

## **Course Offerings**

#### MIS - MANAGEMENT INFORMATION SYSTEMS

Graduate offerings in Management Information Systems are limited to those courses for which there is sufficient student demand as determined by the Department of Networking Operation and Information Systems.

MIS 517 DATA BASE MANAGEMENT (3-0-3)(F). An introduction to database processing. Detailed study of various tools needed for logical and physical design. Several commercially available database management systems are reviewed. The course also covers implementation.

#### MIS 520 ADVANCED SYSTEMS DEVELOPMENT (3-0-3)(F). A

study of selected aspects of contemporary software development methodology. These topics include: definition of user requirements, formal specification of solutions, design and implementation techniques, validation and testing, verification, maintenance, and reuse

MIS 525 INFORMATION ENGINEERING (3-0-3) (F/S). This course offers an overview of Information Engineering methodology. The topics include: phases of information engineering, implementation and planning of information engineering projects, techniques and tools such as data modeling, formal and informal strategic planning; strategic modeling, tactical modeling and operational modeling as

well as the benefits of information engineering.

MIS 526 VISUALIZATION (3-0-3) (F/S). A study of information visualization: the transformation of data and information into visual representation. The topics include: the fundamental philosophy of visualization and the essence of good and bad visualization techniques, visual display of quantitative information, visual explanations, visualization techniques for financial, marketing, and business data. Additionally, the course will consider techniques for visualization of complex directory/file structures and abstract data structures.

#### MIS 530 OBJECT ORIENTED SYSTEM DEVELOPMENT (3-0-3)

**(F/S).** The aim of this course is to provide a language-independent introduction to all aspects of object-oriented systems development. The topics will include: a high-level evaluation of the status of and prospects for object-oriented techniques and products, methods for analysis and design, and managerial issues associated with the introduction of object-oriented technology and methods.

#### MIS 531 ADVANCED SOFTWARE METHODS (3-0-3)

**(F/S).** Advanced topics in programming-languages theory and implementation. Topics include: useful algorithms, comparative language assessment, performance, maintainability, code generation.

#### MIS 550 MANAGEMENT OF INFORMATION TECHNOLOGY

(3-0-3)(S). This course introduces a variety of issues relating to managing information systems and the information technology function in an organization. It addresses both, behavioral and technical issues, and uses case studies as means of exploring a number of decision situations in organizations. All issues are considered from the managerial perspective.

# MIS 557 INTERNATIONAL DIMENSIONS OF THE INFORMATION TECHNOLOGIES (3-0-3) (F/S). This course considers international, regional and national information technology development strategies and policies. Topics include: IT and national sovereignty, development and control of global information highways,

impact of public and business policies on information systems design and use.

#### MIS 560 DATA COMMUNICATIONS AND NETWORKING

(3-0-3)(S). This course deals with fundamentals of digital data communications and networking. Topics include coding, signaling, and transmission of information as well as related hardware, software, standards, and protocol issues. Emphasis will be on open-systems approaches to networking, including TCP/IP, OSI, and the Internet. Additionally, the course will emphasize the analysis and discussion of strategic and technical topics related to the use and selection of data communications and networking technologies in organizations. PREREQ: Admission to program or PERM/INST.

#### MIS 561 NETWORK APPLICATIONS DEVELOPMENT (3-0-3)

**(F/S).** Analysis, design, and implementation of on-line systems using Internet and World Wide Web standards. Topics include client-server architectural alternatives, tools and development environments, database interfaces, use of multimedia, and challenges unique to the delivery environments. Subject to resource and technology availability, students may implement projects using client-side scripting, server-side programming tools, web services, or other distributed/cooperative processing approaches. Tools in past semesters have included Cold Fusion, JavaScript, and XML—however these will vary across semesters. PREREQ: MIS 560 or PERM/INST.

MIS 563 NETWORK MANAGEMENT (3-0-3) (F/S). A technical and managerial view of network operations and how our increasingly complex network architectures are managed. Various current network management tools, security and access policies, commonly used processes, and business policies will be explored. PREREQ: MIS 560 or PERM/INST.

#### MIS 565 ADVANCED NETWORKING AND

**TELECOMMUNICATIONS TOPICS (3-0-3)(F/S).** Exploration of advanced networking and telecommunications topics from both a business and technical perspective. Topics will vary each semester offered and may address current issues in computer networking; voice and data communication; network applications development; electronic commerce; legal, regulatory, and social environments; network management; and computer and network security. PREREQ: MIS 560 or PERM/INST.

## MIS 567 ELECTRONIC COMMERCE: AN EXPLORATION OF MANAGERIAL AND TECHNICAL ISSUES IN THE MOVE TO

**E-BUSINESS** (3-0-3) (F/S). This masters level special topics seminar will address both managerial and technical issues facing organizations as they revise business models and choose strategies to meet the challenges of the new millennium. Evolving out of today's electronic commerce models, the standard for doing business in the future will evolve increasingly around technology and fitting business processes into digital methodologies.

**MIS 570 PROJECT MANAGEMENT (3-0-3)(S).** Project planning, scheduling, control, and evaluation are presented. Issues of large-scale integrated systems are dealt with.

#### MIS 571 RESEARCH PRINCIPLES AND METHODS

**(3-0-3) (F/S).** This course will intend to give a holistic view of research methods. We will present a systematic survey of current research principles, methods, and practices. Content will focus on observation and measuring procedures, analysis methods, conceptualization, methods of constructing hypotheses, and developing research design. Other topics will include argumentation methods, review and

# College of Business and Economics Department of Networking, Operations, and Information Systems

evaluation methods, case study approach, data analysis, and scientific and technical writing. All students will create a research proposal in their area of interest.

# Graduate Certificate in Supply Chain Management

Graduate Program Coordinator: Kirk Smith

Business Building, Room 308 Telephone 208 426-1181 FAX 208 426-1135

e-mail: scm@boisestate.edu

### **General Information**

The Graduate Certificate in Supply Chain Management is intended for professionals with bachelor's degrees who are working in the logistics/supply chain field and need additional knowledge about logistics and supply chain management to fulfill the duties of their jobs. All of the courses in the program are offered online and asynchronous. There are no requirements for face-to-face meetings.

This program is administered on a cohort basis. It is expected that each entering group of students will progress through the program at the same pace. Students will be able to earn the Graduate Certificate in Supply Chain Management in 3 or 4 semesters depending on their choice of a specialty area.

## **Application and Admission**

A prospective student may apply at any time but must follow the general application procedures for admission to a graduate program (see the Graduate Admission Regulations section of this catalog). The applicant must also submit a letter of interest to the graduate program coordinator briefly summarizing his or her background and motivation for enrolling in the certificate program. Once the file for an applicant is complete, it will be evaluated by the graduate program coordinator and a faculty team. An admission recommendation will be forwarded to the dean of the Graduate College. The dean will make the final admission decision and notify the applicant. Conditions for Admission.

An applicant must:

- · possess a bachelor's degree
- be currently working in a job requiring Logistics/SCM skills
- achieve a satisfactory TOEFL score if English is a second language
- meet the graduate admission standards of the college through which they enroll in the program although a predictive exam like the GMAT is not required.

## **Relationships with Other Programs**

Admission to the Graduate Certificate in Supply Chain Management is separate from any other graduate program in the College of Business and Economics at Boise State University. Admission to another graduate program at Boise State University does not imply admission to the program for the Graduate Certificate in Supply Chain Management. Admission to the program for the Graduate Certificate in Supply Chain Management does not imply admission to any other graduate program at Boise State University.

## **Certificate Requirements**

Graduate Certificate in Supply Chain Manage	ment
Course Number and Title	Credits
Core Courses	9
SCM 531 Supply Chain Management3	
SCM 532 Logistics3	
SCM 533 Measurement in Supply Chains 3	
Specialty Courses	6
Successfully complete a two-course sequence in one	
of the following specialty areas:	
Radio Frequency Identification–RFID	
SCM 534 Radio Frequency Identification I 3	
SCM 537 Radio Frequency Identification II 3	
Travel and Transportation	
SCM 535 Transportation Systems Management 3	
SCM 538 Tourism Field Study3	
Operations Excellence along the Supply Chain	
SCM 536 Lean Operations	
SCM 539 Improving Supply Chain Quality 3	
Embedded in each specialty area course sequence will be a Capstone Project that focuses on a real application and demonstrates integration of knowledge and skills developed throughout the program.	
TOTAL	15

## **Course Offerings**

#### SCM - SUPPLY CHAIN MANAGEMENT

**SCM 531 SUPPLY CHAIN MANAGEMENT (3-0-3) (F/S/SU).** This course provides the basics of supply chain management. The focus of the course is on the impact of demands that an organization's stakeholders place on purchasing; the impact that purchasing and materials management have on organizational success; the impact of ethical, contractual, and legal issues; the impact of strategic objectives; and the impact of supply chain considerations on the other major functional activities. PREREQ: Admission to the Graduate Certificate in Supply Chain Management or PERM/INST.

**SCM 532 LOGISTICS (3-0-3) (F/S/SU).** This course is an introduction to the principles and practices of global supply chain and logistics management. The course covers the integration of all the activities involved in the procurement, storage, and movement of goods from the initial supplier to the final customer. This course will introduce the logic behind this integration and discuss how global organizations have gained a sustainable competitive advantage by implementing programs of total supply chain logistics management

# College of Business and Economics Department of Networking, Operations, and Information Systems

into their organizations. PREREQ: Admission to the Graduate Certificate in Supply Chain Management or PERM/INST.

#### SCM 533 MEASUREMENT IN SUPPLY CHAINS (3-0-3) (F/S/SU).

Study of the tools needed to measure and sell the value created by logistics throughout the global supply chain. An evaluation of global systems and complexity factors will be conducted and their impact on the creation of this value. Performance valuation will be analyzed through the techniques of systems analysis, assumption-based planning, project management, balanced scorecard, modeling and computer-based simulation. Financial valuation will be determined through activity-based cost accounting and capital budgeting techniques. PREREQ: Admission to the Graduate Certificate in Supply Chain Management or PERM/INST.

#### SCM 534 RADIO FREQUENCY IDENTIFICATION I (3-0-3)

(F/S/SU). Provides students with an understanding of how the study of radio frequency identification (RFID) automatic identification (AUTO-ID) technology impacts supply chain management systems and logistics applications. The student will assess and measure various RFID methods and technologies within large and small logistics systems, using a variety of RFID or AUTO-ID technology to formulate plans of logistics system success and failure. Students will combine alternative RFID methods in order to test and rank those best needed for different business cases. Students will design, develop and integrate logistics information systems to appraise the value of experimental RFID systems. PREREQ: Any two of SCM 531, SCM 532, SCM 533 or PERM/INST.

# **SCM 535 TRANSPORTATION SYSTEMS MANAGEMENT (3-0-3) (F/S).** This course presents an advanced study of the management of passenger transportation systems in the travel industry. The students will focus on different forms of transportation as they relate to travel industry management and policy. PREREQ: Any two of SCM 531, SCM 532, SCM 533 or PERM/INST.

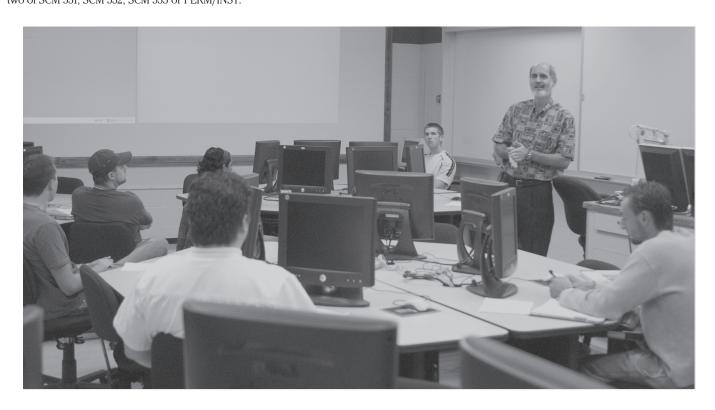
SCM 536 LEAN OPERATIONS (3-0-3) (F/S/SU). The course introduces the basic concepts of lean operations and shows through examples, cases studies, simulations, and hands-on projects how organizations can reduce or eliminate the wastes that adversely impact profitability and performance. Topics covered will include value-stream mapping, synchronized flow, pull systems, kanban systems, the 5S's, quick change-over, theory of constraints, total productive maintenance, error proofing, and the balanced scorecard. PREREQ: Any two of SCM 531, SCM 532, SCM 533 or PERM/INST.

SCM 537 CAPSTONE FOR RFID (3-0-3) (F/S/SU). The student will demonstrate mastery of the knowledge and skills expected of someone who is a supply chain management professional through completion of a business case development project using automatic identification (AUTO-ID) technology such as radio frequency identification or RFID as mandated by Wal-Mart and the Department of Defense. This course is the culmination of the capstone RFID project that will be identified, defined, and begun in the first RFID course. PREREQ: SCM 534 or PERM/INST.

**SCM 538 TOURISM FIELD STUDIES (3-0-3) (F/S).** This course emphasizes the integration of concepts and the application of knowledge and skills from other courses to a selected travel/tourism field study project. PREREQ: SCM 535 or PERM/INST.

#### SCM 539 IMPROVING SUPPLY CHAIN QUALITY (3-0-3)

**(F/S/SU).** The course introduces the basic approaches that organizations can take to work with their suppliers to assist them in all facets of improvement with the objective of becoming a preferred supplier. Such concepts as supplier quality, six-sigma quality, project management skills, quality standard and supplier selection and development are discussed. PREREQ: SCM 536 or PERM/INST.



## College of Education

**Dean: Diane Boothe** 

Associate Dean: Ross Vaughn

Education Building, Room 705 Telephone 208 426-1161 FAX 208 426-4365 http://education.boisestate.edu/grad/

#### General Information

The College of Education is composed of eight academic departments offering one doctoral degree, 13 masters degrees and 6 graduate certificates:

#### **Department of Bilingual Education**

- · Master of Education in Bilingual Education
- Master of Education in English as a Second Language

#### **Department of Counselor Education**

- · Master of Arts in Counseling
- Graduate Certificate in Addiction Studies
- Graduate Certificate in Gerontological Studies

#### Department of Curriculum, Instruction, and **Foundational Studies**

- Doctor of Education in Curriculum and Instruction
- Master of Arts in Education, Curriculum and Instruction
  - Option: Physical Education Pedagogy
- Graduate Certificate in Secondary/K-12 Teaching

#### **Department of Early Childhood Studies**

- · Master of Arts in Education, Early Childhood Studies
- Master of Education in Early Childhood Studies

#### **Department of Educational Technology**

- · Master of Science in Education, Educational Technology
- Graduate Certificate in Online Teaching
- Graduate Certificate in School Technology Coordination
- Graduate Certificate in Technology Integration Specialist

#### **Department of Kinesiology**

- · Master of Science in Exercise and Sport Studies
  - Behavioral Studies
  - Biophysical Studies
  - · Socio-historical Studies
- Master of Physical Education in Athletic Administration (Cooperative with Idaho State University)

#### **Department of Literacy**

Master of Arts in Education, Reading

#### **Department of Special Education**

- Master of Arts in Special Education
- Master of Education in Special Education

## **Application and Admission Requirements**

Prospective students may apply for admission at any time. However, in order to qualify for degree seeking status the following application materials must be received by the Graduate Admissions Office by July 13 for fall semester, or December 1 for the spring semester:

- Application for admission. http://www.boisestate. edu/gradcoll
- \$55.00 application fee.
- Official transcripts of all undergraduate and graduate course work sent directly to Graduate Admission and Degree Services at Boise State University.
- Minimum GPA of 3.00 (on a 4.0 scale) for the last two years of undergraduate study, or an overall GPA of 3.00.

### **Advisors**

The name of a faculty member who will serve as temporary advisor will be indicated in the letter of acceptance to the applicant. Candidates should contact this faculty member as soon as possible to plan a program of study and complete the Program Development Form. Credits taken prior to such planning are subject to the review and approval of the advisor and the Program Coordinator for that particular program or program emphasis.

### **Graduate Assistantships**

Graduate Assistantships are available in each department in the College of Education. Awards may consist of a stipend and a fee waiver. In addition, non-resident tuition is waived for any non-resident student receiving an assistantship award. Applications must be received in the department by January 15 of each year. Typical assignments include research assistants, teaching assistants, or assignments related to specific areas. Graduate assistantships are awarded for one year and may be renewed for one additional year.

# Department of Bilingual Education

Chair: Claudia Peralta Nash

Education Building, Room 411 Telephone 208 426-2846

e-mail: ClaudiaNash@boisestate.edu

Full Graduate Faculty: Robert Bahruth,

Claudia Peralta Nash

Associate Graduate Faculty: Aileen Hale

## **Graduate Degrees Offered**

• Master of Education in Bilingual Education

Master of Education in English as a Second Language

#### **General Information**

The Department of Bilingual Education offers a master of education degree in bilingual education (Spanish-English) and in English as a second language. These degree programs provide additional training for teachers who work with, or are preparing to work with English language learners. The programs meet Idaho state standards for bilingual education and ESL endorsements. ESL participants are required to have at least 4 credit hours of a foreign language. This program does not provide foreign language classes.

## **Bilingual Education**

To be a bilingual teacher is to be prepared to teach all content area subjects in two languages, Spanish and English, and to teach them in the context of both the Latino and Anglo cultures. Bilingual teachers must be fluent in Spanish and English. The four major goals of bilingual education are as follows:

- To teach English to non-English-speaking students or students learning English;
- To maintain the students at grade level in the content subjects while they are learning English;
- To ensure students meet the same rigorous academic standards that all other students meet; and
- To prepare them to meet requirements so that they can graduate from high school on time.

## English as a Second Language (ESL)

The primary purpose of English as a Second Language (ESL) is to teach students English, enabling them to succeed in schools where English is the language of instruction. ESL is not designed to do the work of bilingual education, that is,

teach all of the content subjects in a way that will maintain students at grade level. It is designed primarily to teach English by using vocabulary and structures commonly found in the content area classes.

#### **Program Requirements**

Courses are offered at the West Campus and Twin Falls on week-ends (Friday-Saturday). Treasure Valley and Magic Valley students may have to travel to Boise to complete some elements of the program. The program also requires attendance at an intensive practicum, which consists of workshops and orientation sessions with the bilingual/ESL staff, followed by a week of visits to local educational centers, observing, working with and co-teaching with an outstanding bilingual/ESL teacher in the host district.

#### **Special Notice**

Cost per 3-credit-hour class is the same for Idaho residents and non-residents: \$840. A Federal grant supports a limited number of scholarships for this program. Contact the Boise State University Bilingual Education Office for information.

# Master of Education in Bilingual Education

**Graduate Program Coordinator:** Claudia Peralta Nash Education Building, Room 411 Telephone 208 426-2846 e-mail: ClaudiaNash@boisestate.edu

## **Degree Requirements**

Master of Education in Bilingual Education (Spanish-English)	n
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
ED-BLESL 500 The Bilingual/ESL Curriculum: Creating, Planning, Implementation	28
ED-BLESL 503 Applied Theoretical Foundations of Bilingual Education/ESL and Multiculturalism. 3 ED-BLESL 504 Literacies for Bilingual and English Language Learners	

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## College of Education Department of Bilingual Education

Master of Education in Bilingual Education (Spanish-Eng (continued)	glish)
ED-BLESL 508 Advanced Theories of Second	
Language Acquisition <b>OR</b>	
ED-LTCY 548 Psycholinguistics & Literacy 3	
ED-BLESL 509 Field Experience in Bilingual	
Classrooms1	
ED-BLESL 511 Contemporary Issues in Bilingual	
Education2	
ED-BLESL 600 Assessment (Comprehensive	
Examination)1	
TOTAL	32

**Note:** This master's program is for both elementary and secondary teachers P-12. The Bilingual Education program uses only the Spanish and English languages and the Latino and Anglo cultures. It requires a student to be bilingual in Spanish and English prior to entering the program. Completion of the Bilingual Education program does not qualify the candidate for state certification. However, these courses may be used toward certification renewal or endorsement.

## Master of Education in English as a Second Language

Graduate Program Coordinator: Claudia Peralta Nash

Education Building, Room 411 Telephone 208 426-2846

e-mail: ClaudiaNash@boisestate.edu

## **Degree Requirements**

Master of Education in English as a Second Lan	guage
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
ED-BLESL 500 The Bilingual/ESL Curriculum:	28
Creating, Planning, Implementation3	
ED-BLESL 501 Culturally Diverse Learners	
ED-BLESL 502 Methods of Teaching ESL: Maximizing	
Innovative Pedagogical Approaches to	
Teaching ESL	
ED-BLESL 503 Applied Theoretical Foundations of	
Bilingual Education/ESL & Multiculturalism 3	
ED-BLESL 505 Applied Linguistics: Nurturing	
Communicative Competence	
ED-BLESL 506 Multicultural Literature: Promoting	
Social Justice	
ED-BLESL 507 Parental Involvement: Building a	
Community of Bilingual/ESL Learners 3	

— continued —

Master of Education in English as a Second Language (con	tinued)
ED-BLESL 508 Advanced Theories of Second	
Language Acquisition <b>OR</b>	
ED-LTCY 548 Psycholinguistics & Literacy 3	
ED-BLESL 510 Field Experience in ESL Classrooms 1	
ED-BLESL 511 Contemporary Issues in Bilingual	
Education2	
ED-BLESL 600 Assessment (Comprehensive	
Examination)1	
TOTAL	32

**Note:** This master's program is for both elementary and secondary teachers P-12. The ESL program uses primarily the Spanish language for examples but is applicable to all non-English languages. It does not require a student to be bilingual. Completion of the ESL program does not qualify the candidate for state certification. However, these courses may be used toward certification renewal or endorsement.

## **Course Offerings**

#### ED-BLESL – EDUCATION-BILINGUAL EDUCATION ED-BLESL 500 THE BILINGUAL/ESL CURRICULUM: CREATING, PLANNING, IMPLEMENTATION (3-0-3)(F/S).

For teachers preparing to teach bilingual and/or English language learners. Theory and best practices of planning and creating an effective curriculum for bilingual and ESL classrooms. Participants examine both planned curriculum based upon specific objectives, and generative curriculum based on learners' needs, experiences and interests. Students will design a model curriculum for a bilingual and/or ESL classroom.

#### **ED-BLESL 501 CULTURALLY DIVERSE LEARNERS (3-0-3)**

**(F/S).** Through the use of ethnographic tools, students will gain a better understanding of cultural and linguistic issues in their schools, local, and global communities.

## ED-BLESL 502 METHODS OF TEACHING ESL: MAXIMIZING INNOVATIVE PEDAGOGICAL APPROACHES TO TEACHING

**ESL** (3-0-3) (F/S). Pedagogy of teaching ESL that will maximize language and literacy acquisition. Students will learn how to develop content subject material that is pedagogically responsible to English language learners and culturally diverse students by learning pedagogical scaffolds that place students at the center of the learning process.

## ED-BLESL 503 APPLIED THEORETICAL FOUNDATIONS OF BILINGUAL EDUCATION/ESL AND MULTICULTURALISM

(3-0-3) (F/S). The study and analysis of successful bilingual education, English as a Second Language, and Multicultural program practices. Students research and critique programs that demonstrate the characteristics of successful bilingual, ESL, and multicultural classrooms (i.e., teachers' ability to articulate pedagogy used in the classroom).

**ED-BLESL 504 LITERACIES FOR BILINGUAL AND ENGLISH LANGUAGE LEARNERS (3-0-3) (SU).** For teachers in classrooms designated as Spanish and English bilingual classrooms. Participants learn the processes and effective strategies for teaching reading and writing to bilingual and English language learners. Taught in Spanish and English.

## ED-BLESL 505 APPLIED LINGUISTICS: NURTURING COMMUNICATIVE COMPETENCE (3-0-3) (SU). A course to

assist teachers in learning the differences and similarities between the Spanish and English languages in order to teach English as a language of instruction and to promote communicative competence among English language learners. Explorations of the intersections of language, with race, class, gender and ethnicity.

#### ED-BLESL 506 MULTICULTURAL LITERATURE: PROMOTING

**SOCIAL JUSTICE (3-0-3) (F/S).** Students examine multicultural literature by engaging in critical literacy, substantive discussion, reflective writing, visual representation, and dramatic enactment. A main theme throughout this class is how to use the collection of literature as a tool for curriculum transformation, to promote social justice and encourage empowerment. Students will learn to take the words from the page to inform and transform their worlds.

## ED-BLESL 507 PARENTAL INVOLVEMENT: BUILDING A COMMUNITY OF BILINGUAL/ESL LEARNERS (3-0-3) (F/S/SU).

Participants critically examine why school-community partnerships are particularly valuable in multicultural settings. They examine texts of parental involvement in schooling and actual practices and address questions of power relations, politics of exclusion and the privilege of race, gender, class, and culture. Students explore practices that respect diversity and honor all parents, students, community members, and teachers.

#### ED-BLESL 508 ADVANCED THEORIES OF SECOND

LANGUAGE ACQUISITION (3-0-3) (F/S/SU). Psycholinguistic processes and strategies by which readers and writers construct and reconstruct the message of a text. Application of theoretical conclusions to the teaching practices. Exploration and discussion of major theoretical arguments from current theorists and the pedagogical implications of second language acquisition research that focuses on language, literacy, and learning. Participants will apply knowledge to teaching primary and secondary children the English language.

#### **ED-BLESL 509 FIELD EXPERIENCE IN BILINGUAL**

**CLASSROOMS** (0-3-1) (F/S). A partnership teaching experience with a bilingual teacher in an exemplary bilingual classroom. Participants spend a minimum of fifty clock hours working side by side with the host teacher.

#### **ED-BLESL 510 FIELD EXPERIENCE IN ESL CLASSROOMS**

**(0-3-1)(F/S).** A partnership teaching experience with an English as a second language teacher in an exemplary ESL classroom. Participants spend a minimum of fifty clock hours working side by side with the host teacher.

#### **ED-BLESL 511 CONTEMPORARY ISSUES IN BILINGUAL**

**EDUCATION/ESL (2-0-2) (F/S/SU).** Current issues and their political ramifications in the fields of bilingual/multicultural education, and English as a second language. Critique of current trends in education and creating an awareness of how teachers can enhance their advocacy for students, parents and stakeholders.

# Department of Counselor Education

#### Chair: Kenneth Coll

Education Building, Room 643 Telephone 208 426-1219 or 426-1821 e-mail: kcoll@boisestate.edu

**Full Graduate Faculty:** Bobbie Birdsall, Kenneth Coll, Margaret Miller, Jim Nicholson

**Adjunct Graduate Faculty:** Mary Campbell, Mary L. Ensley, Brenda Freeman, Susan Reuling Furness, Tim Furness, Anne Marie Nelson (Emerita), Phyllis Nodler

## **Graduate Degrees Offered**

- Master of Arts in Counseling
- · Graduate Certificate in Addiction Studies
- · Graduate Certificate in Gerontological Studies

### **General Information**

The Master of Arts in School Counseling prepares individuals in education and related careers to become professional counselors at the elementary, middle, and secondary school levels as well as addictions related settings. The program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), National Council for the Accreditation of Teacher Education (NCATE), and the Northwest Association for Schools and Colleges (NWASC), and is an institution partner in The Education Trust "Initiative for Transforming School Counseling." The Program is designed to meet or exceed Idaho Department of Education qualifications for certification in school counseling and the State Board of Occupational Licenses' criteria for licensure as a professional counselor. An additional series of electives provides courses leading to certification and licensure as a professional counselor with a specialty in addictions.

Course work is offered in sequence, primarily during evenings and weekends of fall and spring semesters, with students enrolling in six to nine credits each semester and enrolling in six to seven credits offered in the daytime during the summer sessions.

## **Application and Admission Requirements**

In addition to meeting the admission requirements and deadlines of the Graduate College, the student must apply for admission to and be accepted by the Counseling Program Admissions Committee. Enrollment is competitive with a new cohort beginning the Program each fall.

Submit in one packet, to the Counseling Department Admissions Committee (annual deadline is March 1):

 letter of application describing your professional experiences as they support your desire to be a school or addictions related counselor, specific career goals, and

# College of Education Department of Counselor Education

reasons for your interest in this program. Include in the letter your vision about the role of a school or addictions related counselor:

- · up-to-date resume;
- complete post-secondary transcripts (noncertified copies accepted);
- three current, sealed letters of reference supporting your qualifications for a counseling program and for graduate work.

An on-campus pre-admission interview and writing sample are required of all finalists. When attendance is an extreme hardship for the applicant, special arrangements may be made (such as a conference telephone interview or alternate site interview). No other pre-admission testing is required. A criminal background check prior to placement in a school setting is required of all students, and an Adjudication statement is required of each student upon acceptance and at several check points in the program.

## Master of Arts in Counseling

#### **Graduate Program Coordinators:**

Bobbie Birdsall, School Counseling Education Building, Room 611 Telephone 208 426-3204 e-mail: bbirdsa@boisestate.edu

Kenneth Coll, Addiction Studies Education Building, Room 614 e-mail: kcoll@boisestate.edu

#### **General Information**

The Master of Arts in Counseling degree consists of a minimum of sixty (60) semester hours of course work designed to prepare professionals to counsel with youth in school or addictions related settings. Courses promote the acquisition of the knowledge and skill development in the eight core areas listed in CACREP Standards: Professional Identity, Social and Cultural Diversity, Human Growth and Development, Career Development, Helping Relationships, Group Work, Assessment, and Research and Program Evaluation. Specific course work in each of the eight components is listed below. Electives offered ad hoc or in rotation are designed to maximize flexibility while reflecting current training trends in school counseling. Course sequence and content also prepare school counselors to meet the standards of Idaho MOST (Maximizing Outcomes of Students and Teachers).

**School Counseling:** Students incorporate theory and knowledge into an increasingly advanced application of skills throughout the program—fine tuning an individualized counseling approach through audio and video taped interviews in counseling labs, participation in counseling practica using one-way mirrors and video taping, and supervised experience in the community, school, and student outreach sites. Prior to working in the schools, students will obtain a fingerprint/background check and submit the results

directly to the School Counseling Graduate Coordinator. Students have considerable latitude in selecting internship sites to maximize their experience in line with specific career goals with at least half of the 700-hour internship experience occurring in a school setting. The student's culminating activity includes a written comprehensive exam and videotaped evidence of skill and theory integration supported by a comprehensive portfolio demonstrating professional growth and counseling knowledge with culturally appropriate awareness. Each student works closely with a Program Advisor and a Supervisory Committee in preparing the portfolio. During one semester of the Program each student counselor is expected to participate in a group counseling experience with a licensed counselor not involved in Program instruction.

Addiction Studies: The 60-credit Master of Arts in Counseling offers the core of counseling knowledge and skills that allows graduates to enter nearly any branch of the counseling profession. An additional elective track in addictions counseling provides courses leading to certification as an addictions counselor. Certifications identify to the public those counselors who have met professional addictions standards and promote the master level addictions counselors' professional identity, visibility, and accountability. This course work is designed to meet all curricular experiences required to become a nationally credentialed Master Addictions Counselor (MAC) and an Idaho Certified Alcohol and Drug Counselor (CADC).

### **Degree Requirements**

Master of Arts in Counseling	
Course Number and Title	Credits
Professional Identity COUN 501 Foundations in Counseling	6
COUN 519 Elementary School Counseling <b>OR</b> 2 COUN 520 Secondary School Counseling <b>OR</b> 2 COUN 529 Middle School Counseling	
Social and Cultural Diversity COUN 508 Special Needs, Ethics and Legal Issues in Counseling	7
Human Growth and Development COUN 511 Family Systems	7
Career Development COUN 507 Career Development and Vocational Counseling	3

— continued —

Advanced Auto in Commoding (continued)	
Master of Arts in Counseling (continued)	
Helping Relationships COUN 502 Counseling Theories and Applications I	6
Applications II	
Group Work COUN 513 Group Counseling3	3
Assessment COUN 504 Measurement and Evaluation in School Counseling	6
Research and Program Evaluation COUN 512 Statistics and Research Design	3
Practica COUN 514 Counseling Practicum I	4
Internships COUN 526 Internship in Counseling I	6
Electives	9
TOTAL	60

Master of Arts in Counseling, Addiction Studies	
Course Number and Title	Credits
CORE REQUIREMENTS COUN 519 Elementary School Counseling	51
EMPHASIS REQUIREMENTS COUN 545 Foundations of Chemical Dependency	8
ADDITIONAL CREDENTIAL REQUIREMENTS For MAC add: COUN 544 Assessment of Alcohol and Drug Problems, Part I	3-6
TOTAL	62-65

# Graduate Certificate in Addiction Studies

(See Section on Interdisciplinary Programs)

# Graduate Certificate in Gerontological Studies

(See Section on Interdisciplinary Programs)

## **Course Offerings**

**COUN - COUNSELING** 

**COUN 501 FOUNDATIONS IN COUNSELING (3-0-3)(F).** Provides an introduction to professional, ethical, legal, theoretical, cultural, social, and practical aspects of counseling. Students examine the roles and responsibilities of counselors; professional organizations and associations; and professional preparation standards. Historical, cultural, and social contexts along with emerging professional issues and directions are included. PREREQ: Admission to the Counseling Program.

#### **COUN 502 COUNSELING THEORIES AND APPLICATIONS I**

(2-2-3)(F). Examine historical and contemporary theories of counseling, overview of counseling processes in a pluralistic society, and acquire counseling skills through videotaped and role-played practice related to major approaches. Specified structure and activities within this course meet the CACREP accreditation requirement of 10 hours of Group Counseling Experience. PREREQ: Admission to the Counseling Program.

COUN 504 MEASUREMENT AND EVALUATION IN SCHOOL COUNSELING (3-0-3) (SU). Students will access theory and practice of standardized test development and procedures; applications and limitations of standardized tests; techniques of administering individual/group tests and of interpreting assessment instruments and profiles; and communication strategies with clients, parents, school personnel, and relevant professionals. PREREQ: COUN 512 or similar graduate statistics course.

#### **COUN 505 COUNSELING THEORIES AND APPLICATIONS II**

(2-2-3)(S). Examine historical and contemporary theories of counseling including an overview of counseling process and practice. Acquire effective and ethical counseling skills through videotaped and role-played practice related to major approaches. As a culminating activity each student will develop and articulate an individualized perspective toward counseling in a pluralistic society. PREREQ: COUN 501 and COUN 502.

**COUN 506 LIFESPAN DEVELOPMENT (2-0-2)(F/SU).** Examine theoretical constructs related to developmental processes, both typical and atypical, and analyze developmentally based behavior patterns across the age spectrum (birth to death) through a variety of contemporary cultures and beliefs.

# College of Education Department of Counselor Education

#### **COUN 507 CAREER DEVELOPMENT AND VOCATIONAL**

**COUNSELING (3-0-3)(S/SU).** Provides an overview of the major career development theories, vocational guidance and occupational/educational information sources and systems. Career development program planning, resources, computerized information systems, and evaluation will be included. Emphasis will be placed on how career counseling and vocational guidance are practiced by the school counselor. PREREQ: Admission to the Counseling Program or Masters in Counseling.

COUN 508 SPECIAL NEEDS, ETHICS, AND LEGAL ISSUES IN COUNSELING (3-0-3) (F/SU). Information on laws, regulations, techniques and interventions needed by professional counselors when working with individuals with disabilities or other challenges. Examination of ethical, legal, and professional issues involved in counseling in all settings and populations. Analysis of questionable situations and practitioner decision-making based on the ethical standards of the American Counseling Association and laws governing professional counselors. PREREQ: COUN 505 or PERM/INST.

#### COUN 509 CULTURALLY AWARE COUNSELING (3-0-3)

**(S/SU).** Examine the impact of cultural diversity among races, ethnic groups, genders, and social classes on personality, value systems and the counseling relationship with an understanding of societal changes and trends, human roles in societal subgroups, social mores, and differing lifestyles with special attention to the influence of cultural and social change on family relationships, gender equity, and individual adjustment. Examine one's own attitudes, behaviors, perceptions, and biases to develop a culturally aware approach to teaching, counseling, and/or administration. PREREQ: COUN 502 or PERM/INST.

COUN 511 FAMILY SYSTEMS (2-2-3) (F/SU). Examine theoretical constructs related to the family structure, climate, and interactions and develop skills for working with families from diverse backgrounds, including families with special needs children. Opportunities are presented for student participation in parenting skills classes and family systems work. PREREQ: COUN 505 and COUN 509.

#### COUN 512 STATISTICS AND RESEARCH DESIGN (2-2-3)(SU).

Students will gain the fundamentals of statistics as they analyze counseling and educational data with emphasis on the review and interpretation of research literature (particularly in the areas of child development and psychotherapy), experience the role of computers in statistical analysis, and discover the relationships among measurement, design, and statistics. PREREQ: COUN 501.

**COUN 513 GROUP COUNSELING (2-2-3) (SU).** Students will focus on the concepts and skills necessary to understand and lead counseling groups in schools and other settings. PREREQ: Completion of COUN 516 with grade of at least "B".

**COUN 514 COUNSELING PRACTICUM I (2-1-2) (F).** Review theory and culturally competent skills integration prior to participating in closely supervised counseling experiences through modeling, peer counseling, ethical review, and audio and/or video taping. PREREQ: COUN 505 with grade of at least "B".

**COUN 516 COUNSELING PRACTICUM II (1-2-2)(S).** Participation in closely supervised counseling experiences (audio and/or videotaping required) with emphasis in student's area of specialization or interests focusing on ethical decision-making and culturally competent strategies. PREREQ: COUN 514 with a grade of at least "B".

#### COUN 517 FAMILY ISSUES IN LATER LIFE (3-0-3)(S)(Even

**years).** Overview of gerontology presented by examining major issues related to family issues of aging. Content includes development and transition in later life, wellness in later life, common issues, and appropriate family counseling and consulting strategies.

#### **COUN 518 COUNSELING ISSUES WITH OLDER ADULTS**

**(3-0-3)(S)(Odd years).** Focus on intervention strategies for common later life impairments. Application of theory, research, and practice to gerontological counseling and wellness.

#### **COUN 519 ELEMENTARY SCHOOL COUNSELING**

(2-0-2)(F) (Odd years). Explore evolving roles and responsibilities of elementary school counselors including curriculum development, parent and teacher consultation, developmentally appropriate interventions, emergency procedures, ethical and legal considerations, documentation, referral, and counseling skills with children from diverse backgrounds. Analyze the organization and implementation of the "Idaho Comprehensive School Counseling Program Model" while observing in an elementary school setting. PREREQ: COUN 505 and COUN 530 or Masters in Counseling.

#### COUN 520 SECONDARY SCHOOL COUNSELING (2-0-2)(S)

**(Even years).** Explore the evolving roles and responsibilities of high school counselors including curriculum development, parent and teacher consultation, developmentally appropriate interventions for diverse populations, emergency procedures, ethical and legal considerations, documentation, referral, job/school partnerships, and lifespan planning. Analyze the organization and implementation of the "Idaho Comprehensive School Counseling Program Model" while observing in a secondary school setting. PREREQ: COUN 505 and COUN 530 or Masters in Counseling.

#### **COUN 521 OUTREACH THROUGH PARENT EDUCATION**

(1-0-1)(S). Students will learn the philosophy and rationale for parent education, become familiar with parent education materials, and gain skills necessary to facilitate parent education groups. This course presents materials used by the Parent Education Center in the Boise School District. Students must take either this course or Boise District's Parent Education Facilitator Training to be eligible to provide parent education classes. PREREQ: Admission to the Counseling Program or Master in Counseling.

#### COUN 523 REFERRAL AND NETWORKING (1-0-1)(F/S/SU).

Investigate the crisis/short-term intervention approach to counseling. Analyze the resources within the school, agency, and community that support this approach and practice effective referral strategies. Develop a professional support network. PREREQ: PERM/INST.

**COUN 525 CONSULTATION (1-2-2) (F/S/SU).** Knowledge and skills consulting with individuals, groups, and systems. Practices and procedures of consultation where students demonstrate relevant skills in both simulated and internship-based situations. PREREQ: COUN 505 and 509 or PERM/INST.

**COUN 526 COUNSELING INTERNSHIP I (1-4-3) (F/S).** Students apply their skills, training, and knowledge with increasing autonomy as primary supervision shifts toward an onsite counseling supervisor. Students are observed and evaluated as they engage in a wide range of counseling-related activities. Pass/fail credit. PREREQ: COUN 516 with grade of at least "B". COREQ: COUN 566.

**COUN 527 APPLIED RESEARCH (1-2-2)(F).** Methods and evaluation of counseling and educational research with the emphasis

### College of Education Department of Counselor Education

on individual exploration of a possible thesis or research project in cooperation with student's advisor or director of the study. PREREQ: COUN 512 or similar graduate statistics course.

COUN 528 COUNSELING INTERNSHIP II (1-4-3) (F/S). In this culminating component of internship, student assumes all functions of a counselor in his/her site while under site-based (primary) and university supervision, providing the range of counseling services from crisis intervention to promotion of personal development and environmental enhancement. Pass/fail credit. PREREQ: Recommendation of COUN 526 Supervisors. COREQ: COUN 568.

COUN 529 MIDDLE SCHOOL COUNSELING (2-0-2)(F)(Even

years). Explore evolving roles and responsibilities of middle school/junior high school counselors including curriculum development, parent and teacher consultation, developmentally appropriate interventions for diverse populations, emergency procedures, ethical and legal considerations, documentation, and referral. The unique needs, stresses, and developmental concerns of this age group are included with emphasis on the organization and implementation of the "Idaho Comprehensive School Counseling Program Model" while observing in a middle/junior high school setting. PREREQ: COUN 505 and COUN 530 or Masters in Counseling.

**COUN 530 MANAGING DEVELOPMENTAL SCHOOL** 

**PROGRAMS** (2-0-2) (SU). Students examine program theory in educational settings to create, implement, manage, evaluate, and promote comprehensive counseling and vocational guidance curricula for all students. This course provides the framework for COUN 519, COUN 520, and COUN 529 and emphasizes the "Idaho Comprehensive Guidance and Counseling Model." PREREQ: COUN 505 or Masters in Counseling.

#### COUN 531 COUNSELING PRACTICUM INTENSIVE (1-4-3)

(F/S). A supervised skill review and experientially intensive practicum that may be required of a student needing additional time on skill development before advancing to Internship. PREREQ: Permission of Department Chair and faculty.

#### **COUN 532 COUNSELING INTERNSHIP INTENSIVE (1-4-3)**

**(F/S).** A supervised skill review and experientially intensive internship that may be required of a student needing additional time on skill development before enrolling in COUN 528 Counseling Internship II. PREREQ: PERM/CHAIR.

COUN 541 (MHLTHSCI 544) ALCOHOL/DRUG ABUSE AND THE FAMILY (3-0-3) (F/S). An examination of the effects of chemical abuse on the family system. Included are the roles family members assume to accommodate the chemically dependent person, and the financial and emotional costs to the entire family. Special attention is given to intervention and other treatment approaches. May be taken for MHLTHSCI or COUN credit, but not both.

COUN 543 (MHLTHSI 543) ASSESSING AND MANAGING ADOLESCENT SUBSTANCE ABUSE AND MENTAL HEALTH RISKS (3-0-3)(S)(Odd years). Introduction to comprehensive adolescent risk assessment and treatment planning. Examination of current and available comprehensive adolescent assessments, current and available specialized assessments, report writing approaches and effective treatment processes. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

COUN 544 (MHLTHSCI 564) ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART I (3-0-3)(F). Emphasis on screening and assessment tool-procedures for substance abuse.

Application of current interventions and screening processes. Legal, social ethical, and health implications will be investigated. May be taken for MHLTHSCI or COUN credit, but not both.

**COUN 545 (MHLTHSCI 545) FOUNDATIONS OF CHEMICAL DEPENDENCY (3-0-3) (F,S).** An overview of the pharmacological and physiological effects of chemical dependency. Special attention is given to how substance abuse impacts brain chemistry and how brain chemistry impacts substance abuse. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

COUN 546 (MHLTHSCI 565) ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART II (3-0-3) (S). Clinical application of concepts and principles presented in Part I. Special emphasis is placed on case management techniques. Continued investigation of legal, social, ethical, and health implications. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: MHLTHSCI 564 or COUN 544, or PERM/INST.

COUN 547 (MHLTHSCI 547) CHEMICAL ADDICTIONS AND VIOLENCE PREVENTION (3-0-3)(S) (Even years). Introduction to professional, ethical, legal, and practical aspects of chemical addictions and violence prevention (primary and secondary) in the schools and other settings (e.g., adolescent treatment). Examination of current research and available curriculum models, current identification and intervention approaches, and effective prevention programming. Historical and social contexts (e.g., Safe and Drug Free Schools and Communities Initiative) also included. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: Graduate or Senior standing.

## COUN 549 (ED-CIFS 549) (MHLTHSCI 549) COUNSELING TECHNIQUES FOR CHEMICAL DEPENDENCY (3-0-3) (F/S).

A study of counseling techniques and practices used in dealing with people of all ages who are chemically dependent. Special attention will be paid to the impact of chemical dependency in family members and counseling strategies for adolescents. May be taken for COUN, ED-CIFS, or MHLTHSCI credit but no more than once. PREREQ: PERM/INST.

COUN 550 (MHLTHSCI 568) DIAGNOSES, ASSESSMENT, AND TREATMENT PLANNING (2-0-2) (F) (Odd years). Examination of concepts of "mental disorders," DSM classification systems, and the diagnostic benefits and diagnostic problems inherent in such systems. An introduction and overview of the major psychopathological syndromes of adolescents and adults (especially in the area of Co-morbidity of Substance Abuse/Dependence and other DSM IV diagnoses) to facilitate appropriate use of assessment-diagnostic-treatment links (including treatment planning). May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

**COUN 551 PSYCHOPHARMACOLOGY WITH OLDER ADULTS (3-0-3)(SU)(Even years).** Examination of common psychopharmacology issues with older adults, including medications for anxiety and depressive disorders, dementia. Drug combinations and interactions included.

COUN 555 SPIRITUALITY AND COUNSELING (2-0-2)(S) (Even years). Investigation of the role that spirituality plays in the well-being of clients and counselors including the extent to which the spiritual dimension affects personal development, mental and emotional health, behavioral competence and responsibility, and a sense of well-being. Spiritual experiences, beliefs, and practices found among various cultures will be explored as well as religious responses

# College of Education Department of Counselor Education

to universal questions about human life. Ethical issues regarding counseling and spirituality will be included.

#### COUN 556 GRIEF AND LOSS COUNSELING (1-0-1)(SU)(Even

**years).** Explores the grieving process people experience after the death of a loved one. It also focuses on the losses and trauma people experience during the dying process. Much of the content will also focus on losses people experience throughout their lives.

COUN 557 PLAY THERAPY (1-0-1) (SU) (Odd years). Play therapy will be viewed from the perspective of understanding the meaning of play in children's lives and the stages of play in the therapeutic process with adjusted and maladjusted children. Guidelines for determining therapeutic progress in play therapy will be reviewed. The necessary characteristics and the role of the play therapist in the therapeutic experience will be examined.

**COUN 558 DEPRESSION (1-0-1)(S).** Examines depression as both an academic subject and personal expression of mood associated with health and psychological problems. Assesses the symptoms, causes and related treatments for the range of depressive related problems from situational based depression and grief reactions to major clinical depression and bipolar disorder.

**COUN 559 FEARS AND PHOBIAS (1-0-1)(F).** An overview of the symptoms and underlying casual factors associated with the range of anxiety-based problems. A continuum of severity is presented across the normal impact of stress to severe "anxiety disorders" (panic, phobias, obsessive-compulsive, generalized, post-traumatic, and acute stress). Anxiety based problems are analyzed in terms of the interactions between behavior, affect, somatic, interpersonal and cognitive factors that operated in a cyclical fashion.

#### **COUN 566 SEMINAR: COUNSELING WITH SPECIAL**

**POPULATIONS (0-1-1) (F/S).** Discussion of and research into the role of ethical and culturally competent counseling with special populations in schools and agency settings, including Individual Developmental Education Act (IDEA), American Disabilities Act (ADA), and Section 504 Regulations. COREQ: COUN 526.

COUN 567 (MHLTHSCI 567) CLINICAL SUPERVISION PRINCIPLES AND PRACTICE (1-0-1)(F) (Even years). Theory and skill development for practitioners who are or will be supervising interns and/or professionals in school, agency, and other settings. Topics include ethical issues in clinical supervision, models and best practices, documentation, and troubleshooting problematic dynamics. PREREQ: PERM/INST.

#### **COUN 568 SEMINAR: PROFESSIONAL COUNSELING**

**(0-1-1)(F/S).** Discussions and research into the evolving culturally competent role of professional counselors in all settings, emphasizing ethical decision-making and licensure and certification considerations. COREQ: COUN 528.

COUN 571 (MHLTHSCI 571) (SOCWRK 571) FUNDAMENTALS OF HEALTHY AGING (3-0-3) (F). Overview of gerontology presented by examining major issues related to aging. Content includes theories of aging; the impact of an aging population; and future implications at local, national, and international levels. May be taken for COUN, MHLTHSCI or SOCWRK credit, but not more than once.

# Department of Curriculum, Instruction and Foundational Studies

**Chair: Philip Kelly** 

Education Building, Room 215 Telephone 208 426-4977 e-mail: pkelly@boisestate.edu

Full Graduate Faculty: Holly Anderson,

Jonathan Brendefur, Michael Heikkinen, Philip Kelly, Rickie Miller, William Parrett, Lawrence Rogien, Ted Singletary, Scott Willison

**Associate Graduate Faculty:** Cheryl Franklin, Richard Osguthorpe, Jennifer Snow-Gerono

**Adjunct Graduate Faculty:** Wilma Jones, Kevin Laughlin, Dan Prinzing

## **Graduate Degrees Offered**

- Doctor of Education in Curriculum and Instruction
- Master of Arts in Education, Curriculum and Instruction
  - Option: Physical Education Pedagogy
- Master of Education in Educational Leadership
- Graduate Certificate in Secondary/K-12 Teaching

# Doctor of Education in Curriculum and Instruction

**Program Coordinator:** Jonathan Brendefur Education Building, Room 407 Telephone 208 426-2468 FAX 208 426-4006 jbrendef@boisestate.edu

#### **General Information**

The doctoral program in curriculum and instruction, leading to an Ed.D. degree, is designed to develop graduates who will be effective leaders in educational improvement. The course work provides students with the basis for a thorough understanding of what schools are and can be, insights into the complexities of teaching and learning, and collaborative opportunities to work towards making a measurable and positive effect upon current education programs and student learning

## **Application and Admission Requirements**

The doctoral program involves a cohort of students in a common set of courses and experiences. The selection of a new cohort takes place prior to the summer semester. The

## College of Education Department of Curriculum, Instruction, and Foundational Studies

admission process has two components: admission to the Graduate College and acceptance into the doctoral program.

Applicants must submit the following materials to the Graduate Admissions Office:

- Application for admission (available inside the current graduate catalog or at http://www.boisestate.edu/ gradcoll);
- Official scores from the verbal, quantitative, and analytical reports of the Graduate Record Examination. The GRE must have been taken within seven years of the application date.
- 3. Minimum GPA of 3.0 on a 4.0 scale for all previous graduate work; and,
- Official transcripts for all course work indicating the completion of a Master's degree or the functional equivalent.

At the same time, applicants must submit the following materials to the College of Education Teacher Education Graduate Programs Coordinator:

- A letter of application describing: the applicant's professional experiences and their relevance to doctoral study in education; career and/or personal goals and how doctoral study will support them.
- 2. A current resume or vitae.
- 3. A sample of recent scholarly and/or professional writing that includes references and is preferably written in APA style (Master's thesis or project, scholarly papers, project reports, publications, grant proposals, etc.).
- 4. Three letters of reference attesting to the applicant's commitment to doctoral study in education, professional effectiveness, potential for influencing education, scholarly abilities and dispositions, personal and professional integrity, and any other information that will help the selection committee make an informed decision.

The Doctoral Management Committee will review the materials submitted, make them available to other interested graduate faculty for analysis, and may schedule interviews with applicants. After arriving at a decision for each candidate, the committee recommends to the Graduate College Dean those who should be admitted.

#### **Transfer Credits**

Doctor of Education students may transfer up to 21 credits, 15 of which may be taken at other institutions and apply those credits toward a graduate degree. However, the courses must be consistent with the program of study planned by the student and the supervisory committee. In addition, the student must have taken the courses at an accredited institution and must have received—in each course—a grade no lower than B.

## **Graduate Assistantships**

Any student qualifying for admission may apply for one of a limited number of graduate assistantships offered each year.

Awards consist of a stipend and fee waiver for fall and spring semesters, plus a six-credit fee waiver for summer school. Graduate assistantships are awarded on an annual basis and must be renewed yearly by reapplying for the position. In all cases GA's must register for a minimum of 9 credits during the regular academic year. To be considered, applications must be submitted to the Teacher Education Graduate Programs Coordinator by March 1. Typical assignments involve teaching undergraduate Teacher Education courses, supervising student teachers, serving as research assistants for graduate faculty, or a combination of activities.

#### **Program and Dissertation Advisors**

Students will have program and dissertation advisors as they progress towards their degree. However, during the first term of the doctoral program, the Summer Residency Faculty will serve as unofficial advisors answering questions about the program and assisting students in making connections with graduate/doctoral faculty who may be willing and appropriate as program advisors. It is recommended that students determine a program advisor and committee members no later than the spring semester of the first year of study. The choice of advisor will be based on the shared scholarly interests and compatible educational philosophies of student and faculty. Students may change advisors, and it is not uncommon for students to have a program advisor and then when admitted to candidacy switch to a different advisor for the dissertation.

## **Degree Requirements**

The program has five components: Curriculum and Instruction, School Improvement, Research, Cognate, and Dissertation. Specific courses in each component are listed below. Each doctoral student will develop a program plan in consultation with his/her advisor and program committee.

Doctor of Education in Curriculum and Instruc	tion
Course Number and Title	Credits
Curriculum and Instruction	15
ED-CIFS 610 The American Culture and the	
Context of Schooling3	
ED-CIFS 660 Learning and Cognition 3	
ED-CIFS 661 Current Issues in Teaching	
ED-CIFS 662 Curriculum3	
ED-CIFS 664 Seminar in Curriculum and	
Instruction3	
School Improvement	10
ED-CIFS 611 School Culture and the Problems of	
Change3	
ED-CIFS 612 Strategies for School Improvement 3	
ED-CIFS 620 Field Experience: Learners At-risk 2	
ED-CIFS 621 Field Experience: School	
Improvement2	

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Doctor of Education in Curriculum and Instruction (continued)	
Research	12
ED-CIFS 650 Analysis of Research Perspectives 3	
ED-CIFS 651 Intermediate Statistics in	
Educational Research3	
ED-CIFS 652 Quantitative Approaches to	
Research3	
ED-CIFS 653 Qualitative Approaches to	
Research3	
Cognate Area	17-20
Dissertation	9-12
ED-CIFS 693 Dissertation	
TOTAL	66

In addition to the above degree requirements, students not having background in the following areas will be expected to complete additional course work. This course work may be included in the program plan of study as long as it is graduate level and approved by the student's advisor and program committee:

- Research design (ED-CIFS 503 or equivalent) must be completed prior to taking ED-CIFS 651 Intermediate Statistics in Educational Research and ED-CIFS 653 Qualitative Approaches to Research.
- Beginning statistics (KINES 552 or equivalent) must be completed prior to taking ED-CIFS 651 Intermediate Statistics in Educational Research.
- Foundations of curriculum (ED-CIFS 536 or equivalent) must be completed prior to taking ED-CIFS 662 Curriculum.
- Instructional theory or educational psychology (ED-CIFS 537 or ED-CIFS 501 or equivalents) must be completed prior to taking ED-CIFS 660 Teaching and Learning.
- Philosophy of education or foundations of education (ED-CIFS 505 or equivalent) must be completed prior to taking ED-CIFS 610 The American Culture and the Context of Schooling.

Master's Credits Applied Toward the Doctor of Education: Credits earned for a master's degree exclusion.

**Education:** Credits earned for a master's degree, excluding credits for Thesis or Project, may be applied to the requirements of the Doctor of Education degree program as part of the 21 transfer credits allowed at the discretion of the student's doctoral committee. Ordinarily, these credits would be within the seven-year time limit and would constitute no more than one-third of the total credits required for the doctorate.

**Residency:** Boise State University requires that students accepted into the doctoral program be in continuous enrollment and complete a minimum of 23 semester credits of graduate level course work during the first 15 months of the program.

## Master of Arts in Education, Curriculum and Instruction

Program Coordinator: Ted Singletary

Education Building, Room 313 Telephone 208 426-3270 e-mail: tsingle@boisestate.edu

#### **General Information**

The Master of Arts in Education, Curriculum and Instruction is designed to improve instructional skills and reflection in practicing educators. It does not lead to initial certification nor does it require certification for admission. Graduates of the program will be able to adapt research based techniques to meet the requirements of their instructional situations and be able to assess and reflect on the efficacy of their efforts. This degree requires completion of a minimum of 33 or 34 credits. Students may select from three possible culminating experiences.

## **Degree Requirements**

Master of Arts in Education, Curriculum and Inst	truction
Course Number and Title	
ED-CIFS 506 Issues in Education	4
Elective Core Courses  Approved two-credit elective will be listed in the class schedule as ED-CIFS 580 Selected Topics or ED-CIFS 597 Special Topics. Core followed by the specific title of the course. The following are examples of titles that might be offered:  Parents in Education  School Law and Ethics  Students in the Middle School  Contemporary Education Policy  Interpreting Education Research  NOTE: Students selecting Option II must take a research class, which may be ED-CIFS 597 Special Topics: Core - Interpreting Educational Research (2 credits), or ED-CIFS 503 Fundamentals of Educational Research (3 credits).	2
ED-CIFS 536 Curriculum Planning and Implementation	3
ED-CIFS 537 Instructional Theory	3
Content elective courses  Content electives should be chosen to support an area normally taught in the schools, or educational perspectives offered in the College of Education.  Each student should determine an individual program with an assigned advisor.	12

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Master of Arts in Education, Curriculum and Instruction (co	ntinued)
Elective options: Option I. Thesis or Project ED-CIFS 503 Fundamentals of Educational Research	9
Option II. Comprehensive Written Examination: (A comprehensive written examination is required at the end of the course work. This examination is to be tailored by each candidate's committee specifically for that candidate following guidelines established by the department. Candidate must be enrolled in a minimum of one credit (ED-CIFS 600 or other) for the comprehensive written examination. After the candidate has completed the written portion of the examination, the committee will meet with the candidate for an oral review prior to final approval or rejection of the written examination.)	
ED-CIFS 505 Philosophy of Education <b>OR</b> ED-CIFS 503 Fundamentals of	
Educational Research	
TOTAL	33

## Master of Arts in Education, Curriculum and Instruction Option: Physical Education Pedagogy

Program Coordinator: Kenneth Bell

Department of Kinesiology Telephone 208 426-1228 e-mail: kbell@boisestate.edu

## **Degree Requirements**

Master of Arts in Education, Curriculum and Ins Option: Physical Education Pedagogy	truction
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
Elective Core Courses: Students must take an approved two credit elective. These will be listed in the class schedule as "ED-CIFS 597 Special Topics: Core" followed by the specific title of the course. Following are examples of titles to be offered: Parents in Education School Law and Ethics Students in the Middle School Contemporary Education Policy for Teachers Positive Classroom Management	2
KINES 555 Physical Education Pedagogy	3
ED-CIFS 503 Fundamentals of Educational Research <b>OR</b> KINES 551 Research Design in Exercise and Sport	3
KINES 591 Project <b>OR</b> KINES 593 Thesis	6
Approved electives	15
TOTAL	33
Recommended electives in Kinesiology: KINES 510 Physiology of Activity KINES 520 Biomechanics KINES 525 Mechanical Analysis of Motor Activities KINES 530 Psychology of Exercise & Sport KINES 535 Sociology of Exercise & Sport KINES 540 Applies Principles of Conditioning KINES 550 Philosophy of Exercise & Sport KINES 552 Statistical Methods in Exercise & Sport KINES 560 Motor Learning KINES 570 Health Promotion KINES 575 Computers in Exercise & Sport KINES 580 Selected Topics in Applied Sport Psychology	

# Master of Education in Educational Leadership

Program Coordinator: Kathleen Budge

Education Building, Room 211 Telephone 208 426-3758

e-mail: kathleenbudge@boisestate.edu

#### **General Information**

The College of Education offers a master's degree in Educational Leadership, designed to develop effective leaders in educational settings. The interdisciplinary course work provides students with the basis for a thorough understanding of leadership, management and reform within educational institutions. Students will have collaborative opportunities to effectively influence current education programs and student learning.

#### **Conceptual Framework**

The conceptual framework for the College of Education at Boise State University is grounded in the theory and practice of the reflective practitioner. Reflective practitioners think critically about pedagogy, subject matter, and the needs and backgrounds of all students and clients. Accordingly, they choose appropriate content and adapt their approaches as needed, while maintaining high standards. Successful professionals are committed students of the disciplines in which they work. They remain current with professional ideas and use these to guide decision making. They are constantly assessing their instructional and clinical effectiveness.

## **Application and Admission Requirements**

Prospective students may apply for admission at any time. However, the following application materials must be received by Graduate Admission and Degree Services by April 1 for the summer session, July 1 for the fall semester, and November 1 for spring semester. Required:

- 1. Application for admission (http://www.boisestate.edu/gradcoll).
- 2. Application fee.
- Official transcripts of all undergraduate and graduate course work sent directly to Boise State Graduate Admission and Degree Services.
- 4. Minimum GPA of 3.0 (on a 4.0 scale) for the last two years of undergraduate study, or an overall GPA of 3.0.
- Official scores from the verbal, quantitative, and analytical reports of the Graduate Record Examination. The GRE must have been taken within seven years of application.
- 6. A sample of scholarly and/or professional writing.
- 7. Letter of recommendation from school district personnel (if employed as an educator).
- 8. Letter of application including professional goals.
- 9. Recommendation following an interview with Educational Leadership Development faculty.

Admission will be granted to qualified applicants who hold a Bachelor's degree from an accredited college or university and have some professional relationship to instruction. Candidates must meet the standards set by the College of Education and participating departments as well as the specific regulations of the particular program to which they apply.

## **Degree Requirements**

Master of Education in Educational Leadership	
Course Number and Title	Credits
ED-CIFS 576 Leadership Foundation	6
ED-CIFS 577 Leading Teaching and Learning	6
ED-CIFS 578 Leading System Change	6
ED-CIFS 590 Internship	6
ED-CIFS 591 Project	6
Total	30

# Graduate Certificate in Secondary/K-12 Teaching

**Program Coordinator:** Ted Singletary Education Building, Room 313 Telephone 208 426-3270 e-mail: tsingle@boisestate.edu

## **General Information**

The Graduate Certificate in Secondary/K-12 Teaching is offered by the Department of Curriculum, Instruction, and Foundational Studies, College of Education, for students who hold a bachelor's degree in a certifiable area and who wish to pursue teaching as a profession. The goal of the certificate program is to prepare students to qualify for a teaching certificate from the Idaho State Department of Education. Approved certification areas include the following:

Anthropology	English	Physics
Art	French	Political Science
Biology	German	Social Science
Chemistry	History	Sociology
Communication	Mathematics	Spanish
Earth Science	Music	Theatre Arts
Economics	Physical Education K-12	

Admission Requirements: Applicants are required to have:

- a baccalaureate degree from an accredited institution,
- a cumulative undergraduate GPA of at least 3.00 on a 4.00 scale,
- a minimum score of 75% on the Idaho Educational Technology Assessment, or equivalent assessment,
- a minimum score of 172 on the PRAXIS I writing examination,

## College of Education Department of Curriculum, Instruction, and Foundational Studies

- an approved 45-credit teaching major, or a 30-credit teaching major and a 20-credit teaching minor chosen from the list above,
- a minimum 2.75 GPA in the major and minor fields,
- three letters of recommendation, describing applicant's experience working with children and schools,
- an essay that describes the applicants experiences with children and schools, and
- a passing score on the appropriate PRAXIS II examination in major and minor fields.

However, these minimum requirements do not guarantee admission to the program. Admission recommendations will be based upon a review of the student's transcripts, letters of recommendation, and essay.

**Application Procedures:** An applicant should follow the general application procedures for graduate degree-seeking students (see Applying as a Degree-Seeking Student in the Graduate Admission Policies and Procedures section of this catalog). Applicants must apply to the Graduate College for admission to the Graduate Certificate in Secondary/K-12 Teaching at http://www.boisestate.edu/gradcoll/0001.html or in person. The Graduate College is located in the Math/ Geosciences building in Rooms 140 and 141. Send mail to: Boise State University, Graduate College, 1910 University Drive, Boise, ID 83725-1110. In addition, an applicant must:

- Submit an essay to the Graduate Certificate
   Program, Office of Teacher Education, Boise
   State University, 1910 University Drive, Boise,
   ID 83725-1745. The essay should explain the student's motivation for pursuing a Graduate Certificate in Secondary/K-12 Teaching and describe his/her career interests.
- Submit three letters of recommendation, in which
  the applicant's experience working with schools and
  children and potential contribution to the field are
  described, to the Graduate Certificate Program Coordinator.

Once the applicant's file is complete, the Graduate Certificate Program Coordinator will evaluate and an admission recommendation (regular, provisional, or denial) will be forwarded to the Chair of the Department of Curriculum, Instruction, and Foundational Studies. In the case of a recommendation for provisional admission, the Coordinator will also establish the stipulations that must be satisfied by the student to advance to regular status.

**Application Deadlines:** The first Friday of February.

## **Certificate Requirements**

Graduate Certificate in Secondary/K-12 Teaching	
Course Number and Title	
ED-CIFS 507 Foundations of American Education	3
ED-CIFS 508 Learning and Development of Students	3
ED-CIFS 509 Curriculum, Instruction, and Assessment	3
in Grades 6-12	
ED-CIFS 561 Professional Year I - Teaching Experience I	1-3
ED-CIFS 550 Seminar On Teaching and Learning	3
ED-CIFS Professional Year II	12
ED-LTCY 544 Content Literacy In Secondary Schools	3
Content-specific methods course	3
Courses may have prerequisites in addition to the admission requirements.	
ED-SPED 550 Teaching Secondary Students with	3
Exceptional Needs	
TOTAL	34-36

## **Course Offerings**

 $\mbox{Ed-Cifs} - \mbox{Education-curriculum, instruction}, \mbox{And foundational studies}$ 

**ED-CIFS 501 ADVANCED EDUCATIONAL PSYCHOLOGY (3-0-3) (Demand).** A study of contemporary issues involving both theoretical and methodological considerations in the history and systems of educational psychology. Special emphasis will be given to group behavior in terms of principles relevant to educational

#### **ED-CIFS 502 EDUCATION IN EMERGING NATIONS**

objectives. PREREQ: PSYC 101 and ED-CIFS 225.

**(3-0-3)(F).** The course provides an analysis of the relationship between national goals and the educational system in the twentieth century. Contemporary systems will be studied in light of three major factors: (1) religious factors; (2) natural factors such as race, language and environment; (3) secular factors such as Humanism, Socialism and Nationalism.

**ED-CIFS 503 FUNDAMENTALS OF EDUCATIONAL RESEARCH** (3-0-3) (F/S/SU). This course will introduce students to the elements of experimental and non-experimental research designs. Instruction in using research resources and interpreting statistics will be given and students will analyze current research related to education. Students will learn how to develop a research proposal and will write a scholarly research paper.

#### **ED-CIFS 504 SUPERVISION OF INSTRUCTIONAL PERSONNEL**

(3-0-3)(S). A course designed to improve the supervision skills of elementary/secondary cooperating teachers and other supervisory personnel. Emphasis will be placed on a variety of observation and evaluation strategies designed to improve instruction.

#### ED-CIFS 505 PHILOSOPHY OF EDUCATION (3-0-3)(S,SU).

Students will analyze and evaluate past and contemporary philosophies and the values derived from them as they apply to education. A formal paper will be required.

**ED-CIFS 506 ISSUES IN EDUCATION (4-0-4)(F/S/SU).** Historical and contemporary social, economic, and organizational issues influencing education. Includes readings, presentations by members of the educational community, and discussions.

## College of Education Department of Curriculum, Instruction, and Foundational Studies

#### **ED-CIFS 507 FOUNDATIONS OF AMERICAN EDUCATION**

(3-0-3)(SU). Historical, philosophical, and sociological foundations of American Education. Students will study the historical development of public education in the United States, with special emphasis given to questions of power, equity, and inclusion; explore major schools of educational thought, as well as the philosophy of inclusion; and apply historical understanding and philosophical analysis to contemporary issues.

#### **ED-CIFS 508 LEARNING AND DEVELOPMENT OF STUDENTS**

**(2-2-3)(SU).** Theories of psychological and social development of children and adolescents as they apply to learning, motivation, and interaction, including the ranges of abilities and interests found in typical classrooms.

ED-CIFS 509 CURRICULUM, INSTRUCTION, AND ASSESSMENT IN GRADES 6-12 (3-0-3) (SU). Curriculum planning, instructional strategies, assessment of student learning, differentiated instruction, and principles of classroom and behavior management, including functional behavior analysis.

## **ED-CIFS 511 ASSESSMENT AND EVALUATION (3-0-3) (F/S).** Investigates formal and informal assessments of student, class,

Investigates formal and informal assessments of student, class, district, state, and national performance and achievement, and evaluation using appropriate standards. Practical applications creating relevant assessments of classroom learning are emphasized.

**ED-CIFS 520 FOUNDATIONS OF GIFTED AND TALENTED EDUCATION (3-0-3) (F/S/SU).** An overview of gifted/talented education. Topics may include identification, assessments, talent areas, curriculum adaptations, social needs, critical and creative thinking, legal aspects, and resources. PREREQ: PSYC 101 and ED-CIFS 203 or ED-CIFS 302 or ED-CIFS 538, or PERM/INST.

#### **ED-CIFS 521 CREATIVITY AND CRITICAL THINKING SKILLS**

(3-0-3) (F/S/SU). Definition, identification, and facilitation of creativity and critical thinking skills. Topics may include overview, cognitive development, related brain research, assessment instruments, creative people, processes, and conditions for fostering creativity and models of critical thinking including creative problem solving. Demonstration of competency in identifying, fostering, assessing, demonstrating, and describing programs that foster creativity and critical thinking are required. PREREQ: PSYC 101 and ED-CIFS 203 or ED-CIFS 302 or ED-CIFS 538, or PERM/INST.

ED-CIFS 522 SOCIAL AND EMOTIONAL NEEDS OF GIFTED AND TALENTED LEARNERS (3-0-3) (F/S/SU). Identification and basic intervention for basic affective needs of gifted and talented learners. Topics covered may include: emotional aspects of giftedness, suicide, perfectionism, underachievement, peer relations, gender issues, risk taking, family relations, cultural factors, twice exceptional, self-esteem, career counseling, asynchronous development, and counseling skills for teachers. PREREQ: PSYC 101 and ED-CIFS 203 or ED-CIFS 302 or ED-CIFS 538, or PERM/INST.

**ED-CIFS 530 ADVANCED PRACTICES AND PRINCIPLES IN TEACHING SOCIAL SCIENCE (3-0-3) (F).** A comprehensive study of the practices and principles in social science education, including objectives, social problems, unit development, work-study skills, organization of the program materials and media, and research findings basic to social studies will be developed.

ED-CIFS 531 ADVANCED PRACTICES AND PRINCIPLES IN TEACHING ELEMENTARY SCHOOL MATHEMATICS

(3-0-3)(S). Emphasis on creative methods and strategies for teaching elementary school mathematics. Also includes a review of current research, curriculum trends and exploration of experimentation with unique materials for teaching mathematics.

## ED-CIFS 533 ADVANCED PRACTICES AND PRINCIPLES IN TEACHING ELEMENTARY SCIENCE (3-0-3)(F). Current

practices and principles in modern elementary science concepts are developed. Emphasis is placed on the selection and organization of content and experimental activities.

**ED-CIFS 534 TEACHING SECONDARY SOCIAL STUDIES** 

(3-0-3) (F/S). This course will prepare teachers to engage young people in an inquiry about fundamental ideas and values from history and/or social science disciplines as well as to assist and encourage them to become informed, active participants in a democratic society. Students will examine professional literature on best teaching practices. PREREQ: Admission to Graduate Secondary Teacher Certification and ED-SPED 550. COREQ: ED-LTCY 544 and ED-CIFS 561.

#### **ED-CIFS 535 SECONDARY SCHOOL SCIENCE METHODS**

(3-0-3)(F/S). Students will examine local, state and national science curricula and standards. Students will use a variety of materials and methods, including appropriate instructional technologies, to develop science lessons which help all learners to develop scientific inquiry skills, an understanding of the nature of science, and critical understanding of selected science concepts and procedures. Students will also analyze current science educational journal articles and research. PREREQ: Admission into Graduate Teacher Certification and ED-SPED 550. COREQ: ED-LTCY 544 and ED-CIFS 561.

#### **ED-CIFS 536 CURRICULUM PLANNING AND**

**IMPLEMENTATION** (3-0-3) (F/S/SU). This is a general course for practicing teachers intended to give them a foundation in curriculum theory and practice. They will develop an understanding of how curriculum is developed, organized, implemented and evaluated. Current issues and trends in curriculum with some historical perspective will be explored.

#### ED-CIFS 537 INSTRUCTIONAL THEORY (3-0-3) (F/S/SU).

This course includes investigations of research and theory about educational contexts, motivation, learning and development as they relate to models of instruction. Students will develop skills in selecting appropriate instructional models to achieve specific purposes in a variety of educational settings.

ED-CIFS 539 CURRICULUM ADAPTATIONS FOR GIFTED AND TALENTED STUDENTS (3-0-3) (F/S/SU). Curriculum adaptations for gifted and talented learners including curriculum compacting, independent study, project-based learning, research-based learning, enrichment programs, mentoring programs, acceleration, dual enrollment, and more. PREREQ: PSYC 101 and ED-CIFS 203 or ED-CIFS 302 or ED-CIFS 538, or PERM/INST.

#### **ED-CIFS 550 SEMINAR ON TEACHING AND LEARNING**

**(3-0-3)(S).** This hybrid seminar, consisting of campus and on-line discussion, will focus on synthesizing field experiences. Teaching as decision-making, teacher inquiry, classroom learning environments, employment preparation, adaptation of instruction, collaboration, and legal issues affecting classrooms will be addressed.

ED-CIFS 553 IN-SERVICE TEACHER EDUCATION WORKSHOP (0-1-1 to 0-3-3). Available at special fee rate (approximately one-third

## College of Education Department of Curriculum, Instruction, and Foundational Studies

of part-time education fee). Student must be an Idaho public school teacher or professional employee of an Idaho school district. Credit awarded is for professional development only and cannot be applied towards a degree program. Pass/Fail.

#### **ED-CIFS 561 PROFESSIONAL YEAR - TEACHING**

**EXPERIENCE I (0-V-V)(F).** Students will work with master teachers for 50 hours per credit. They will observe the teaching/learning process (which they have studied on campus) and demonstrate competence in a P-12 school setting. Graded Pass/Fail. PREREQ: Admission to Graduate Certificate in Secondary/K-12 Teaching.

## ED-CIFS 562 PROFESSIONAL YEAR - ELEMENTARY TEACHING EXPERIENCE II K-12 OPTION (1-40-6)(S). This

course is reserved for students who are seeking an endorsement to teach in specific disciplines in grades 1-8. Students are given assignments in elementary schools where they observe and teach for one-half semester under the supervision of a master teacher and a university supervisor. Available for Art, Music, and Physical Education majors only. (Pass/Fail.) PREREQ: Admission to Graduate Certificate in Secondary/K-12 Teaching and approval for placement in an appropriate classroom setting. COREO: ED-CIFS 563 or ED-CIFS 564.

#### ED-CIFS 563 PROFESSIONAL YEAR – GRADES 6-9 TEACHING EXPERIENCE II K-12 OPTION (1-40-6)(S).

Supervised student teaching in a junior high/middle school. The student will be placed with a cooperating teacher for one-half semester (full-time) in his/her major/minor field under the supervision of university faculty. Available for Art, Music, and Physical Education majors only. Seminars are required. (Pass/Fail.) PREREQ: Admission to Graduate Certificate in Secondary/K-12 Teaching. COREQ: ED-CIFS 562 or ED-CIFS 564.

## ED-CIFS 564 PROFESSIONAL YEAR – GRADES 9-12 TEACHING EXPERIENCE II K-12 OPTION (1-40-6)(S).

Supervised student teaching in a senior high/middle school. The student will be placed with a cooperating teacher for one-half semester (full-time) in his/her major/minor field under the supervision of university faculty.. Available for Art, Music, and Physical Education majors only. (Pass/Fail.) PREREQ: Admission to Graduate Certificate in Secondary/K-12 Teaching. COREQ: ED-CIFS 562 or ED-CIFS 563.

#### **ED-CIFS 565 PROFESSIONAL YEAR - GRADES 6-9**

**TEACHING EXPERIENCE II (1-40-12)(S).** Supervised student teaching in a high/junior high/middle school. The student will be placed with a cooperating teacher for one semester (full-time) in his/her major/minor field under the supervision of university faculty. (Pass/Fail.) Not available for Art, Music, or Physical Education Majors. PREREQ: Admission to Graduate Certificate in Secondary/K-12 Teaching.

#### **ED-CIFS 566 PROFESSIONAL YEAR - GRADES 9-12**

**TEACHING EXPERIENCE II (1-40-12)(S).** Supervised student teaching in a senior high school. The student will be placed with a cooperating teacher for one semester (full-time) in his/her major/minor field under the supervision of university faculty. (Pass/Fail.) Not available for Art, Music, or Physical Education Majors. PREREQ: Admission to Graduate Certificate in Secondary/K-12 Teaching.

#### ED-CIFS 576 LEADERSHIP FOUNDATION (6-0-6) (F/S/SU).

This module emphasizes essential knowledge, skills and dispositions to serve as the foundation for candidates pursuing positions of

leadership, including study of the political, social, cultural and economic systems that support and affect schools and the theoretical principles underlying effective leadership. Emphasis includes developing conceptual frameworks to lead and manage (1) schools and school systems, (2) change and improvement, and (3) self, others and relationships. Participation in simulations is required of all students.

#### **ED-CIFS 577 LEADING TEACHING AND LEARNING**

(6-0-6) (F/S/SU). This module emphasizes the knowledge, skills and dispositions of an effective instructional leader who is expected to influence, manage, monitor and ensure the quality of curriculum, instruction and assessment in schools and classrooms. Students will investigate aspects of curriculum theory, supervision, characteristics of effective teaching for diverse learners, strategies for assessment, and professional development. Participation in simulations is required of all students. PREREQ: ED-CIFS 576.

**ED-CIFS 578 LEADING SYSTEM CHANGE (6-0-6) (F/S/SU).** This module emphasizes the knowledge, skills and dispositions necessary to create school and district cultures, conditions and capabilities that support high levels of achievement for all students. Students learn to build relationships with all stakeholders, to use processes for creating system change, and to optimize the use of school funding. Participation in simulations is required of all students. PREREQ: ED-CIFS 576.

#### ED-CIFS 610 THE AMERICAN CULTURE AND THE CONTEXT

**OF SCHOOLING (3-0-3) (SU).** Students will explore the roles of schools in American society, including cross-cultural analyses; identify political forces influencing school policy-making in local, state, national and international arenas; investigate the economics of school improvement proposals; and consider the historical contexts of contemporary improvement efforts. They will give particular attention to the effects on American culture and the school of changing demographics, the challenges of an increasingly diverse society, and the impact of technology and the ongoing information revolution. PREREQ: Admission to the doctoral program and ED-CIFS 505, ED-CIFS 506 or equivalents; or PERM/INST and ED-CIFS 505, ED-CIFS 506 or equivalents.

#### ED-CIFS 611 SCHOOL CULTURE AND THE PROBLEMS OF

**CHANGE (3-0-3) (SU).** Students will explore the cultures and organizational dynamics of schools, and obstacles to change in an increasingly diverse society. Case studies of change efforts in the past will be examined for their lessons for contemporary improvement efforts. Research and theory about systemic change in schools and other organizations will be explored as a basis for developing working theories and leadership skills necessary to guide school improvement efforts. PREREQ: Admission to doctoral program and ED-CIFS 610; or PERM/INST and ED-CIFS 610.

#### **ED-CIFS 612 STRATEGIES FOR SCHOOL IMPROVEMENT**

(3-0-3)(SU). Students will explore contemporary strategies being tried or proposed to bring about ongoing improvement in the schools. There will be an emphasis on participatory approaches to school change, collaboration and partnership building, the role of technology, attention to cultural diversity, and conflict resolution strategies. Students will work on projects through which they will transform their emerging theories of change into plans for making change happen in their schools. Special emphasis will be placed on preparation

## College of Education Department of Curriculum, Instruction, and Foundational Studies

for school-based decision making. PREREQ: Admission to doctoral program or PERM/INST.

#### ED-CIFS 620 FIELD EXPERIENCE: LEARNERS AT-RISK

**(0-4-2) (F/S/SU).** This field experience enables participants to bridge the current knowledge base on effective practice and program design with the needs of learners at-risk, their families, schools, and community agencies. Through in-depth field study, students will gain better understanding of learners at-risk and programs designed to meet their needs. PREREQ: ED-CIFS 653.

**ED-CIFS 621 FIELD EXPERIENCE: SCHOOL IMPROVEMENT (0-4-2) (F/S).** Students will participate in schools and other educational settings that are involved in exemplary educational improvement projects; curriculum development efforts; and professional development activities, including the planning,

implementation, and evaluation of such programs. PREREQ: ED-CIFS 620.

#### **ED-CIFS 650 ANALYSIS OF RESEARCH PERSPECTIVES**

**(3-0-3)(F/S/SU).** Overview and critical analysis of research paradigms. Assumptions, standards, and methods for critiquing, generating and communicating interpretations. PREREQ: ED-CIFS 503 or equivalent.

#### **ED-CIFS 651 INTERMEDIATE STATISTICS IN EDUCATIONAL**

**RESEARCH (3-0-3) (F/S/SU).** Parametric and nonparametric statistical procedures commonly used in educational research, including analysis of variance, analysis of covariance, chi square, and multiple regression. Data analysis and interpretation procedures via computer-based statistical packages. PREREQ: ED-CIFS 650 and an introductory course addressing inferential statistics.

#### **ED-CIFS 652 QUANTITATIVE APPROACHES TO RESEARCH**

**(3-0-3) (F/S/SU).** Appropriate research designs and data analysis techniques in quantitative research and related design and measurement issues. Conduct a quantitative study. PREREQ: ED-CIFS 651.

#### **ED-CIFS 653 QUALITATIVE APPROACHES TO RESEARCH**

(3-0-3)(F/S/SU). Qualitative methods in educational research. Analysis of various approaches to qualitative research, including case studies and biographical, phenomenological, ethnographic, interactional, and critical analyses. Conduct a qualitative study. PREREQ: ED-CIFS 650.

#### ED-CIFS 660 LEARNING & COGNITION (3-0-3) (F/S/SU).

Learning theories and processes with emphasis given to cognitive and situated learning. PREREQ: Graduate status and ED-CIFS 501.

#### **ED-CIFS 661 CURRENT ISSUES IN TEACHING (3-0-3)**

**(F/S/SU).** Pedagogical practices and professional development including social, political, cultural and historical influences, and practices of instructional leadership. PREREQ: ED-CIFS 537.

ED-CIFS 662 CURRICULUM (3-0-3) (F/S). Students will focus on major theories, research bases, and significant societal factors in school curricula. The course will include historical and philosophical foundations of curricular development; analysis of factors and issues influencing curricular determinations, including cultural influences and technological contributions; and consideration of likely future curricular evolution. PREREQ: Admission to the doctoral program and ED-CIFS 536 or equivalents; or PERM/INST and ED-CIFS 536 or equivalent.

**ED-CIFS 663 EVALUATION (3-0-3) (F/S/SU).** Methods of evaluation with emphasis on making judgments about such educational issues as school effectiveness, individual performances, and other educational endeavors. Ethical issues in assessment and evaluation and analysis of social, cultural, and political influences affecting assessment and evaluation procedures. PREREQ: ED-CIFS 651 and ED-CIFS 653.

#### **ED-CIFS 664 SEMINAR IN CURRICULUM AND INSTRUCTION**

**(3-0-3)(F/S).** In this culminating seminar, students will synthesize their learning from prior course work and field experiences and examine educational issues relevant to their respective professional careers. PREREQ: ED-CIFS 660 and ED-CIFS 662.

**ED-CIFS 693 DISSERTATION (0-V-12) (F/S/SU).** Students will complete an independent and original research project on an important educational issue; collect and interpret the findings in a cogent, professional and scholarly-written document; successfully defend the project to the dissertation committee; and disseminate those findings in a professionally appropriate manner. PREREQ: Successful completion of "Comprehensive Evaluation" and Admission to Candidacy.

# Department of Early Childhood Studies

**Interim Chair: Carrie Mori** 

Education Building, Room 207 Telephone 208 426-2804 e-mail: cmori@boisestate.edu

Full Graduate Faculty: Carrie Mori

Associate Graduate Faculty: Beatrice Harris

## **Graduate Degrees Offered**

- Master of Arts in Education, Early Childhood Studies
- · Master of Education in Early Childhood Studies

#### **General Information**

The mission of the master's degrees in Early Childhood Studies is to provide advanced professional preparation for candidates with a common core and specialization in early childhood studies. The program blends two disciplines, early childhood education and early childhood special education, thus, a candidate is qualified to work with all young children, birth through grade three. The program may or may not lead to certification to teach in public schools depending on the goals of the candidate. The Master of Arts requires a thesis, and the Master of Education requires a project or comprehensive examination.

# Master of Arts in Education, Early Childhood Studies

Graduate Program Coordinator: Carrie Mori

Education Building, Room 207 Telephone 208 426-2804 e-mail: cmori@boisestate.edu

### **Degree Requirements**

Master of Arts in Education, Early Childhood S	tudies
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
Elective Core Courses Approved two-credit elective will be listed in the class schedule as ED-CIFS 597 Special Topics: Core followed by the specific title of the course. Early Childhood Studies Coursework	2

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Master of Arts in Education, Early Childhood Studies (continued)	
ED-ECS 521 Readings: ECE/ECSE	3
ED-ECS 522 Development and Curriculum: ECE/ECSE	3
ED-ECS 523 Early Learning Models: ECE/ECSE	3
ED-ECS 524 Play, Language Acquisition, and Literacy:	3
ECE/ECSE	
ED-ECS 525 Leadership: ECE/ECSE	3
Culminating Activity Coursework	
ED-CIFS 503 Fundamentals of Educational	3
Research	
ED-CIFS 593 Thesis	6
Approved Electives	3
TOTAL	33

Note: Completion of the required courses in the Master of Arts in Education, Early Childhood Studies does not qualify the candidate for state certification in Blended Early Childhood/Early Childhood Special Education. The candidate should seek advising to determine certification requirements

# Master of Education in Early Childhood Studies

Graduate Program Coordinator: Carrie Mori

Education Building, Room 207 Telephone 208 426-2804 e-mail: cmori@boisestate.edu

### **Degree Requirements**

Master of Education in Early Childhood Stud	lies
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
Elective Core Courses Approved two-credit elective core courses are listed in the class schedules as ED-CIFS 597 Special Topics: Core followed by the specific title of the course	2
Early Childhood Studies Coursework	
ED-ECS 521 Readings: ECE/ECSE	3
ED-ECS 522 Development and Curriculum: ECE/ ECSE	3
ED-ECS 523 Early Learning Models: ECE/ECSE	3
ED-ECS 524 Play, Language Acquisition, and Literacy: ECE/ECSE	3
ED-ECS 525 Leadership: ECE/ECSE	3
Culminating Activity Options: Option 1: Project	12
ED-CIFS 503 Fundamentals of Educational	
Research3	
ED-ECS 591 Project6	
Approved Electives3	

- continued -

## College of Education Department of Early Childhood Studies

Master of Education in Early Childhood Studies (continu	ied)
Option 2: Comprehensive Examination	
ED-CIFS 505 Philosophy of Education	
ED-CIFS 597 Research2	
ED-ECS 600 Assessment (Comprehensive	
Examination) 1	
Approved Electives6	
Students must complete all coursework before	
taking comprehensive examination.	
TOTAL	33

NOTE: Completion of the required courses in the Master of Education, Early Childhood Studies does not qualify the candidate for state certification in Blended Early Childhood/Early Childhood Special Education. The candidate should seek advising to determine certification requirements.

## **Course Offerings**

#### **ED-ECS - EDUCATION-EARLY CHILDHOOD STUDIES**

**ED-ECS 521 EARLY CHILDHOOD: READINGS (3-0-3)(S).** Past and current research in early childhood education will be reviewed and synthesized in a seminar format. Students will determine a specific research area to study in depth.

**ED-ECS 522 DEVELOPMENT AND CURRICULUM: ECE/ECSE** (3-0-3)(F). Development in all domains is examined in depth, birth to age eight. Curriculum is examined as it fosters development in ALL young children.

#### **ED-ECS 523 EARLY LEARNING MODELS: ECE/ECSE**

**(3-0-3)(S).** Models of effective early childhood education, birth to age eight, for ALL young children and their families.

ED-ECS 524 PLAY, LANGUAGE ACQUISITION, AND LITERACY: ECE/ECSE (3-0-3)(F). Language development, acquisition and the relationship between play, language and emergent literacy in ALL young children, birth to age eight.

**ED-ECS 525 LEADERSHIP: ECE/ECSE (3-0-3)(S).** Refining practice through reflection, collaboration with colleagues and communities, and advocacy for ALL young children and their families. Fieldwork is required.

**ED-ECS 600 ASSESSMENT (Comprehensive Examination)** (1-0-1). Graded Pass/Fail.

# Department of Educational Technology

Chair: Lisa Dawley

Education Building, Room 305 Telephone 208 426-1966 e-mail: lisadawley@boisestate.edu

Full Graduate Faculty: Constance Pollard

**Adjunct Graduate Faculty:** Lisa Dawley, Kerry Rice, Barbara Schroeder, Chareen Snelson, Jeremy Tutty, Janet Evans Worthington

## **Graduate Degrees Offered**

- Master of Science in Education, Educational Technology
- · Graduate Certificate in Online Teaching
- Graduate Certificate in School Technology Coordination
- · Graduate Certificate in Technology Integration Specialist

#### **General Information**

The Master of Science in Education with emphasis in educational technology focuses on theoretical foundations, hands-on technology skills, and integration strategies for today's classrooms. The program is offered entirely online, and is specifically designed to meet the needs of practicing teachers, especially those who have a desire to share what they learn with their colleagues.

## **Application Procedures**

An applicant to the program must follow the general application procedures of the Graduate College for admission to a graduate program. The applicant must also submit a letter of interest to the Graduate Program Coordinator briefly summarizing his or her background and motivation for enrolling in the program as well as a writing sample which, along with the applicant's GPA, will be evaluated as a part of the admission process. Once the applicant's file is complete, it will be reviewed by the Graduate Program Coordinator who will provide an admission recommendation to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant.

# Master of Science in Education Educational Technology

Graduate Program Coordinator: Lisa Dawley

Education Building, Room 305 Telephone 208 426-1966

e-mail: lisadawley@boisestate.edu

### **Degree Requirements**

Master of Science in Education, Educational Tech	nology
Course Number and Title	Credits
The Master of Science in Education with emphasis in Educational Technology prepares students to work in educational and other settings requiring expertise in improving performance, designing instruction, and using a variety of instructional delivery systems. This program enables professionals to select and use a variety of technologies to produce long-term benefits for individuals and organizations. Work in this program includes a wide range of theoretical and practical experiences.	
Requirements:  EDTECH 571 Introduction to Educational Technology	21
Culminating Activities  I. Thesis or Project EDTECH 591 Project OR EDTECH 593 Thesis	6

— continued —

Master of Science in Education, Educational Technology (co	ntinued)
Students should take at least 6 credits of elective	6
course work.	
Suggested Electives:	
EDTECH 570 Online Skills and Strategies 1	
EDTECH 580-589 Selected Topics 3	
EDTECH 590 Practicum6	
SOC 510 Conflict and Change in Socio-Cultural	
Systems3	
TOTAL	33

# Graduate Certificate in Online Teaching

Graduate Program Coordinator: Lisa Dawley

Education Building, Room 305 Telephone 208 426-1966

e-mail: lisadawley@boisestate.edu

#### **General Information**

The Graduate Certificate in Online Teaching program is designed for those who wish to learn methodologies for online instruction with an emphasis on designing and moderating online courses. Students admitted to the certificate program are required to be familiar with all policies of the Graduate College that govern graduate certificate programs.

## **Admission Requirements**

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university and admission to the Graduate College. In addition, the academic background of the applicant must be judged by the Graduate Program Coordinator to be adequate for enrollment in graduate courses in education and educational technology. However, meeting these minimum requirements does not guarantee admission to the certificate program. If the student skill set is judged insufficient the student may be admitted provisionally with the expectation of prerequisite course work.

## **Application Procedures**

An applicant to the certificate program must follow the general application procedures of the Graduate College for admission to a graduate program. The applicant must also submit a letter of interest to the Graduate Program Coordinator briefly summarizing his or her background and motivation for enrolling in the certificate program. Once the applicant's file is complete, it will be reviewed by the Graduate Program Coordinator who will provide an admission recommendation to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant.

## College of Education Department of Educational Technology

### **Special Relationships with Other Programs**

A student may be simultaneously enrolled in the Master of Science in Educational Technology program and the Graduate Certificate in Online Teaching program subject to the approval of the chair of the student's supervisory committee and the graduate program coordinators of both programs. Please note that admission to the certificate program does not guarantee admission to the degree program and vice versa.

A student who is not enrolled in any graduate degree program at Boise State University may by enrolled in the Graduate Certificate in Online Teaching program and one other graduate certificate program offered by the Department of Educational Technology but only with the written approval of the Graduate Program Coordinator. Please note that admission to one certificate program does not guarantee admission to another certificate program, even if the programs are closely related. Simultaneous enrollment in more than two graduate certificate programs is prohibited by the Graduate College. Credits earned in this certificate program may be counted towards the Master of Science in Educational Technology program.

## **Certificate Requirements**

Graduate Certificate in Online Teaching	
Course Number and Title	Credits
EDTECH 572 Instructional Design for Educators	3
EDTECH 575 Integrating Technology into Classroom	3
Curricula	
EDTECH 582 Selected Topics: Teaching Online	3
EDTECH 583 Selected Topics: Multimedia	3
EDTECH 586 Selected Topics: Technical Writing for	3
Educational Technologists	
TOTAL	15

# Graduate Certificate in School Technology Coordination

Graduate Program Coordinator: Lisa Dawley

Education Building, Room 305 Telephone 208 426-1966

e-mail: lisadawley@boisestate.edu

#### **General Information**

The Graduate Certificate in School Technology Coordination program is designed to provide specialized skills for those professionals who are responsible for coordinating educational technology for an entire school. The program emphasizes understanding of the networked environment, web programming, and skills for teaching teachers how to use computers in the teaching and learning process. Students admitted to the certificate program are required to be familiar

with all policies of the Graduate College that govern graduate certificate programs.

### **Admission Requirements**

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university and admission to the Graduate College. In addition, the academic background of the applicant must be judged by the Graduate Program Coordinator to be adequate for enrollment in graduate courses in education and educational technology. However, meeting these minimum requirements does not guarantee admission to the certificate program. If the student skill set is judged insufficient the student may be admitted provisionally with the expectation of prerequisite course work.

## **Application Procedures**

An applicant to the certificate program must follow the general application procedures of the Graduate College for admission to a graduate program. The applicant must also submit a letter of interest to the Graduate Program Coordinator briefly summarizing his or her background and motivation for enrolling in the certificate program. Once the applicant's file is complete, it will be reviewed by the Graduate Program Coordinator who will provide an admission recommendation to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant.

#### **Special Relationships with Other Programs**

A student may be simultaneously enrolled in the Master of Science in Educational Technology program and the Graduate Certificate in School Technology Coordination program subject to the approval of the chair of the student's supervisory committee and the graduate program coordinators of both programs. Please note that admission to the certificate program does not guarantee admission to the degree program and vice versa.

A student who is not enrolled in any graduate degree program at Boise State University may be enrolled in the Graduate Certificate in School Technology Coordination program and one other graduate certificate program offered by the Department of Educational Technology but only with the written approval of the Graduate Program Coordinator. Please note that admission to one certificate program does not guarantee admission to another certificate program, even if the programs are closely related. Simultaneous enrollment in more than two graduate certificate programs is prohibited by the Graduate College. Credits earned in this certificate program may be counted towards the Master of Science in Educational Technology program.

## **Certificate Requirements**

Graduate Certificate in School Technology Coordination	
Course Number and Title	Credits
EDTECH 574 Instructional Software Development and Courseware Design	3
EDTECH 575 Integrating Technology into Classroom Curricula	3
EDTECH 583 Selected Topics: Multimedia	3
EDTECH 585 Selected Topics: Operating Systems and Networks	3
EDTECH 586 Selected Topics: Technical Writing for Educational Technologists	3
TOTAL	15

# Graduate Certificate in Technology Integration Specialist

**Graduate Program Coordinator:** Lisa Dawley Education Building, Room 305

Telephone 208 426-1966 e-mail: lisadawley@boisestate.edu

#### **General Information**

The Graduate Certificate in Technology Integration Specialist is designed for K-12 teachers who wish to develop skills in computer technology to support the teaching and learning process. Students admitted to the certificate program are required to be familiar with all policies of the Graduate College that govern graduate certificate programs.

## **Admission Requirements**

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university and admission to the Graduate College. In addition, the academic background of the applicant must be judged by the Graduate Program Coordinator to be adequate for enrollment in graduate courses in education and educational technology. However, meeting these minimum requirements does not guarantee admission to the certificate program. If the student skill set is judged insufficient the student may be admitted provisionally with the expectation of prerequisite course work.

## **Application Procedures**

An applicant to the certificate program must follow the general application procedures of the Graduate College for admission to a graduate program. The applicant must also submit a letter of interest to the Graduate Program Coordinator briefly summarizing his or her background and motivation for enrolling in the certificate program. Once the applicant's file is complete, it will be reviewed by the Graduate Program Coordinator who will provide an admission recommendation to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant.

### **Special Relationships with Other Programs**

A student may be simultaneously enrolled in the Master of Science in Educational Technology program and the Graduate Certificate in Technology Integration Specialist program subject to the approval of the chair of the student's supervisory committee and the graduate program coordinators of both programs. Please note that admission to the certificate program does not guarantee admission to the degree program and vice versa.

A student who is not enrolled in any graduate degree program at Boise State University may be enrolled in the Graduate Certificate in Technology Integration Specialist program and one other graduate certificate program offered by the Department of Educational Technology but only with the written approval of the Graduate Program Coordinator. Please note that admission to one certificate program does not guarantee admission to another certificate program, even if the programs are closely related. Simultaneous enrollment in more than two graduate certificate programs is prohibited by the Graduate College. Credits earned in this certificate program may be counted towards the Master of Science in Educational Technology program.

## **Certificate Requirements**

Graduate Certificate in Technology Integration Specialist	
Course Number and Title	Credits
EDTECH 575 Integrating Technology into Classroom Curricula	3
EDTECH 580 Selected Topics: Technology in the Content Area	3
EDTECH 581 Selected Topics: Technology-Supported Problem-Based Learning for Educational Technologists	3
EDTECH 583 Selected Topics: Multimedia	3
TOTAL	12

## College of Education Department of Educational Technology

## **Course Offerings**

#### **EDTECH — EDUCATIONAL TECHNOLOGY**

#### **EDTECH 570 ONLINE SKILLS AND STRATEGIES (1-0-1)**

(Offered on demand). Students learn the fundamentals of learning online. This course gives students the conceptual and software tools that will help them be successful in the online Educational Technology Master's degree program.

#### **EDTECH 571 INTRODUCTION TO EDUCATIONAL**

**TECHNOLOGY (3-0-3) (F/S).** This course provides students with an overview of the field of Educational Technology with an emphasis on K-12 education. Students will identify helpful resources and standards, discuss ethical legal, and human issues involving computing, and find and summarize major research finding and trends related to the use of technology in education.

#### **EDTECH 572 INSTRUCTIONAL DESIGN FOR EDUCATORS**

**(3-0-3)(F/S).** This course provides students with design principles based on both behaviorist and cognitive approaches. The course will help students understand how these principles apply to the content (conceptual and process) that they teach relative to the technologies (computers, video audio, and test) that are available in public schools.

#### EDTECH 573 THE INTERNET FOR EDUCATORS (3-0-3)(S/SU).

Students will access and use the Internet and its tools for remote information access and retrieval and multimedia/hypermedia publishing. Students will also identify and learn appropriate models for using the Internet in the classroom as well as collaborate in on-line work groups and build bodies of knowledge around topics based on Internet data sources.

EDTECH 574 INSTRUCTIONAL SOFTWARE DEVELOPMENT AND COURSEWARE DESIGN (3-0-3) (F/S). Students will practice the elements of courseware design for computer delivery as they learn a programming language. Students will learn programming basics and interface design.

#### **EDTECH 575 INTEGRATING TECHNOLOGY INTO**

**CLASSROOM CURRICULA (3-0-3) (F/S/SU).** Students learn and demonstrate knowledge of computer hardware and operating systems in networked computing environments found in K-12 educational settings; use advanced features of spreadsheets and relational

database management systems to develop classroom strategies and lessons and will create an electronic portfolio that demonstrates understanding of the integration of technology into the teaching/learning process. PREREQ: EDTECH 202, or completion of the Educational Technology Assessment, or EDTECH 573.

#### EDTECH 576 EVALUATION FOR EDUCATIONAL

**TECHNOLOGISTS (3-0-3)(F/S/SU).** Examines the nature and purpose of educational evaluation in making decisions about instructional products and academic programs with an emphasis on technology based programs and products. This course includes the study of and practice in methodologies for planning, conducting, and reporting evaluation results.

#### **EDTECH 577 INSTRUCTIONAL MESSAGE DESIGN**

(3-0-3) (F/S/SU). This course is designed to enhance the ability of educational technology students in the theory, design and selection of instructional media that is to be delivered in a high technology environment. Instructional Message Design refers to the manipulation and planning of signs and symbols that can be produced for the purpose of modifying the cognitive, affective or psychomotor behavior of one or more persons. It involves the application of perception theory, learning theory, communication theory and systems theory to the design and evaluation of instructional media.

**EDTECH 580-589 SERIES SELECTED TOPICS (3-0-3).** Topics in educational technology with frequently changing content. Provides students with a concentration area in Online Teaching, Technology Integration, or School Technology Coordination.

EDTECH 580 SELECTED TOPICS: TECHNOLOGY IN THE CONTENT AREA

EDTECH 581 SELECTED TOPICS: PROBLEM-BASED LEARNING FOR EDUCATIONAL TECHNOLOGISTS EDTECH 582 SELECTED TOPICS: TEACHING ONLINE EDTECH 583 SELECTED TOPICS: MULTIMEDIA EDTECH 585 SELECTED TOPICS: OPERATING SYSTEMS AND NETWORKS

EDTECH 586 SELECTED TOPICS: TECHNICAL WRITING FOR EDUCATIONAL TECHNOLOGISTS

EDTECH 591 PROJECT (0-V-6).

EDTECH 593 THESIS (0-V-6).

## **Department of Kinesiology**

#### Chair: Lynda Ransdell

Kinesiology Building, Room 209 Telephone 208 426-4270 FAX 208 426-1894

e-mail: lyndaransdell@boisestate.edu

**Full Graduate Faculty:** Kenneth Bell, Mark DeBeliso, Chad Harris, Werner Hoeger, Shelley Lucas, John McChesney, Linda Petlichkoff, Ron Pfeiffer, Lynda Ransdell, Jane Shimon, Caile Spear, Ross Vaughn

**Associate Graduate Faculty:** Terry-Ann Gibson, Laura Jones, Mary Pritchard

**Adjunct Graduate Faculty:** Paul Baehr, Nikki Hughes, Gregory Mondin, James Moore, Kevin Shea

## **Graduate Degrees Offered**

- Master of Science in Exercise and Sport Studies, Behavioral Studies
- Master of Science in Exercise and Sport Studies, Biophysical Studies
- Master of Science in Exercise and Sport Studies, Socio-historical Studies
- Master of Physical Education in Athletic Administration (ISU)

### **General Information**

The Master of Science Degree in Exercise and Sport Studies is designed to accommodate students with diverse academic backgrounds.

Students are required to complete a minimum of 3 credits from each area of emphasis (CORE REQUIREMENT), plus 6 credits in "Methods of Inquiry." The student, in conjunction with his/her advisor, selects additional classes to meet the credit hour requirement for the chosen area of emphasis. All students MUST complete a thesis.

It is assumed students are seeking a program which fosters critical thought. Therefore, those graduating must be able to apply the scientific method of problem solving to issues and questions related to one or more of the many dimensions of exercise, sport, and physical activity. Important outcomes for learners include:

- Acquiring a sound conceptual basis from which leadership can be exercised in the profession.
- 2. Demonstrating the expertise to interpret, communicate and effectively promote healthy lifestyles in occupational settings.
- Being intelligent consumers of research with competence to apply findings to the design, administration, evaluation and improvement of sport science-related programs.
- Possessing the skills needed to develop and conduct research which contributes to the growth of knowledge in the field.

Fundamental to the Graduate Program are faculty who provide a supporting environment and are active in teaching, scholarship, research and professional development.

## **Application and Admission Requirements**

Students will be admitted to the Exercise and Sport Studies Master's program with Regular Status when the following criteria are met:

- The Graduate College has received an application for admission, a one-time matriculation fee, and official transcripts of all undergraduate and graduate work.
- 2. A baccalaureate degree has been granted from an accredited institution.
- 3. A minimum cumulative grade point average of 3.0 on a 4.0 scale, and at least a 3.0 GPA for the last 60 credits of undergraduate work has been earned.
- An appropriate pattern of classes providing a foundation for the graduate area of study as determined by Kinesiology Department Graduate Faculty has been completed.
- 5. The Coordinator of the Graduate Program recommends acceptance and approval is granted by the Graduate College.

## Master of Science in **Exercise and Sport Studies**

Graduate Program Coordinator: Chad Harris

Kinesiology Building, Room 209 Telephone 208 426-4270 e-mail: charris@boisestate.edu

## **Degree Requirements**

Master of Science in Exercise and Sport Stud	lies
Course Number and Title	Credits
Core Requirements Select a minimum of one course from each of the following areas: Behavioral Studies KINES 530 Psychology of Exercise & Sport	9
KINES 551 Research Design in Exercise & Sport 3  Select one of the following courses:  KINES 552 Applied Statistical Methods	Ü
Electives Approved by Graduate Committee See following areas of emphasis.	15
KINES 593 Thesis	6
TOTAL	36

## Master of Science in **Exercise and Sport Studies, Behavioral Studies**

Graduate Program Coordinator: Chad Harris

Kinesiology Building, Room 209 Telephone 208 426-4270 e-mail: charris@boisestate.edu

### **Degree Requirements**

Master of Science in Exercise and Sport Stud Behavioral Studies	lies,
Course Number and Title	Credits
Core Requirements	9
Methods of Inquiry	6
Approved Electives	15
Suggested courses include, but are not limited to the following:  KINES 365G Social Psychology of Physical Activity	
KINES 593 Thesis	6
TOTAL	36

## Master of Science in **Exercise and Sport Studies, Biophysical Studies**

Graduate Program Coordinator: Chad Harris

Kinesiology Building, Room 209 Telephone 208 426-4270 e-mail: charris@boisestate.edu

### **Degree Requirements**

Master of Science in Exercise and Sport Stud Biophysical Studies	lies,
Course Number and Title	Credits
Core Requirements	9
Methods of Inquiry	6
Approved Electives  Suggested courses include, but are not limited to the following:  BIOL 531 Pharmacology	15
MHLTHSCI 548 Counseling Techniques for Health Professionals	
KINES 593 Thesis	6
TOTAL	36

## Master of Science in **Exercise and Sport Studies,** Socio-historical Studies

Graduate Program Coordinator: Chad Harris

Kinesiology Building, Room 209 Telephone 208 426-4270 e-mail: charris@boisestate.edu

### **Degree Requirements**

Master of Science in Exercise and Sport Studies, Socio-historical Studies	
Course Number and Title	Credits
Core Requirements	9
Methods of Inquiry	6
Approved Electives  Suggested courses include, but are not limited to the following:  ED-BLESL 503 Applied Foundations and  Multiculturalism	15
KINES 593 Thesis	6
TOTAL	36

## **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

KINES - KINESIOLOGY

KINES 330G EXERCISE PHYSIOLOGY (2-0-2)(F/S). Instruction in the physiological and biochemical changes accompanying exercise and training with emphasis on application of scientific principles to training program design. COREQ: KINES 331G.

KINES 331G LABORATORY FOR EXERCISE PHYSIOLOGY (0-2-1)(F/S). The laboratory to accompany KINES 330G. COREQ: Concurrent enrollment in KINES 330G is required.

KINES 365G SOCIAL PSYCHOLOGY OF PHYSICAL ACTIVITY (2-0-2)(F/S). Examination of current topics in psycho-social aspects of physical activity including history of sport and competition, establishment of learning/performance environments, moral development, and social context of performance. PREREQ: Graduate standing, PSYC 101 and KINES 201.

# College of Education Department of Kinesiology

**KINES 370G BIOMECHANICS (2-0-2) (F/S).** Anatomical and mechanical considerations applied to human motion in sport and exercise. COREQ: KINES 371G.

KINES 371G LABORATORY FOR BIOMECHANICS (0-2-1) (F/S). The laboratory to accompany KINES 370G. COREQ: KINES 370G.

**KINES 375G HUMAN GROWTH AND MOTOR LEARNING (2-0-2) (F/S).** Designed to provide the student with an understanding of human growth, movement development, motor learning and control. Application to skilled behavior is emphasized. COREQ: KINES 376G

KINES 376G LABORATORY FOR HUMAN GROWTH AND MOTOR LEARNING (0-2-1) (F/S). The laboratory to accompany KINES 375G. COREQ: Concurrent enrollment in KINES 376G is required.

**KINES 500 FUNCTIONAL ANATOMY (3-0-3).** A study of gross human anatomy from the descriptive approach with emphasis on the skeletal, muscular, nervous and circulatory systems. Includes cadaver dissection. In addition, indepth study of joint structure and function, gross-motor-movement, and skill will be included. Video analysis will be utilized.

**KINES 510 PHYSIOLOGY OF ACTIVITY (3-0-3).** A study of the various factors affecting human performance and subsequent adaptations of the body to single and repeated bouts of exercise.

**KINES 515 EXERCISE PHYSIOLOGY LAB (2-2-3).** Practical application of the principles that govern response and adaptation of the human body to exercise, utilizing laboratory equipment to collect data and analyze results. PREREQ: KINES 510 or PERM/INST.

**KINES 520 BIOMECHANICS (3-0-3).** A study of the internal and external forces acting on the human body and the effects produced by these forces. Analysis of movement will focus on qualitative techniques.

#### KINES 525 MECHANICAL ANALYSIS OF MOTOR ACTIVITIES

**(3-0-3).** An introduction to the analysis techniques used to study the mechanics of human motion. Topics will include cinematography, videography, force transducers, electromyography and computer analysis techniques. PREREQ: KINES 520 or PERM/INST.

#### KINES 530 PSYCHOLOGY OF EXERCISE AND SPORT (3-0-3).

A study of psychological factors as they relate to exercise, sport and performance. Content includes personality traits, motivation, anxiety/arousal, and intervention/coping strategies.

#### KINES 535 SOCIOLOGY OF EXERCISE AND SPORT (3-0-3).

A study of the relationships among sport and other facets of society, including social organization, group behavior and social interaction patterns.

#### KINES 540 APPLIED PRINCIPLES OF CONDITIONING (2-2-3).

Advanced study of the conditioning process. Emphasis on application of the conceptual to practical situations. Involves program planning, objectives, exercise analysis for conditioning specificity, exercise prescription and other conditioning variables affecting performance. PREREQ: KINES 510 or PERM/INST.

**KINES 545 EXERCISE TESTING AND PRESCRIPTION (2-2-3).** A study of the current methods and procedures used in coronary heart disease risk detection and reduction, including the recommended

guidelines by the American College of Sports Medicine for exercise testing and prescription.

#### KINES 550 PHILOSOPHY OF EXERCISE AND SPORT (3-0-3).

A study of the philosophical foundations underlying exercise and sport. Topics include values development, design and evaluation of individual and program philosophy and goal structuring.

#### KINES 551 RESEARCH DESIGN IN EXERCISE AND SPORT

(3-0-3)(S). Includes critical analysis of published research in terms of research design, statistical procedures, concepts of validity, experimentation and control; classification of various research methods; various types of research problems; and the relevant attributes of experimental designs. A research proposal is a requirement of the course.

#### KINES 552 (MHLTHSCI 552) APPLIED STATISTICAL

**METHODS (3-0-3) (F,S).** An introduction to statistical techniques utilized in the treatment of data. The techniques to be covered include measures of central tendency and variability, correlation measures, probability, analysis of variance, and regression analysis. May be taken for KINES or MHLTHSCI credit, but not both. PREREQ: Completion of an undergraduate statistics or measurement course.

#### KINES 555 PHYSICAL EDUCATION PEDAGOGY (3-0-3)

**(F/S/SU).** Advanced pedagogical theory and practice in physical education. In-depth study of the teaching and learning process through application of advanced teaching methods and student assessment.

**KINES 560 MOTOR LEARNING (3-0-3).** A study of the relevant empirical evidence and research in the field of motor learning and performance, including the learning process, feedback, timing, information processing, transfer, perception, motivation and practice conditions.

#### KINES 570 (MHLTHSCI 570) HEALTH PROMOTION (3-0-3).

A critical examination of health promotion and education policy with an emphasis on planning, implementation and evaluation of health programs for various public sectors. May be taken for KINES or MHLTHSCI credit, but not both.

#### KINES 572 (MHLTHSCI 572) GRANT WRITING (3-0-3)(SU).

Examination of the process of securing resources from external entities. Students will learn and apply a variety of techniques employed in proposal development and grant authorship. May be taken for KINES or MHLTHSCI credit, but not both.

KINES 574 (MHLTHSCI 574) HEALTH PROMOTION AND OPTIMAL AGING (3-0-3) (F) (Even Years). Focus on promoting healthful behavior and quality of life among older adults. Application of theory, research, and practice to gerontological health promotion and wellness. May be taken for KINES or MHLTHSCI credit, but not both

#### KINES 575 COMPUTERS IN EXERCISE AND SPORT (3-0-3).

An introduction to computer applications in the exercise and sport sciences, including methods for collecting data. Processing of data will include both microcomputer software and the Statistical Analysis System (SAS) package.

## KINES 580 SELECTED TOPICS IN APPLIED SPORT PSYCHOLOGY (3-0-3).

**KINES 590 PRACTICUM (0-9-3).** Available on a selective, limited basis. Culminating experience designed to provide students with

an opportunity to apply skills learned in the classroom. PREREQ: PERM/INST.

**KINES 593 THESIS (6 credits).** A scholarly paper containing the results of original research. PREREQ: Admission to candidacy and approval of the student's graduate committee.

KINES 596 GRADUATE INDEPENDENT STUDY (Variable credit). Opportunity for the student to pursue a topic of interest on an individual basis.

# Master of Physical Education in Athletic Administration

#### ISU/BSU Cooperative Program

Graduate Program Coordinator: Chad Harris

Kinesiology Building, Room 209 Telephone 208 426-4270 FAX 208 426-1894

e-mail: charris@boisestate.edu

#### Idaho State University Graduate Faculty:

John Fitzpatrick, Mike Lester, Gerard Lyons

#### **General Information**

The Master of Physical Education in Athletic Administration is a cooperative graduate studies program. Idaho State University (ISU) and Boise State University (BSU) have agreed to offer ISU's existing Master of Physical Education (MPE) graduate degree in Athletic Administration in Boise. Entering students will be able to complete the entire 33 credit hour degree in Boise and take up to 15 credits of BSU courses as part of the program requirements. Further stipulations of this cooperative venture are:

ISU will continue to be the degree granting institution.
 Students will initially apply for admission to ISU, and if accepted, apply for admission to BSU. An application fee must be paid to each institution. Courses from both institutions that are offered in Boise will be printed in the Boise State University Schedule of Classes after Kinesiology courses and listed under a separate and distinct heading of "Athletic Administration (ATHLADM)". Under the title of each course it will be stated that the course is part of the ISU Cooperative Athletic Administration Program.

- ISU Graduate Faculty should formally advise all students. A BSU student may request an advisor from BSU. The ISU SSPED Graduate Program Coordinator must approve this request.
- 3. ISU Graduate Faculty should chair all projects, Thesis, and comprehensive exam committees. A BSU student may request that a BSU Graduate Faculty member serve as major advisor. This request must be approved by the ISU SSPED Graduate Program Coordinator. BSU faculty who hold At-Large Graduate Faculty status at ISU may serve as committee members and upon request will submit comprehensive examination questions and participate in the evaluation of same.

## **Application and Admission Requirements**

Students will register at Boise State University for all ISU and BSU courses taken in Boise in accordance with the procedures stated in the *Boise State University Schedule of Classes*.

Students will pay fees to Boise State University and receive BSU activity cards (consistent with current BSU practices for full-time and part-time students) and thereby receive the appropriate services and use of campus facilities.

#### **Financial Aid**

Students taking ISU and/or BSU courses in Boise will be considered as "in-residence" at Boise State. Therefore, students applying for financial aid will do so through the Financial Aid Office at Boise State.

Due to a limited number and amount of scholarship funds at BSU, scholarship monies are not available to students in cooperative programs. If there are scholarships at ISU specifically earmarked for the Athletic Administration program, or if scholarships are developed for this program, they will be awarded by ISU and handled through the BSU Financial Aid Office as are all other outside donor awards.

#### Graduation

Idaho State University graduation requirements must be met by each student seeking an MPE degree in Athletic Administration. Therefore, students must apply for graduation through ISU and a final evaluation of their transcripts will be completed by the ISU Registrar.

## **Degree Requirements**

#### Master of Physical Education in Athletic Administration ISU/BSU Cooperative Program **Course Number and Title** Credits Students in the Cooperative MPE degree in Athletic 18 Administration between ISU and BSU would be limited to taking a maximum of 15 BSU credits, subject to approval from their ISU advisor. ATHLADM 505 (PE 605) Leadership & ATHLADM 515 **OR** KINES 550 (PE 615) Philosophy of Exercise & Sport......3 ATHLADM 531 (PE 631) Athletics & the Law ....... 3 ATHLADM 535 (PE 635) Management of Athletics......3 ATHLADM 540 **OR** KINES 551 (PE 640) Research ATHLADM 549 (PE 649) Issues in Thesis Option 15 ATHLADM 550 (PE 650) Thesis ...... 1-6 Approved Electives......9 **Non-thesis Option** ATHLADM 510 (PE 610) Advanced Sport Psychology **OR** KINES 530 Psychology of Exercise & Sport...... 3 ATHLADM 555 (PE 655) Internship ...... 1-6 **TOTAL** 33

## **Department of Literacy**

#### **Interim Chair: Lee Dubert**

Education Building, Room 504 Telephone 208 426-2862

e-mail: stansteiner@boisestate.edu

**Full Graduate Faculty:** James Armstrong, Lee Dubert, Rosemary Palmer, Stanley Steiner, Roger Stewart **Associate Graduate Faculty:** Anne Gregory, Susan Martin, Tanya Peters

## **Degree Offered**

- Master of Arts in Education, Reading
- Reading Endorsement K-8, 6-12 or K-12

#### **General Information**

Nationally recognized faculty in the Department of Literacy provide a balanced approach to reading instruction through literacy courses that serve early childhood through adults. The variety of coursework is designed to prepare graduate students to become reading specialists in the public and private sectors, obtain an Idaho State Reading Endorsement, complete a doctoral cognate in literacy, help teachers of reading enhance their classroom skills, and to become leaders in the field of literacy. Weekend and conventional delivery classes include reading, writing, listening, speaking, viewing, and technology skills. Our mission is to bring the joys of literacy to all.

## Master of Arts in Education, Reading

Graduate Program Coordinator: Stan Steiner

Education Building, Room 508 Telephone 208 426-2862

e-mail: stansteiner@boisestate.edu

## **Degree Requirements**

Master of Arts in Education, Reading	
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
Elective Core Courses Approved two-credit elective will be listed in the class schedule as ED-CIFS 597 Special Topics: Core followed by the specific title of the course. The following are examples of titles that might be offered: Parents in Education School Law and Ethics Students in the Middle School Contemporary Education Policy	2

— continued —

Master of Arts in Education, Reading (continued)	
ED-LTCY 540 Foundations of Reading Instruction	3
ED-LTCY 541 Assessment and Instruction: Reading	3
Difficulties K-12	
ED-LTCY 542 Best Practices in Literacy Improvement	3
ED-LTCY 543 Seminar in Literacy Education	3
Elective Options:	15
Option I. Thesis or Project	10
ED-CIFS 503 Fundamentals of Educational	
Research	
ED-LTCY 591 Project <b>OR</b>	
ED-LTCY 593 Thesis	
Reading electives	
Approved electives	
(A thesis or project, as mutually agreed upon by the	
candidate and the committee, is required. Selection of a	
thesis implies a research emphasis with a thesis format.  Selection of a project implies a project related to instruc-	
tion, curriculum, or some other aspect of an educational	
program.)	
Option II. Comprehensive Written Examination:	
(A comprehensive written examination is required at the	
end of the course work. This examination is to be tailored by	
each candidate's committee specifically for that candidate following guidelines established by the department. Candi-	
date must be enrolled in a minimum of one credit (ED-LTCY	
600 or other for the comprehensive written examination.	
After the candidate has completed the written portion of the	
examination, the committee will meet with the candidate	
for an oral review prior to final approval or rejection of the written examination.)	
ED-CIFS 505 Philosophy of Education <b>OR</b>	
ED-CIFS 503 Fundamentals of Educational	
Research	
NOTE: Students selecting Option II must take a research	
class, which may be ED-CIFS 597 Special Topics: Core-In-	
terpreting Educational Research (2 credits) or ED-CIFS 503	
Fundamentals of Educational Research (3 credits).  Reading electives	
Approved electives 6	
TOTAL	33

NOTE: Completion of the required courses in the Master of Arts in Education, Reading emphasis may not qualify the candidate for a reading endorsement for state certification. With the assistance of his or her advisor, the candidate can select appropriate electives to meet endorsement requirements.

**Reading Endorsement.** The endorsement in reading provides enhanced depth and breadth of course work in reading and language arts. This enhanced knowledge allow the student to be endorsed in reading education K-8, 6-12 or K-12. Twenty semester credits are required. Which includes a minimum of one or more courses from each of the five

following areas: Foundations of Reading or Developmental Reading, Content Area Reading, Corrective/Diagnostic/Remedial Reading, Psycholinguistics/Language Development and Reading, and Literature for Children and Adolescents. The courses listed here represent suggestions that fulfill the 20-credit endorsement.

Of the minimum twenty (20) semester credit hours needed for this endorsement, sixteen (16) credit hours must be divided among Areas I-V so that credit hours are earned from each area. Additional credit hours as needed, taken from area VI will satisfy the endorsement credit requirements.

Reading Endorsement K-8, 6-12 or K-12	
Course Number and Title	Credits
Area I: Foundations of Developmental Reading ED-LTCY 540 Foundations of Reading Instruction ED-LTCY 549/594/597 Idaho Comprehensive Literacy Course	3
Area II: Reading in the Content Area (ED-LTCY 544 & 550 are required for K-12 endorsement) Idaho has endorsements for K-8, 6-12 and K-12. Secondary students wanting the K-12 certification must take an elementary reading methods course. ED-LTCY 550 Content Area Literacy: K-8 (Required for K-8 endorsement only) ED-LTCY 544 Content Literacy in Secondary School (Required for 6-12 endorsement only)	3-6
Area III: Corrective/Diagnostic/Remedial Reading ED-LTCY 541 Assessment and Instruction: Reading Difficulties K-12 <b>AND</b> ED-LTCY 542 Best Practices in Literacy Improvement	3-6
Area IV: Psycholinguistics/Language Development and Reading (Choose at least one) ED-ECS 524 Early Childhood: Language Acquisition and Development ED-LTCY 548 Psycholinguistics and Literacy ENGL 505 Linguistics	3
Area V: Literature for Children or Adolescents (Choose at least one) ED-LTCY 546 Advanced Study of Children's Literature ED-LTCY 547 Advanced Young Adult Literature ENGL 581 Literature for Use in Junior and Senior High Schools	3

— continued —

# College of Education Department of Literacy

Reading Endorsement K-8, 6-12 or K-12 (continued	)
Area VI: Choose electives to total 20 credits from the	0-4
following list.	
ED-LTCY 532 Advanced Principles and Practices in	
Teaching Language Arts and Linguistics	
ED-LTCY 543 Seminar in Literacy	
ED-LTCY 545 Teaching Writing in Elementary	
Schools	
ED-LTCY 590 Practicum/Internship	
ED-LTCY 591 Project	
ED-LTCY 593 Thesis	
ED-LTCY 594 Conference or Workshop	
ED-LTCY 596 Directed Research	
ED-LTCY 597 Special Topics	
ENGL 502 Teaching Fiction, Non-Fiction and	
Poetry Writing (Secondary)	
ENGL 597 Selective Topics in Teaching English	
Language Arts (Secondary)	
TOTAL	20

# **Course Offerings**

**ED-LTCY - EDUCATION-LITERACY** 

# ED-LTCY 532 ADVANCED PRINCIPLES AND PRACTICES IN TEACHING LANGUAGE ARTS AND LINGUISTICS (3-0-3)(F).

Study of the theoretical constructs of reading, the psychological and pedagogical foundations of reading instruction, and learn to create and improve reading education programs in elementary and secondary classrooms.

# ED-LTCY 540 FOUNDATIONS OF LITERACY INSTRUCTION

**(3-0-3)(F/S/SU).** Studies the theoretical constructs of reading and writing, the psychological and pedagogical foundations of literacy instruction, and the creation and improvement of literacy education programs in elementary and secondary classrooms.

# **ED-LTCY 541 ASSESSMENT AND INSTRUCTION: READING DIFFICULTIES K-12 (3-0-3) (F/SU).** Diagnostic, standardized, and informal (performance-based) assessment procedures will be studied, evaluated, learned, and practiced. Instructional strategies for elementary and secondary students with reading difficulties will be learned and linked to assessment procedures. PREREQ: Admission to graduate program.

#### **ED-LTCY 542 BEST PRACTICES IN LITERACY IMPROVEMENT**

**(2-1-3)(S/SU).** Diagnostic instructional and assessment procedures will be used with 1-3 elementary or secondary students in the Boise State Tutoring Program in Reading. Each participant prepares a professional quality client report. One meeting per week with the client outside of class time is required. PREREQ: ED-LTCY 541 or the equivalent.

### **ED-LTCY 543 SEMINAR IN LITERACY EDUCATION (3-0-3)**

**(S/SU).** Covers current issues and trends in literacy education and leadership techniques. PREREQ: ED-LTCY 540 or PERM/INST.

#### **ED-LTCY 544 CONTENT LITERACY IN SECONDARY SCHOOL**

(3-0-3) (F/S/SU). Emphasis on using instructional materials in the various content subjects and developing instructional skills to meet the reading, writing, and studying needs of all learners in today's diverse society. Students will examine professional literature on best teaching practices. PREREQ: Admission to Graduate Secondary Teacher Certification and ED-SPED 550. Instructor permission to waive prerequisites may be given to all students not enrolled in the secondary education certification program (Block I-III). COREQ: ED-CIFS 561 and the content methods course for the declared major.

#### **ED-LTCY 545 TEACHING WRITING IN ELEMENTARY**

**SCHOOLS (3-0-3)(S).** Focuses on learning, teaching, and assessment of writing. The writing process and writing in a variety of genres are emphasized.

#### **ED-LTCY 546 ADVANCED STUDY OF CHILDREN'S**

**LITERATURE (3-0-3)(F).** In-depth literary analysis of children's literature from preschool to early adolescence, including multicultural literature. Development of children's literature activities for classroom, libraries, and other settings.

#### **ED-LTCY 547 ADVANCED YOUNG ADULT LITERATURE**

(3-0-3)(S). Offers an update in diverse young adult literature, as well as research, critical analysis and instructional strategies for a variety of settings. Intended for teachers, librarians, media generalists, and others working with young adults.

## **ED-LTCY 548 PSYCHOLINGUISTICS AND LITERACY (3-0-3)**

**(F/SU).** Psychological processes and strategies by which readers and writers construct and reconstruct the message of a text. Application of theoretical conclusions to teaching practices.

## **ED-LTCY 549 IDAHO COMPREHENSIVE LITERACY COURSE**

**(3-0-3)(F/S/SU).** Research-based best reading practices focused on language structure and literacy instruction, comprehension research, material selection, and assessment and intervention strategies. Contemporary and historical perspectives will be examined.

## ED-LTCY 550 CONTENT AREA LITERACY: K-8 (3-0-3)(F/S).

Knowledge, strategies, and tools for comprehension and vocabulary, and introduction to writing of narrative and expository texts in content areas. For students seeking K-8 Idaho State Reading Endorsement.

ED-LTCY 590 PRACTICUM/INTERNSHIP (1-3 Credits).

ED-LTCY 591 PROJECT (3-6 Credits) (Pass/Fail).

ED-LTCY 593 THESIS (6 Credits) (Pass/Fail).

ED-LTCY 594 CONFERENCE OR WORKSHOP (1-3 Credits) (Graded Pass/Fail).

ED-LTCY 596 DIRECTED RESEARCH (1-3 Credits)(Pass/Fail).

ED-LTCY 597 SPECIAL TOPICS (1-3 credits) (Pass/Fail).

ED-LTCY 600 ASSESSMENT (Comprehensive Examination) (1-3 credits)(Pass/Fail).

ED-LTCY 697 SPECIAL TOPICS IN LITERACY (1-3 Credits) (Pass/Fail).

# Department of Special Education

Chair: Melinda Lindsey

Education Building, Room 203 Telephone 208 426-1548 e-mail: mlindse@boisestate.edu

Full Graduate Faculty: Jack Hourcade, Melinda Lindsey

Associate Graduate Faculty: Karen Hager Adjunct Graduate Faculty: Elizabeth West

# **Graduate Degrees Offered**

· Master of Arts in Special Education

• Master of Education in Special Education

# **General Information**

The Department of Special Education at Boise State University is committed to providing professional development opportunities that result in highly qualified special educators. At the graduate level, programs are designed for experienced professionals who seek advanced knowledge and skills in the field of special education. Such professionals may be employed as special educators in public schools, or they may work with or on behalf of individuals with disabilities in community or agency settings.

The department offers two graduate degrees, a Master of Arts in Special Education and a Master of Education in Special Education. The two degrees are similar in course work requirements but differ in the culminating activity. The Master of Arts in Special Education culminates in a thesis and is designed for candidates interested in scholarly research. The Master of Education in Special Education culminates in either a comprehensive examination or a project and is designed for practitioners.

Note: Completion of the required courses in a Department of Special Education graduate program does not qualify the candidate for initial certification to teach special education in public schools. The candidate should seek the help of his or her advisor to plan additional course work that satisfies certification requirements.

# Master of Arts in Special Education

**Graduate Program Coordinator:** Melinda Lindsey

Education Building, Room 203 Telephone 208 426-1548 e-mail: mlindse@boisestate.edu

# **Degree Requirements**

Master of Arts in Special Education	
Course Number and Title	Credits
ED-CIFS 506 Issues in Education	4
Elective Core Courses (Approved two-credit elective core courses are listed in the class schedule as ED-CIFS 597 Special Topics: Core followed by the specific title of the course.)	2
Special Education Coursework ED-SPED 551 Counseling and Consulting Skills for Educators	3
ED-SPED 552 Instructional Design for Special Educators <b>OR</b> ED-SPED 556 Seminar in Severe Disabilities	3
ED-SPED 556 Seminar in Severe Disabilities  ED-SPED 554 Students with Emotional  Disturbances or Behavior Disorders	3
ED-SPED 555 Issues and Trends in Special Education	3
ED-SPED 590 Practicum: Special Education	3
Culminating Activity Coursework	3
ED-CIFS 503 Fundamentals of Educational Research ED-SPED 593 Thesis	6
Approved electives	3
TOTAL	33

# Master of Education in Special Education

Graduate Program Coordinator: Melinda Lindsey

Education Building, Room 203 Telephone 208 426-1548 e-mail: mlindse@boisestate.edu

# **Degree Requirements**

Master of Education in Special Education	
Course Number and Title	Credits
ED-CIFS 506 Graduate Core: Issues in Education	4
Elective Core Courses Approved two-credit elective core courses are listed in the class schedule as ED-CIFS 597 Special Topics: Core followed by the specific title of the course.	2
Special Education Coursework  ED-SPED 551 Counseling and Consulting Skills for Educators	3
ED-SPED 552 Instructional Design in Special Education <b>OR</b>	3
ED-SPED 556 Seminar in Severe Disabilities ED-SPED 554 Students with Emotional Disturbances or Behavior Disorders	3
ED-SPED 555 Issues and Trends in Special Education	3
ED-SPED 590 Practicum: Special Education	3
General Education coursework ED-CIFS 503 Fundamentals of Educational Research	3
Culminating Activity Options: Option 1: Project ED-SPED 591 Project	9
TOTAL	33

# **Course Offerings**

**ED-SPED - EDUCATION-SPECIAL EDUCATION** 

Admission to Graduate Secondary Teacher Certification.

**ED-SPED 550 TEACHING SECONDARY STUDENTS WITH EXCEPTIONAL NEEDS (3-0-3) (F,S).** Education of students with exceptional needs at the secondary level. Characteristics of students with disabilities, relevant legislation, assessment techniques, curricular adaptations and accommodations, and collaboration. PREREQ:

**ED-SPED 551 COUNSELING AND CONSULTING SKILLS FOR EDUCATORS (3-0-3)(S).** Theories and approaches to counseling and consulting, communication skills, and intervention programs for educators working with families of students with disabilities.

**ED-SPED 552 INSTRUCTIONAL DESIGN FOR SPECIAL EDUCATORS (3-0-3)(F) (Even years).** Advanced instructional design components to more effectively teach individuals with disabilities, including theoretical and programmatic considerations.

**ED-SPED 554 STUDENTS WITH EMOTIONAL DISTURBANCES OR BEHAVIOR DISABILITIES (3-0-3) (F/SU).** Current best practices in development of instructional and behavioral programs for students with severely challenging behaviors.

**ED-SPED 555 ISSUES AND TRENDS IN SPECIAL EDUCATION (3-0-3)(S).** Current issues and trends in the field of special education, targeting such areas as eligibility, assessment, parents, and service delivery options. Seminar format with student presentations.

**ED-SPED 556 SEMINAR IN SEVERE DISABILITIES (3-0-3)(S)** (**Odd years).** Advanced professional knowledge and skills relevant to providing services to individuals with severe disabilities, with special attention to contemporary issues and trends in the field.

ED-SPED 590 PRACTICUM/INTERNSHIP (1-3 Credits)
ED-SPED 591 PROJECT (1-6 Credits) (Graded Pass/Fail)
ED-SPED 593 THESIS (1-6 Credits) (Graded Pass/Fail)
ED-SPED 596 INDEPENDENT STUDY (1-3 Credits)
ED-SPED 600 ASSESSMENT (Comprehensive Examination) (1-3 Credits) (Graded Pass/Fail)

# College of Engineering

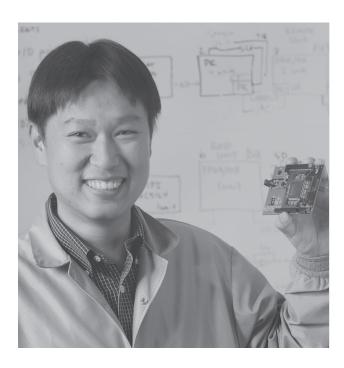
**Dean: Cheryl B. Schrader** Telephone 208 426-1153

## Associate Dean: Janet Hampikian

Telephone 208 426-1450 Engineering Technology Building, Room 338 FAX 208 426-4466 http://coen.boisestate.edu

# **Graduate Degrees Offered**

- Doctor of Philosophy in Electrical and Computer Engineering
- · Master of Science in Civil Engineering
- · Master of Engineering in Civil Engineering
- · Master of Science in Computer Engineering
- Master of Engineering in Computer Engineering
- Master of Science in Computer Science
- · Master of Science in Electrical Engineering
- Master of Engineering in Electrical Engineering
- Master of Science in Instructional & Performance Technology
- · Master of Science in Mechanical Engineering
- · Master of Engineering in Mechanical Engineering
- Master of Science in Materials Science and Engineering (See Interdisciplinary Programs)
- Master of Engineering in Materials Science and Engineering (See Interdisciplinary Programs)



# **General Information**

There are six departments that grant graduate degrees in the College of Engineering at Boise State University: Civil Engineering, Computer Science, Electrical and Computer Engineering, Mechanical Engineering, Materials Science and Engineering, and Instructional & Performance Technology. These departments serve the mission of the College of Engineering by providing accessible, high-quality, nationally recognized programs of instruction, research, and service that prepare students for engineering and other high technology careers, and that support individuals and organizations in Idaho, the Northwest region, and the nation.

The graduate programs in the College of Engineering are offered in a variety of degree options and delivery methods to accommodate student interests and career needs. The Master of Science degrees in Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering and Materials Science and Engineering, are thesis-based programs designed to prepare students for careers that involve a research component in their field. The thesis-based options often provide funding to students pursuing these options. The Master of Engineering degrees are non-thesis programs that may be satisfied by an approved selection of coursework and culminating activities. A number of graduate level courses are available in an on-line delivery format. The Master of Science in Computer Science offers both a thesis and a non-thesis option. The Master of Science in Instructional & Performance Technology has several different options that include thesis and non-thesis options, and is available in both the traditional on-campus mode of delivery as well as in an on-line delivery format which constitutes an entirely nonresident course of

The graduate faculty members in the College of Engineering are active in their academic and research fields, in their professional societies, and are dedicated to providing the highest quality instruction possible. The research facilities available to graduate students pursuing a degree include a variety of equipment housed in a number of different facilities such as the Biomaterials Research Laboratory, the Beowulf Computer Cluster Development Laboratory, the C-MEMS Laboratory, Environmental Sensor Development, the Biomechanics Research Laboratory, the Nanofabrication Laboratory, and more.

# Department of Civil Engineering

**Chair: Robert Hamilton** 

Engineering and Technology Building, Room 201 Telephone 208 426-3764 FAX 208 426-4800 http://coen.boisestate.edu/ce/msece.asp

Full Graduate Faculty: Molly Gribb, Robert Hamilton, David Haws, Mandar Khanal, George Murgel Associate Graduate Faculty: Rebecca Mirsky

# **Graduate Degrees Offered**

- · Master of Science in Civil Engineering
- Master of Engineering in Civil Engineering

# **General Information**

The Department of Civil Engineering offers two distinct graduate degree programs. The program leading to the Master of Science in Civil Engineering (M.S. CE) is a thesis-based program designed to prepare students for research and development and further study at the doctoral level. The program leading to the Master of Engineering in Civil Engineering (M.Engr. CE) is a non-thesis program with a focus on professional development.

# **Application and Admission Requirements**

**Admission Requirements.** An applicant must satisfy the minimum admission requirements of the Graduate College. In addition, the applicant must hold a baccalaureate degree in civil engineering from an ABET-accredited program or a baccalaureate degree in a closely related field, and must follow the application procedures specified below. Admission is competitive and the achievement of minimum requirements does not guarantee admission.

**Application Procedures.** A prospective student may apply at any time and should follow the general graduate application procedure for degree-seeking students (see Applying as a Degree-Seeking Student in this catalog). The applicant must also (1) submit a statement of purpose to the graduate program coordinator of the Department of Civil Engineering, and (2) arrange to have GRE General Test scores submitted by the Educational Testing Service (www.ets.org) directly to Boise State University (code R4018). The statement of purpose should give the educational and professional

background of the student and his or her motivation for graduate study including career goals. Applicants holding a baccalaureate degree from the College of Engineering of Boise State University are not required to submit GRE scores. International students must arrange to have three letters of recommendation submitted directly by the references to the Boise State University International Admissions Office. Once the applicant's file is complete, it will be evaluated by the Civil Engineering Graduate Studies Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the Dean of the Graduate College. In order to ensure proper mentoring of all graduate students, a recommendation for regular or provisional admission will not be forwarded unless a faculty member of the Department of Civil Engineering is available to serve as the major advisor. The graduate dean will make the final admission decision and notify the applicant and the Civil Engineering Graduate Studies Committee.

# **Advisor and Supervisory Committee**

The Civil Engineering Graduate Studies Committee will assign a supervisory committee (including a major advisor who serves as chair) for each admitted student. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study.

# Master of Science in Civil Engineering

**Graduate Program Coordinator:** George Murgel Micron Engineering Center, Room 403D Telephone 208 426-3788 e-mail: gmurgel@boisestate.edu

# **Degree Requirements**

Students must complete at least 31 graduate credits distributed as shown in the degree requirements table. A written thesis proposal and oral presentation to the supervisory committee is required prior to the completion of 15 credits applicable to the degree requirements. Work on the thesis can only be undertaken after approval of the thesis proposal by the supervisory committee. The thesis must constitute an original contribution to knowledge in civil engineering and must be successfully defended at a final oral examination. All work directly related to the thesis must be represented by at least 6 credits of CE 593.

Master of Science in Civil Engineering	
Course Number and Title	Credits
ENGR 500 Research Methods	1
Graduate CE Courses Graduate courses in civil engineering; all courses to be selected with student input and approved by the supervisory committee.	15-24
Other Graduate Courses Graduate courses in civil engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-9
<b>Thesis</b> CE 593 Thesis (P/F)	6
TOTAL	31

# Master of Engineering in Civil Engineering

Graduate Program Coordinator: George Murgel

Micron Engineering Center, Room 403D Telephone 208 426-3788 e-mail: gmurgel@boisestate.edu

# **Degree Requirements**

Students must complete at least 31 graduate credits distributed as shown in the degree requirements table. A maximum of 3 credits of CE 696 Directed Research may be applied to meet the degree requirements. The comprehensive examination cannot be attempted prior to the last semester of the program. If the comprehensive examination is failed on the first attempt, then the student will be permitted a second attempt. Failure on the second attempt will result in dismissal from the program.

Master of Engineering in Civil Engineering	
Course Number and Title	Credits
Graduate CE Courses Graduate courses in civil engineering; all courses to be selected with student input and approved by the supervisory committee.	18-30
Other Graduate Courses Graduate courses in civil engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-12
Comprehensive Examination CE 600 Assessment (P/F)	1
TOTAL	31

**Special Rule on Transfer Credit.** The normal transfer credit policies of the Graduate College hold except that up to 15 transfer credits earned in combination at the University of Idaho and Idaho State University may be applied to either

degree program (M.S. CE or M.Engr. CE) with the approval of the supervisory committee.

# **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

**CE - CIVIL ENGINEERING** 

**CE 452G STRUCTURAL STEEL DESIGN (2-3-3) (F/S).** Design of steel structures, such as beams and columns, in accordance with latest AISC Manual of Steel Construction, LRFD edition. PREREQ: CE 352.

## CE 460G GEOTECHNICAL ENGINEERING DESIGN (3-0-3)

**(F/S).** Subsoil exploration and site investigation methodologies. Soil mechanics in design of earth retaining structures, shallow and deep foundations, embankments, slopes, and excavations. PREREQ: CE 360 and CE 361.

**CE 512 (GEOL 512) HYDROGEOLOGY (3-0-3)(F).** The study of subsurface water and its relationship to surface water, the hydrologic cycle, and the physical properties of aquifer systems. Flow nets and flow through porous and fractured media. Methods of determination of aquifer characteristics and performance and groundwater modeling. May be taken for CE or GEOL credit, but not for both. PREREQ: MATH 175, junior standing.

CE 520 ADVANCED ENVIRONMENTAL ENGINEERING PROCESSES AND DESIGN (3-3-4) (F/S). Theoretical and engineering aspects of advanced chemical, physical and biological phenomena and processes applicable to the removal of impurities from water, wastewater and industrial wastes and to their transformation in receiving waters. Includes experimental problem analysis, pilot plant treatment studies with data collection and analysis and optimal treatment solution reporting. PREREQ: CE 320, CE 321, CE 336. CE 424.

**CE 522 HAZARDOUS WASTE ENGINEERING (3-0-3) (F/S).** Physical, chemical, and biological treatment of hazardous wastes. Consideration of legal and political issues. PREREQ: CHEM 112.

**CE 524 WATER AND WASTEWATER TREATMENT PLANT DESIGN (3-0-3) (F/S).** Design of treatment systems for water supply and wastewater disposal. PREREQ: CE 320.

### CE 526 ENVIRONMENTAL PROCESS CHEMISTRY

(3-0-3)(S) (Even years). Chemical principles of water and wastewater treatment processes and reactions in receiving waters. Topics include chemical thermodynamics, reaction kinetics, acid-base equilibria, mineral precipitation/dissolution, and electrochemistry. PREREQ: CHEM 112 or PERM/INST.

#### CE 527 (GEOL 526) AQUEOUS GEOCHEMISTRY (3-0-3)(F/S).

Basic tools and topics of aqueous geochemistry with an emphasis on low temperature processes in natural waters. Essentials of thermodynamics, kinetics, aqueous speciation, mineral-water interaction, and elemental cycling in the context of surficial earth processes and environmental challenges. May be taken for CE or GEOL credit, but not for both. PREREQ: PERM/INST.

#### CE 530 (GEOL 530) VADOSE ZONE HYDROLOGY

**(3-0-3)(F).** Laboratory and field methods for characterizing physical and hydraulic properties of soils, solution of variably saturated flow problems using analytical and numerical techniques. Computer

# College of Engineering Department of Civil Engineering

simulations of flow and transport in variably saturated soils. May be taken for CE or GEOL credit, but not for both. PREREQ: CE 412, GEOL 412, CE 512, or GEOL 512 or PERM/INST.

#### CE 533 (GEOL 533) CONTAMINANT TRANSPORT (3-0-3)(S).

The fate and transport of dissolved solutes and non-aqueous phase liquids in groundwater systems. Students will analyze field data and develop conceptual models for contaminated sites. The role of engineers and hydrologists in environmental litigation will be addressed through case studies. May be taken for CE or GEOL credit, but not for both. PREREQ: CE 412 or CE 512 or GEOL 412 or GEOL 512, or PERM/INST.

#### CE 538 WATER RESOURCES ENGINEERING (2-3-3)(F/S).

Flood frequency analysis, reservoir characteristics and design, open channel flow applications, water project design, model studies, pump and turbine hydraulics and other water resources engineering topics. PREREQ: ENGR 330.

#### CE 540 PAVEMENT DESIGN AND EVALUATION (3-0-3)(F/S).

Pavement design processes, materials selection and characterization methods, design of flexible pavements, design of rigid concrete pavements, condition survey and ratings, distress evaluation, and maintenance and rehabilitation techniques. PREREQ: CE 340 and CE 370.

**CE 551 STRUCTURAL DYNAMICS (3-0-3) (F/S).** Examines free vibration and response to harmonic and general dynamic loading of the single degree of freedom system, Fourier analysis and response in the frequency domain, response spectra, framed structures modeled as discrete multi-degree-of-freedom systems, dynamic analysis of nonlinear systems. Response of structural systems to earthquake excitation. PREREQ: ME 472.

**CE 553 STRUCTURES II (3-0-3)(S)(Odd years).** Analysis and design of structural systems. Stiffness method including the development of element properties, coordinate transformations, and global analysis theory. Three-dimensional building systems and an introduction to the Finite Element Method. PREREQ: CE 352.

**CE 554 TIMBER DESIGN (3-0-3) (F/S).** Design of wood, and wood composite, structures and systems based on mechanical and structural characteristics and specifications. PREREQ: CE 352.

**CE 562 FOUNDATION DESIGN (3-0-3)(F/S).** Design of foundations, slope stabilization, and retaining structures. PREREQ: CE 460.

#### CE 564 SEEPAGE, DRAINAGE, FLOW NETS AND

**EMBANKMENTS** (3-0-3) (F/S). Emphasis on the applied aspects of groundwater flow and seepage through porous media from a theoretical point of view; examination and development of governing field equations; flow net construction, modeling techniques, filter design, construction dewatering; simplified design of small earthfill dams and slope stability of embankments. PREREQ: CE 360, CE 361.

#### CE 570 HIGHWAY AND TRAFFIC SYSTEMS DESIGN (2-3-3)

**(F/S).** Planning, design, and operations of urban and rural highway systems. PREREQ: CE 360 and CE 370.

**CE 572 TRANSPORTATION PLANNING (3-0-3) (F/S).** Theory and practice of transportation planning at the metropolitan as well as regional levels. The four-step traditional planning process will be covered in depth. Use of a transportation planning software will be required. Recent advances in planning will be introduced.

**CE 575 ADVANCED TRAFFIC MANAGEMENT (3-0-3)(F/S).** An overview of recent initiatives and advances in traffic management. Focus on selected aspects such as incident detection, corridor simulation, or signal timing optimization. Use of software and completion of a project dealing with a real-world traffic problem will be required. PREREQ: PERM/INST.

#### CE 623 (GEOL 623) (GEOPH 623) ADVANCED

**HYDROGEOLOGY (3-0-3) (F).** Treatment of groundwater occurrence and flow, theory fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls. May be taken for credit in GEOL, GEOPH, or CE, but not for more than one department. PREREQ: MATH 275, MATH 333, and GEOL 412 or GEOL 512 or CE 412 or CE 512 or PERM/INST.

## CE 624 (GEOL 624) (GEOPH 624) APPLIED HYDROGEOLOGY

(3-0-3)(S). Quantitative determination of hydrologic parameter values and groundwater flow conditions. Conceptual models and geologic context, boundary condition, analytical and numerical solution techniques, measurement methods, applications to engineering and environmental problems. May be taken for credit in GEOL, GEOPH, or CE, but not for more than one department. PREREQ: GEOL 623 or GEOPH 623 or CE 623 or PERM/INST.

## **ENGR - ENGINEERING SCIENCE**

**ENGR 500 RESEARCH METHODS (1-0-1) (F/S).** Topics include defining a thesis or other research project, library and internet searching techniques, completing a literature review, preparing a research or project plan, research methods, preparing the thesis proposal, preparing the final thesis or research project document, and preparing a successful oral presentation.

# Department of Computer Science

Chair: John H. Griffin

Engineering and Technology Building, Room 240B Telephone 208 426-5640 FAX 208 426-2470 http://cs.boisestate.edu

e-mail: office@cs.boisestate.edu

**Full Graduate Faculty:** James Buffenbarger, Alex Feldman, John Griffin. Amit Jain

**Associate Graduate Faculty:** Tim Anderson, Gang-Ryung Uh, Jyh-haw Yeh

# Master of Science in Computer Science

## **Graduate Program Committee Coordinator**:

Alex Feldman Math/Geosciences Building, Room 233 Telephone 208 426-3374 e-mail: afeldman@boisestate.edu

## **General Information**

The Master of Science in Computer Science program has been designed for people who have a good background in computer science at the undergraduate level—that is, either

- · a baccalaureate degree in computer science, or
- a degree in a related field with significant course work in computer science.

We expect that most of the students enrolling in the program will have full-time employment commitments. Accordingly, we try to schedule courses in such a way as to meet the needs of working students.

Prospective students whose computer science background is limited are encouraged instead to pursue a second Bachelors degree, in Computer Science. A second Bachelors degree in Computer Science involves taking the required undergraduate Computer Science classes and, in most cases, would require less time than the Masters.

The Computer Science Graduate Committee may grant provisional admission to exceptional students with limited computer science background.

Students who are interested in a master's degree program that is somewhat less technical and more business-oriented might wish to consider the Master of Science in Management Information Systems, offered by the College of Business and Economics at Boise State University.

# **Application and Admission Requirements**

Applicants must have either a baccalaureate degree in computer science, or a baccalaureate degree in a related field plus substantial course work and/or professional experience in computer science, with an undergraduate GPA of 3.0 or higher.

Admission as a graduate student at Boise State University has two components: 1) admission to the Graduate College, which can occur with unclassified status and 2) admission to a particular program. To apply for admission to the Graduate College, complete the following steps:

- Submit the Boise State University Graduate Admission Application, along with the application fee, to Graduate Admission and Degree Services. The application form is contained in the Boise State University Graduate Catalog, which may be obtained by contacting the Graduate Admission and Degree Services at 208 426-3903 or 208 426-4204, or by e-mail at gradcoll@boisestate.edu. An on-line admission form is available at www.boisestate. edu/gradcoll/.
- Arrange for official transcripts from all post-secondary institutions attended to be sent directly to Graduate Admission and Degree Services.

To apply for admission to the graduate program in Computer Science, you will need to complete the following additional steps. A decision on admission into the masters program (for Regular or Provisional status) will not be considered prior to the completion of these steps.

- Take the GRE General test and arrange for the scores to be sent to the Graduate Admission and Degree Services.
- If you do not have a degree in Computer Science or Computer Engineering from a college or university with a CSAB/ABET accredited program in Computer Science, you must take the GRE Computer Science Subject test and arrange for the scores to be sent to the Graduate Admission and Degree Services.
- Arrange for three letters of reference that address your preparation for graduate study in computer science to be sent directly to the Computer Science Graduate Committee in the Department of Computer Science.

**Regular and Provisional Status.** Completed applications will be reviewed by the Computer Science Graduate Committee.

- Applicants who meet the stated requirements and whose computer science background is deemed sufficient will be admitted to the program with Regular status.
- Applicants whose computer science background is deemed deficient may be granted admission with Provisional status. In this case the applicant will be required to pass specific undergraduate computer science courses in order to remove the deficiency and be granted Regular admission status.
- Unless otherwise specified, all deficiencies must be removed within two years of Provisional admission to the program. Time spent in Provisional status counts toward

# College of Engineering Department of Computer Science

the limit of five years (or up to seven years if an extension is granted) allowed for completion of the degree.

# **Degree Requirements**

The degree requirements described below allow the students a fair amount of flexibility in designing a program to fit his or her needs. The only fixed requirements are three "core" classes in algorithms, programming languages, and operating systems. The remainder of the course-work is to be chosen by the student, in consultation with his/her adviser and the graduate computer science committee, to reflect the student's interests, ensures a coherent program, and fit within the constraints of course availability. The Master of Science in Computer Science requires a minimum of 30 credit hours, as specified in the table below. In addition, the student's adviser and the Computer Science Graduate Committee must approve the student's proposed degree plan to ensure that it meets these criteria and forms a coherent program of study. All requirements for the degree must be completed within five years of initial enrollment in the program, unless the Computer Science Graduate Committee grants an explicit extension of time. In no event will more than seven years be allowed for completion of the degree.

Master of Science in Computer Science	
Course Number and Title	Credits
<b>Core Computer Science Courses</b>	10
COMPSCI 521 Design and Analysis of	
Algorithms3	
COMPSCI 531 Advanced Programming	
Languages3	
COMPSCI 553 Operating Systems 4	
Other Graduate Courses	11-17
Graduate courses in computer science or a related	
field; all courses to be selected with student input	
and approved by the supervisory committee.	
One of the following culminating activities	
Thesis or Project Option	3-9
COMPSCI 591 Project	
OR	
COMPSCI 593 Thesis	
TOTAL	30

# **Course Offerings**

**COMPSCI - COMPUTER SCIENCE** 

**COMPSCI 510 DATABASES (4-0-4) (S).** A study of the theoretical foundations of database management systems. Design and implementation of alternatives for various database models, including, but not limited to, hierarchical, network and relational models. Comparison of the reliability, security and integrity of various database systems. Implementation of a simple system. PREREQ: COMPSCI 242 or PERM/INST.

#### **COMPSCI 512 ADVANCED TOPICS IN DATABASES (3-0-3)**

**(F/S).** Parallel and distributed database system architectures, distributed database design, client/server database systems. Selected

topics from new developments in: extended relational databases, multimedia databases, information retrieval systems, object-oriented databases, temporal databases. PREREQ: COMPSCI 410 or COMPSCI 510 or PERM/INST.

#### **COMPSCI 521 DESIGN AND ANALYSIS OF ALGORITHMS**

(3-0-3)(F/S). Design techniques such as amortized analysis, dynamic programming, and greedy algorithms. Computational geometry, graph algorithms, primality and other number-theoretic algorithms, specialized data structure techniques such as augmenting data structures, combinatorial graph reduction and functional repetition. NP completeness and approximation algorithms. PREREQ: COMPSCI 242 or PERM/INST.

#### **COMPSCI 525 NETWORK PROTOCOLS AND PROGRAMMING**

**(3-0-3) (F/S).** Applications and hands-on problems from TCP/IP in the Unix environment, augmented by examples from many different kinds of protocols and technologies. OSI layers, fault tolerance, sockets, streams, parallel processes, spooling, remote execution and client-server models. PREREQ: MATH 361 and COMPSCI 453 or PERM/INST.

**COMPSCI 530 PARALLEL COMPUTING (4-0-4) (F).** Motivation for parallel computation and survey of different models. Fundamental techniques used in parallel algorithms. Implementation on parallel machines and simulations on clusters of workstations. Distributed computing versus parallel computing. Models for distributed computing. Examples of distributed programming environments. PREREQ: COMPSCI 242 or PERM/INST.

#### **COMPSCI 531 ADVANCED PROGRAMMING LANGUAGES**

(3-0-3) (F/S). Advanced topics in programming-language theory, design, and implementation. Topics include: data types; binding, scope, and extent; abstraction, extensibility, and control mechanisms; formal semantics and program verification. Emphasis on alternative programming-language paradigms. PREREQ: COMPSCI 354 or PERM/INST.

## COMPSCI 541 (EE 532) COMPUTER ARCHITECTURE (3-0-3)

**(S).** Structure of computer systems using processors, memories, input/output (I/O) devices as building blocks. Computer system instruction set design and implementation, including memory hierarchies, microprogramming, pipelining and multiprocessors. Issues and tradeoffs involved in the design of computer system architectures with respect to the design of instruction sets. Applications of hardware description languages (HDL) in the design of computer systems. May be taken for either COMPSCI or EE credit, but not both. PREREQ: COMPSCI 117 or COMPSCI 125 and EE 332 or PERM/INST.

COMPSCI 546 COMPUTER SECURITY (3-0-3) (F/S). Computer and network security. Public-key and private-key cryptography, authentication, digital signatures, key exchange, key management, certification authorities, and distributed trust models. File system security, Mail system security, and Web security. Intruders, Trojan Horses, and viruses. Covert channels. Projects will involve using currently available security tools. PREREQ: COMPSCI 453 or PERM/INST.

#### **COMPSCI 550 PROGRAMMING LANGUAGE TRANSLATION**

**(4-0-4)(S).** Assembler Language Programming, theory and practice of formal language translation, experience with compiler construction tools under UNIX. Students work on significant projects. PREREQ: COMPSCI 253 and COMPSCI 354.

# College of Engineering Department of Computer Science

#### **COMPSCI 551 ADVANCED TOPICS IN COMPILATION**

**(3-0-3) (F/S).** Code generation, analysis, and optimization. Projects will use a simple framework for performing analysis and optimizations at the assembly level. PREREQ: COMPSCI 450 or COMPSCI 550.

**COMPSCI 553 OPERATING SYSTEMS (4-0-4) (F).** Concepts and techniques for computer operating systems: process management, concurrency, inter-process communication, synchronization, scheduling, memory management, file systems and security. PREREQ: COMPSCI 253 and EE 332.

## COMPSCI 554 ADVANCED OPERATING SYSTEMS (3-0-3)(S).

In-depth exploration of the various components of an actual operating system. Includes modifying operating system code to observe behavior, adding new functionality, understanding how various parts work as well as other experiments. Special emphasis on soft and hard real-time operating systems. PREREQ: COMPSCI 453 or COMPSCI 553 or PERM/INST.

COMPSCI 555 DISTRIBUTED SYSTEMS (3-0-3)(S). Principles and paradigms of distributed systems. Communication, processes, naming, synchronization, consistency and replication, fault tolerance and security. In-depth coverage of Remote Procedure Call (RPC), Remote Method Invocation (RMI) and socket programming. Survey of major distributed systems. Several software projects. PREREQ: COMPSCI 453 or COMPSCI 553 or PERM/INST.

#### COMPSCI 557 ARTIFICIAL INTELLIGENCE (3-0-3) (F/S).

Course will include a survey of some of the following topics, plus a project: Principles of knowledge-based search techniques; automatic deduction; knowledge representation using predicate logic, semantic networks, connectionist networks, frames, rules; applications in problem solving, expert systems, game playing, vision, natural language understanding, learning, robotics; LISP programming. PREREQ: COMPSCI 242 and COMPSCI 354 or PERM/INST.

**COMPSCI 561 INTRODUCTION TO THE THEORY OF COMPUTATION (3-0-3)(F).** Grammars, automata, Turing machines, decidability and complexity, language hierarchies, normal forms, NP-completeness, and reducibilities. Applications will be drawn from various areas of computer science. PREREQ: COMPSCI 242 or PERM/INST.

**COMPSCI 562 COMPLEXITY THEORY (3-0-3) (S).** Abstract machines, relativizations, upper and lower bounds on complexity, recursive hierarchies and alternation, time-space interaction, parallel and randomized complexity classes, approximation algorithms. PREREQ: COMPSCI 461.

COMPSCI 564 COMPUTER GRAPHICS I (3-0-3) (F). The mathematics and programming techniques for computer graphics emphasizing raster graphics, rasterization algorithms, and scanline rendering. Two- and three-dimensional transformations, homogeneous coordinates, projections; clipping, hidden-surface removal. PREREQ: COMPSCI 242 and MATH 301; MATH 275 recommended.

**COMPSCI 565 COMPUTER GRAPHICS II (3-0-3)(S).** A continuation of COMPSCI 564. Polygonal representation of 3D objects,

lighting models, shading and shadows, texture mapping, antialiasing, interactive graphics. Nonrecursive and recursive ray tracing. PREREQ: COMPSCI 464 or COMPSCI 564.

COMPSCI 567 CRYPTOLOGY I (4-0-4) (F). Introduction to modular arithmetic. The study of: the RSA, El-Gamal, Diffie-Hellman, and Blum-Blum-Shub public key cryptosystems, authentication and digital signatures, anonymity protocols. Protocol failures for these systems. Crosslisted with MATH 307 and COMPSCI 367; credit may be received for only one of these three courses. PREREQ: MATH 170, MATH 171, and MATH 187.

**COMPSCI 568 CRYPTOLOGY II (4-0-4) (S).** Introduction to groups, fields, polynomial rings and Lucas numbers. The study of: the Elliptic Curve, LUC, and NTRU public key cryptosystems, authentication and digital signatures, anonymity protocols. Crosslisted with MATH 308 and COMPSCI 368; credit may be received for only one of these three courses. PREREQ: MATH 170, MATH 171, and MATH 187.

#### COMPSCI 571 SOFTWARE ENGINEERING (3-0-3) (F). A

formal study of the software development process. Topics include: lifecycle models, requirements definition, specification, design, implementation, validation, verification, maintenance, and reuse. Students work in small teams on significant projects. PREREQ: COMPSCI 225 and MATH 187 or PERM/INST.

## **COMPSCI 572 OBJECT-ORIENTED DESIGN PATTERNS**

(3-0-3)(S). Designing a flexible and reusable object-oriented software system is difficult. Object-oriented design patterns capture simple, elegant, and recurring solutions to specific object-oriented design problems. This class reviews object-oriented design principles, explains the goals and form of design patterns, and examines several well-known patterns. PREREQ: COMPSCI 225 or PERM/INST.

## COMPSCI 573 ADVANCED SOFTWARE ENGINEERING

(3-0-3)(S). A study of selected aspects of contemporary software development methodology. Topics are taken from recent research articles. These topics include: definition of user requirements, formal specification of solutions, design and implementation techniques, validation and testing, verification, maintenance, and reuse. PREREQ: COMPSCI 471 or PERM/INST.

**SELECTED TOPICS.** (Variable credit). In depth study of current trends and advanced topics in targeted areas of computer science.

COMPSCI 580 PARALLEL COMPUTING COMPSCI 581 ALGORITHMS COMPSCI 583 COMPUTER SECURITY COMPSCI 584 NETWORKS COMPSCI 585 OBJECT-ORIENTED DESIGN COMPSCI 586 DATABASES COMPSCI 587 SOFTWARE ENGINEERING

COMPSCI 591 PROJECT (Variable credit).

COMPSCI 593 THESIS (Variable credit).

COMPSCI 600 ASSESSMENT Comprehensive Examination (1 Credit)(Graded Pass/Fail).

# Department of **Electrical and Computer Engineering**

Chair: R. Jacob Baker

Engineering Technology Building, Room 240 Telephone 208 426-5640 FAX 208 426-2470

e-mail: jbaker@boisestate.edu

Full Graduate Faculty: Said Ahmed-Zaid, R. Jacob Baker, Elisa H. Barney Smith, William Knowlton, Nader Rafla, Cheryl B. Schrader, Scott Smith

Associate Graduate Faculty: Kris Campbell, Wan Kuang, Sin Ming Loo

# **Graduate Degrees Offered**

- · Doctor of Philosophy in Electrical and Computer Engineering
- Master of Science in Computer Engineering
- Master of Engineering in Computer Engineering
- Master of Science in Electrical Engineering
- Master of Engineering in Electrical Engineering

# **Doctor of Philosophy in Electrical** and Computer Engineering

Doctoral Program Coordinator: R. Jacob Baker Engineering Technology Building, Room 240 Telephone 208 426-5640 FAX 208 426-2470

http://coen.boisestate.edu/ece/home.asp e-mail: bmicone@boisestate.edu

## **General Information**

Boise State University offers a Doctor of Philosophy in Electrical and Computer Engineering through the Department of Electrical and Computer Engineering (ECE). The degree requires the completion of a prescribed course of study in ECE, satisfactory performance on the comprehensive examination and dissertation proposal, and independent completion of original research that results in a publicly defended dissertation that contributes significantly to ECE knowledge.

# **Graduate Teaching and** Research Fellowships

Graduate fellowships including tuition and fee waivers are funded from three sources: appropriated state funds, endowments, and research grants and contracts. Applicants to the Ph.D. in ECE program who submit all documents required by the admission procedure by January 7 of any given year will be considered for a state appropriated or endowed graduate fellowship to start the following fall semester; notification of successful applicants will be during February and March. Information on graduate fellowships funded by research grants and contracts is available from the Coordinator of the ECE doctoral program.

# **Doctoral Program Committee**

The Doctoral Program Committee in ECE consists of the ECE Doctoral Program Coordinator, the program coordinators for the electrical engineering and computer engineering Master's programs, and the associate chair of the department. The duties of the Doctoral Program Committee include development of recommendations for admission of prospective graduate students, decision on transfer credits and required background courses, appointment of Supervisory Committees for graduate students, and administration of the comprehensive examination.

# **Supervisory Committee**

The Supervisory Committee is charged with general guidance of the doctoral student, including design and approval of the program of study, administration of the oral dissertation proposal, supervision of the dissertation research, and participation in the dissertation defense. The Supervisory Committee consists of a principal advisor from the student's chosen area of major emphasis who acts as chair, one member from the student's chosen area of minor emphasis. and at least two additional members, all of whom must be members of the University regular or research faculty and must also be members of the Graduate Faculty. One or more additional members may be appointed when such appointments enhance the function of the Committee. In all cases, regular or research faculty members of the Department of Electrical and Computer Engineering must constitute a majority of the Supervisory Committee.

# **Application and Admission**

Admission Requirements. An applicant must satisfy the minimum admission requirements for the Graduate College. Applicants are required to have a Bachelor's or Master's degree in electrical engineering or computer engineering from an ABET-accredited program or a baccalaureate or Master's degree in a closely related field from an accredited college or university, and must follow the application procedures specified below. Admission is competitive and the achievement of minimum requirements does not guarantee admission into the program.

# College of Engineering Department of Electrical and Computer Engineering

**Application Procedures.** Admission decisions are made each year in January. However, a prospective student may apply at any time and should follow the general graduate application procedure for degree-seeking students (see Applying as a Degree-Seeking student in this catalog). Admission to the program will be based on: 1) transcripts, 2) professional references, preferably three, 3) scores on the general test of the Graduate Record Examination (GRE), and 4) a two-page statement of teaching and research interests. Students whose native language is not English must submit a TOEFL score of 587 or higher for the written examination or 240 or higher for the computer-based examination. Test scores must be submitted directly to Boise State University (code R4018). Once the applicant's file is complete, it will be evaluated by the ECE Doctoral Program Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the Dean of the Graduate College. In order to ensure proper mentoring of all graduate students, a recommendation for admission will not be forwarded unless a faculty member in ECE is available to serve as the major advisor. The graduate dean will make the final admission decision and notify the applicant and the ECE Doctoral Program Committee.

# **Degree Requirements**

The program of study for the Doctor of Philosophy (Ph.D.) in Electrical and Computer Engineering will require at least 72 credits beyond the Bachelor's Degree or 48 credits beyond a Master's Degree, and adhere to all policies and procedures of the Graduate College. Courses applied to meet the 72-credit minimum requirement must be taken for a letter grade (A-F), except for EE 600 Assessment which is graded P (Pass) or F (Fail), and EE 693 Dissertation which is initially graded IP (In Progress) and later graded P or F depending on the outcome of the dissertation defense. Credit for coursework must be distributed as shown in the degree requirements table. For those entering the program with a Master's Degree, no more than 24 credits of previous graduate coursework can be applied as course credit. For a student entering with a Bachelor's degree, a maximum of 9 credits of post graduate coursework can be applied towards the Ph.D. program. All programs of study must be approved by the student's Supervisory Committee.

Doctor of Philosophy in Electrical and Computer Engineering	
Course Number and Title	Credits
Core Sequence	10
ENGR 500 Research Methods1	
At least 3 courses from the following	
EE 500 Advanced EM Theory3	
EE 510 Integrated Circuit Physical Design3	
EE 520 Advanced Device Design and Simulation3	
EE 530/COMPE 530 Digital Hardware Design3	
EE 550 Stochastic Signals and Systems3	
EE 560 Linear Systems3	

- continued -

Doctor of Philosophy in Electrical and Computer Engineering (continued)	
<b>Major Area of Concentration</b>	15
Emphasis (Minor) Area	9
<b>Electives (with supervisory committee approval)</b>	12
Comprehensive Examination  EE 600 Assessment - Ph.D. Comprehensive Exam (Pass/Fail)	26
TOTAL	72

# **Areas of Concentration and Emphasis**

15 credits of coursework are required in a Major Area of Concentration. This is to be 5xx and 6xx courses beyond the core sequence from one area chosen from the three ECE Areas: Computer Engineering, Circuits and Devices, or Signals and Systems. An additional 9 credits of coursework is required beyond the core sequence in an Emphasis or Minor Area also at the 5xx or 6xx level. This should be in one of the two remaining ECE Areas. The Areas are defined as follows: Computer Engineering (all COMPE courses and all EE courses with a middle digit of 3), Circuits and Devices (all EE courses with a middle digit of 1, 2, 4 or 8), and Signals and Systems (all EE courses with a middle digit of 5, 6 or 7).

# Ph.D. Examinations and Dissertation Requirements

Students admitted to the Ph.D. program will be required to pass a comprehensive exam and an oral dissertation proposal. As a culminating activity, the student will be required to present, and successfully defend, a doctoral research dissertation presenting significant research augmenting existing knowledge in the field of electrical and computer engineering.

# **Comprehensive Examination**

The comprehensive examination is given yearly in January. Generally, students entering the program with a Bachelor's degree take the comprehensive examination after the third semester of study. Students entering with a Master's degree take the written comprehensive examination, generally, the first time it is offered after their admission. This examination will test depth and breadth of knowledge over 3 of the 6 core courses: EE 510 (circuits), 520 (devices), 530 (digital), 550 (communications), 560 (systems), and 580 (electromagnetics). The results of the comprehensive examination can lead to three possible outcomes: 1) pass, 2) pass after completion of background coursework with grades of A or B to resolve deficiencies (note that this coursework will not count towards the Ph.D. degree credits required for graduation), or 3) failure. If the student fails

# College of Engineering Department of Electrical and Computer Engineering

the comprehensive examination they may take it again the following year. Failure a second time will result in administrative withdrawal from the doctoral program.

# **Dissertation Proposal**

The oral dissertation proposal is designed to assess the suitability of a Ph.D. student for research in a specific area and will focus on advanced coursework and research in the student's dissertation area. Satisfactory completion is required for the student to become a Ph.D. candidate. The dissertation proposal should be presented before, or at the beginning of, the student's Ph.D. research and within one year of satisfactory completion of the comprehensive examination. To initiate the dissertation proposal, the student must submit a research proposal for their doctoral dissertation to their Supervisory Committee, After the Supervisory Committee reviews the proposal they can give their approval to proceed with scheduling the oral presentation or they can ask the student to make changes to the proposal and to resubmit it. The oral dissertation presentation consists of the student presenting their proposed doctoral research and answering questions about the proposal, related background material and the material covered in all courses listed in their program of study. If a student fails the oral presentation, they may be allowed to reinitiate the dissertation proposal once with the approval of the Supervisory Committee. Students who fail a second time or do not receive approval to resubmit the proposal will be administratively withdrawn from the program.

# **Dissertation Requirements**

The dissertation must be the result of independent and original research by the student and must constitute a significant contribution to electrical and computer engineering knowledge equivalent to multiple peer-reviewed publications. The style and format of the dissertation are to conform to the standards of the Department of Electrical and Computer Engineering and the Graduate College.

## **Final Oral Examination**

A public defense of the dissertation is scheduled after the Supervisory Committee has reviewed a draft that is considered to be nearly a final version. The date of the defense is determined jointly by the Supervisory Committee and the student and must be consistent with any guidelines provided by the Graduate College. A Defense Committee is formed that consists of the following voting members: an appointed chair, the chair and members of the Supervisory Committee, and an external examiner. The chair of the Defense Committee is appointed by the Dean of the Graduate College and must be a member of the Graduate Faculty, but must not be the chair or a member of the Supervisory Committee. The external examiner is a faculty member from another university who is a recognized expert in the field of the dissertation research and is appointed to the Defense Committee by the Dean of the Graduate College. Attendance at the defense by the external examiner is not required, but a written evaluation of the dissertation and a pass or fail vote must be submitted by

the external examiner to the chair of the Defense Committee at least 3 weeks prior to the defense. The written evaluation provided by the external examiner is distributed to the other members of the Defense Committee at least 2 weeks before the defense. The chair of the Defense Committee conducts the defense according to the procedure established by the Doctoral Program Committee. A student who fails the defense may be permitted to try again, but failure a second time will result in dismissal from the program.

# Final Approval of the Dissertation

If the defense is completed with a result of pass, the Supervisory Committee prepares a statement describing final requirements such as additions or modifications to the dissertation and any additional requirements such as archival of data. When these requirements have been met to the satisfaction of the Supervisory Committee, the approval page of the dissertation is signed by the members of the Committee.

# **Graduate College Requirements**

The general requirements of the BSU Graduate College also govern the Doctor of Philosophy in Electrical and Computer Engineering degree program.

# Master of Science/ Master of Engineering

# **General Information**

The Department of Electrical and Computer Engineering offers four distinct computer engineering graduate degree programs. Two programs leading to the Master of Science in Computer Engineering (M.S. COMPE) and Master of Science in Electrical Engineering (M.S. EE) are thesis-based programs designed to prepare students for research and development and further study at the doctoral level. The programs leading to the Master of Engineering in Computer Engineering (M.Engr. COMPE) and Master of Engineering in Electrical Engineering (M.Engr. EE) are non-thesis programs with a focus on professional development.

# **Application and Admission Requirements**

**Admission Requirements.** An applicant must satisfy the minimum admission requirements of the Graduate College. In addition, the applicant must hold a baccalaureate degree in computer or electrical engineering from an ABET-accredited program or a baccalaureate degree in a closely related field, and must follow the application procedures specified below. Admission is competitive and the achievement of minimum requirements does not guarantee admission.

**Application Procedures.** A prospective student may apply at any time and should follow the general graduate application procedure for degree-seeking students (see Applying as a Degree-Seeking Student in this catalog). The applicant must

also arrange to have GRE General Test scores submitted by the Educational Testing Service (www.ets.org) directly to Boise State University (code R4018). Applicants holding a baccalaureate degree from the College of Engineering of Boise State University are not required to submit GRE scores. International applicants must submit a statement of purpose to the graduate program coordinator and arrange for three letters of recommendation to be submitted directly by the references to the Boise State University International Admissions Office. The statement of purpose should give the educational and professional background of the student and his or her motivation for graduate study including career goals. Once the applicant's file is complete, it will be evaluated by the Graduate Studies Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the Dean of the Graduate College. In order to ensure proper mentoring of all graduate students, a recommendation for regular or provisional admission will not be forwarded unless a faculty member of the Department of Electrical and Computer Engineering is available to serve as the major advisor. The graduate dean will make the final admission decision and notify the applicant and the Graduate Studies Committee.

# **Advisor and Supervisory Committee**

For a student admitted to the M.S. in Computer Engineering or the M.S. in Electrical Engineering program, the Graduate Studies Committee will initiate the assignment of a supervisory committee including a major advisor who serves as chair. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study. For a student admitted to the M.Engr. in Computer Engineering or the M.Engr. in Electrical Engineering, the Graduate Studies Committee will appoint a major advisor; student mentoring will be provided by the major advisor and the chair of the department.

**Special Rule on Transfer Credit.** The normal transfer credit policies of the Graduate College hold except that up to 15 transfer credits earned in combination at the University of Idaho and Idaho State University may be applied to either degree program (M.S.COMPE, M.S. EE, M.Engr. COMPE, or M.Engr. EE) with the approval of the supervisory committee.

# Master of Science in Computer Engineering

**Graduate Program Coordinator:** Scott Smith Micron Engineering Center, Room 202L Telephone 208 426-5743 e-mail: sfsmith@boisestate.edu

# **Degree Requirements**

Students must complete at least 30 graduate credits distributed as shown in the degree requirements table. A written thesis proposal with oral presentation to the supervisory committee is required prior to the completion of 15 credits applicable to the degree requirements. Work on the thesis can only be undertaken after approval of the thesis proposal by the supervisory committee. The thesis must constitute an original contribution to knowledge in computer engineering and must be successfully defended at a final oral examination. All work directly related to the thesis must be represented by at least 6 credits of COMPE 593.

Master of Science in Computer Engineering	
Course Number and Title	Credits
Graduate Courses Related to Computer Engineering Graduate courses in computer engineering; computer science, or electrical engineering; all courses to be selected with student input and approved by the supervisory committee.	15-24
Other Graduate Courses Graduate courses in computer engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-9
Thesis COMPE 593 Thesis (P/F)	6
TOTAL	30

# Master of Engineering in Computer Engineering

**Graduate Program Coordinator: Scott Smith** 

Micron Engineering Center, Room 202L Telephone 208 426-5743 e-mail: sfsmith@boisestate.edu

# **Degree Requirements**

Students must complete at least 31 graduate credits distributed as shown in the degree requirements table. A maximum of 3 credits of COMPE 696 Directed Research may be applied to meet the degree requirements. The comprehensive examination cannot be attempted prior to the last semester of the program. If the comprehensive examination is failed on the first attempt, then the student will be permitted a second attempt. Failure on the second attempt will result in dismissal from the program.

Master of Engineering in Computer Engineering	
Course Number and Title	Credits
Graduate Courses Related to Computer Engineering Graduate courses in computer engineering, computer science or electrical engineering; all courses to be selected with student input and approved by the supervisory committee.	18-30
Other Graduate Courses Graduate courses in computer engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-12
Comprehensive Examination COMPE 600 Assessment (P/F)	1
TOTAL	31

# Master of Science in Electrical Engineering

**Graduate Program Coordinator:** R. Jacob Baker Engineering Technology Building, Room 240 Telephone 208 426-5640 e-mail: jbaker@boisestate.edu

# **Degree Requirements**

Students must complete at least 30 graduate credits distributed as shown in the degree requirements table. A written thesis proposal with oral presentation to the supervisory committee is required prior to the completion of 15 credits applicable to the degree requirements. Work on the thesis can only be undertaken after approval of the thesis proposal by the supervisory committee. The thesis must constitute an original contribution to knowledge in electrical engineering and must

be successfully defended at a final oral examination. All work directly related to the thesis must be represented by at least 6 credits of EE 593.

Master of Science in Electrical Engineering	
Course Number and Title	Credits
Graduate EE Courses Graduate courses in electrical engineering; all courses to be selected with student input and approved by the supervisory committee.	15-24
Other Graduate Courses Graduate courses in electrical engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-9
<b>Thesis</b> EE 593 Thesis (P/F)	6
TOTAL	30

# Master of Engineering in Electrical Engineering

**Graduate Program Coordinator:** R. Jacob Baker Engineering Technology Building, Room 240 Telephone 208 426-5640 e-mail: jbaker@boisestate.edu

# **Degree Requirements**

Students must complete at least 31 graduate credits distributed as shown in the degree requirements table. A maximum of 3 credits of EE 696 Directed Research may be applied to meet the degree requirements. The comprehensive examination cannot be attempted prior to the last semester of the program. If the comprehensive examination is failed on the first attempt, then the student will be permitted a second attempt. Failure on the second attempt will result in dismissal from the program.

Master of Engineering in Electrical Engineering	
Course Number and Title	Credits
Graduate EE Courses Graduate courses in electrical engineering; all courses to be selected with student input and approved by the supervisory committee.	18-30
Other Graduate Courses Graduate courses in electrical engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-12
Comprehensive Examination EE 600 Assessment (P/F)	1
TOTAL	31

# College of Engineering Department of Electrical and Computer Engineering

# **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

#### **COMPE - COMPUTER ENGINEERING**

#### **COMPE 530 (EE 530) DIGITAL HARDWARE DESIGN**

(3-0-3) (F/S). Advanced topics in digital system design emphasizing the specification and design of complex digital hardware systems. Applications include design of synchronous state machines, asynchronous digital systems, and simple digital control circuits using hardware descriptive languages for field programmable gate arrays and complex programmable logic. May be taken for either COMPE or EE credit, not for both. PREREQ: EE 230 and either COMPSCI 117 or COMPSCI 125.

#### **COMPE 536 DIGITAL SYSTEMS RAPID PROTOTYPING**

(3-0-3)(S). Hardware description languages and hardware programming languages as a practical means to simulate/implement hybrid sequential and combinational systems. Actual design and implementation of sizeable digital design problems using the most up-to-date industry Computer Aided Design tools and Field-Programmable Gate Arrays. PREREQ: EE 430, EE 530 or PERM/INST.

COMPE 563 ASIC CHIP DESIGN (3-0-3) (F/S). Study of phases of ASIC development implementing standard, specialized and DSP applications. Course covers specifications and pre-design analysis mapping design units into architectures, evaluation of early design choices using CAD behavioral synthesis tools and design libraries, simulation, functional and timing verification issues, synthesis, design optimization, testing, and evaluation. The course supports individual and group projects to build ASICs implementing RISCs/DSPs/Superscalars/Fuzzy Logic based systems using standard ASIC design CAD tools. PREREQ: EE 430/530 and EE 432/532.

#### **COMPE 565 SYSTEMS FOR MULTIMEDIA PROCESSING**

(3-0-3)(F/S). Study of the general information theory and its applications in speech, imaging, and video processing. Focuses on the underlying structures and architectures for efficient algorithm implementation of video and speech processing systems. Current and future trends in processing, storing, coding, decoding, restoring, and transmission of multimedia information. PREREQ: EE 457/557 and EE 430/530 or COMPE 530, or PERM/INST.

**COMPE 635 HARDWARE IMPLEMENTATION OF DSP ALGORITHMS (3-0-3) (F/S).** Implementation methods of DSP algorithms in programmable logic environment. Hardware required for DSP implementation: architectures; arithmetic; digital filters including FIR, IIR and CIC. Course will also cover the efficient implementation of these algorithms and their impact on the

implementation of these algorithms and their impact on the implementation process and product costs. PREREQ: EE 454/554 and EE 430/530.

#### COMPE 661 DIGITAL SYSTEM TESTING AND TESTABLE

**DESIGN (3-0-3) (F/S).** In-depth theory and practice of fault analysis, test set generation, and design for testability of digital systems. Topics include system modeling; fault sources and types; fault simulation methods; automatic test pattern generation (ATPG) for combinatorial and sequential circuits; testability measures; design-for-testability; scan design; test compression methods; logic-level diagnosis; built-in self-testing (BIST); VLSI testing issues; processor and memory testing. Advance research issues, including topics on mixed signal testing are also discussed. PREREQ: EE 430/530 or COMPE 530, and EE 410/510.

#### **COMPE 662 ADVANCED COMPUTER ARCHITECTURE**

(3-0-3) (F/S). Study of up-to-date multiprocessor systems and parallel computing architectures. Covers basic architectural concepts and their performance evaluation, design principles of VLIW and superscalar architectures, multithread and data-flow computers, shared and distributed memory MIMDS, associative and neural architectures. Focuses on significant trends in building systems on a chip. PREREQ: EE 432/532.

#### **COMPE 664 LARGE SCALE DISTRIBUTED SYSTEMS**

**DESIGN (3-0-3) (F/S).** Fundamental principles, critical issues and latest techniques involved in the design of advanced computer controlled systems. Emphasizes using design requirements, hardware-software tradeoffs, redundancy, and testability to develop highly reliable systems. Topics include software-hardware tradeoffs, memory hierarchy design, calculation of availability, simulation, and communication requirements. Tools and techniques used to develop systems. Incorporates case studies of actual systems. A design project will be included and consists of designing a system driven by embedded computers. PREREQ: EE 432/532.

#### **EE - ELECTRICAL ENGINEERING**

**EE 500 ADVANCED EM THEORY (3-0-3) (F/S).** Advanced study of electromagnetic theory, its content, methods, and applications. Topics include boundary value problems, propagation in bounded structures, forces in quasi-static systems, scattering and diffraction. PREREQ: EE 390 or equivalent.

#### EE 510 INTEGRATED CIRCUIT PHYSICAL DESIGN

(3-0-3)(F/S). CMOS IC layout, modeling, parasitic capacitance extraction, SPICE simulation. Design of logic gates, counters, registers, memories, and photomasks. PREREQ: EE 322.

**EE 511 CMOS ANALOG IC DESIGN (3-0-3)(F/S).** Design, layout, and simulation of CMOS analog integrated circuits. Current mirrors, voltage and current references, amplifiers, and op-amps. PREREQ: EE 410/510.

**EE 513 RF IC DESIGN (2-1-3) (F/S).** Design and characterization of RF-CMOS integrated circuits, including RF transceivers, oscillators, design approaches for handheld wireless systems, low-power and low-noise circuit design techniques. PREREQ: EE 410/510 or EE 411/511.

### EE 518 MEMORY CIRCUIT DESIGN (3-0-3)(F/S)(Alternate

**years).** Transistor level design of memory circuits. Memory technologies including DRAM, Flash, MRAM, Glass-based, and SRAM will be discussed. The course will be a practical introduction to the design of memory circuits. PREREQ: EE 410/510.

**EE 520 ADVANCED DEVICE DESIGN AND SIMULATION** (3-0-3) (F/S). MOSFET device physics, scaling rules, analytical short channel models, hot-electron effects/modeling, LDD design, gate oxide breakdown and reliability, TDDB GIDL, channel mobility, electromigration, BSIM3 device modeling, 2-D TCAD device simulation. PREREQ: EE 323.

EE 520L ADVANCED DEVICE CHARACTERIZATION LAB (0-3-1)(F/S). Advanced measurement and parameter extraction

techniques for MOSFETs. High frequency CV, Quasistatic CV, Charge-Pumping measurements, PREREQ: EE 323.

**EE 521 ADVANCED TOPICS IN SEMICONDUCTOR DEVICES** (3-0-3)(F/S). Study of advanced semiconductor devices, particularly

# College of Engineering Department of Electrical and Computer Engineering

photonic, microwave, power, and high temperature/radiation resistant devices, including physics and applications. TCAD simulation and modeling of these devices will be included. PREREQ: EE 420/520.

EE 522 MICROWAVE SEMICONDUCTOR DEVICES (3-0-3)(F/S).

Covers the various aspects of design, fabrication, and characterization of ultra-low-power, RF-CMOS devices. Short-channel CMOS device physics, Parasitic CMOS device elements, Advanced small-signal bulk and SOI RF-CMOS device models, Ultra-low-power device & circuit design techniques, On-wafer microwave measurement and calibration techniques, and S-parameter device evaluation methods. PREREQ: EE 420/520.

#### EE 530 (COMPE 530) DIGITAL HARDWARE DESIGN

(3-0-3) (F/S). Advanced topics in digital system design emphasizing the specification and design of complex digital hardware systems. Applications include design of synchronous state machines, asynchronous digital systems, and simple digital control circuits using hardware descriptive languages for field programmable gate arrays and complex programmable logic. May be taken for COMPE or EE credit, but not both. PREREQ: EE 230 and either COMPSCI 117 or COMPSCI 125.

**EE 532 COMPUTER ARCHITECTURE (3-0-3) (F/S).** Structure of computer systems using processors, memories, input/output (I/O) devices as building blocks. Computer system instruction set design and implementation, including memory hierarchies, microprogramming, pipelining, and multiprocessors. Issues and tradeoffs and multi-variable optimization algorithms using linear and nonlinear programming methods to design problems in structures, machine components, and energy systems. PREREQ: EE 332 and COMPSCI 117 or COMPSCI 125.

#### EE 533 EMBEDDED AND PORTABLE COMPUTING SYSTEMS

(3-0-3) (F/S). Comparison of commercially available microcontrollers and their use in embedded communications and control applications. Power consumption, software development, interprocessor communication, and interfacing with sensors, actuators, and input/output devices. Use of microcontroller cores implemented in programmable logic devices as an alternative to hardwired microcontrollers. An embedded system project is designed and built. PREREQ: EE 332.

**EE 534 COMPUTER NETWORKS (3-0-3) (F/S).** Concepts of computer networks and architectures. Network topology, connectivity analysis, delay analysis, local access design. Physical layer, data link layer, higher layer protocols. Study of networks as distributed embedded systems. Routing, flow control, congestion control. Local area networks. PREREQ: EE 332.

#### EE 536 DIGITAL SYSTEMS RAPID PROTOTYPING

(3-0-3)(F/S). Use of hardware description languages and hardware programming languages as a practical means to simulate/implement hybrid sequential and combinational systems. Rapid prototyping techniques will be utilized during the implementation. This course focuses upon the actual design and implementation of sizeable digital design problems using the most up-to-date industry Computer Aided Design tools and Field-programmable Gate Arrays. PREREQ: EE 430/530.

**EE 540 INTRO TO INTEGRATED CIRCUIT AND MEMS PROCESSING (3-0-3)(F).** Fundamentals of integrated circuit and micro electromechanical systems (MEMS) fabrication technology;

semiconductor substrates; theory of unit processes such as diffusion, oxidation, ion implantation, rapid thermal processing, photolithography, wet etching and cleaning, dry etching, thin-film deposition; chemical mechanical polishing; process integration; metrology; statistical process control; TCAD. COREQ: EE 540L. PREREQ: EE 323 or PERM/INST.

**EE 540L INTRO TO INTEGRATED CIRCUIT AND MEMS PROCESSING LAB (0-3-1) (F).** Semiconductor cleanroom practices; heavy lab safety; students will fabricate and test simple structures in lab; application of TCAD to practical problems. COREQ: EE 540.

#### **EE 541 ADVANCED TOPICS IN SILICON TECHNOLOGY**

(3-0-3)(S). Advanced models for unit processes such as diffusion, oxidation, ion implantation, thin film deposition, etching, rapid thermal processing, chemical mechanical polishing, lithography. CMOS, bipolar, and micro electro mechanical systems (MEMS) process integration. Process and device modeling using TCAD. PREREQ: EE 440/540.

**EE 542 PHOTOLITHOGRAPHY (3-0-3) (F/S).** Principles of optics, diffraction, interference, superposition of waves, imaging systems, fundamentals of microlithography, resolution, contact and projection lithography, photoresist processing, metrology. Phase shift masks, anti-reflective coatings, deep-ultraviolet lithography, off-axis annular illumination. Use of TCAD lithography simulation software. COREQ: EE 442.

**EE 542L PHOTOLITHOGRAPHY LAB (0-3-1) (F/S).** Cleanroom lab experience accompany EE 542, utilizing a projection-printing wafer stepper, photoresist wafer track, SEM, and optical metrology equipment. Use of TCAD lithography simulation software. PREREQ: EE 342. COREQ: EE 542.

**EE 543 INTRODUCTION TO MEMS (3-0-3) (F/S).** Overview of MEMS; MEMS device physics including beam theory, electrostatic actuation, capacitive and piezoresistive sensing, thermal sensors and actuators; basic MEMS fabrication techniques; MEMS technologies: bulk micromachining, surface micromachining, and LIGA; MEMS design and modeling; case studies in various MEMS systems. PREREQ: EE 440/540, or PERM/INST.

#### EE 550 STOCHASTIC SIGNALS AND SYSTEMS (3-0-3)(S).

Deterministic signal representations and analysis, introduction to random processes and spectral analysis, correlation function and power spectral density of stationary processes, noise mechanisms, the Gaussian and Poisson processes. Markov processes, the analysis of linear and nonlinear systems with random inputs, stochastic signal representations, orthogonal expansions, the Karhunen-Loeve series, channel characterization, introduction to signal detection, linear mean-square filtering, the orthogonality principle, optimum Wiener and Kalmen filtering, modulation theory, and system analysis. PREREQ: EE 350 and MATH 360 or MATH 361 or equivalent.

**EE 551 COMMUNICATION SYSTEMS (3-0-3)(F).** Signals, noise, propagation and protocol in analog and digital communication systems. Bandwidth, Fourier transforms, signal to noise ratio and receiver noise figures. Introduction to modern wireless communication systems such as cellular, wireless data and satellite data systems. PREREQ: EE 350, and MATH 360 or MATH 361, or PERM/INST.

**EE 552 WIRELESS COMMUNICATIONS (3-0-3) (F/S).** Modern cellular communication systems, including propagation, handoff,

# College of Engineering Department of Electrical and Computer Engineering

noise, and interference studies. CDMA and other spread-spectrum systems. PREREQ: EE 451 or EE 551.

**EE 554 DIGITAL SIGNAL PROCESSING (3-0-3) (F/S).** Modern digital signal processing in engineering systems. Review of continuous-time and discrete-time signals, spectral analysis; design of FIR and IIR digital filters. Fast Fourier Transform, two-dimensional signals, realization structure of digital filters, and filter design. PREREQ: EE 350.

#### EE 556 PATTERN RECOGNITION (3-0-3)(S)(Alternate years).

Basic concepts of statistical and neural pattern recognition. Structure of pattern classification problems. Mathematics of statistical decision theory; multivariate probability functions, discriminant, parametric and nonparametric techniques. Bayesian and maximum likelihood estimation, feature selection, dimensionality reduction, neural network recognition and clustering. PREREQ: COMPSCI 117 or COMPSCI 125. and either MATH 360 or MATH 361.

**EE 557 DIGITAL IMAGE PROCESSING (3-0-3)(F).** Pictures and their computer representation. Image digitization, transformation, and prediction methods. Digital enhancement techniques, histogram equalization, restoration, filtering and edge detection. Color models and transformations. Wavelets and morphological algorithms. PREREQ: EE 350 and COMPSCI 125, or PERM/INST.

**EE 560 LINEAR SYSTEMS (3-0-3)(F/S).** Methods of analysis for continuous and discrete-time linear systems. Classical solution of dynamic equations, transforms and matrices are reviewed. Emphasis is on the concept of state space. Linear spaces, concept of state, modes, controllability, observability, canonical forms, state transition matrices and irreducible realizations. State variable feedback, compensation and decoupling. PREREQ: EE 360, ME 360 or graduate standing.

**EE 561 (ME 561) CONTROL SYSTEMS (3-0-3)(S).** Time and frequency domain analysis and design of feedback systems using classical and state space methods. Observability, controllability, pole placement, observers, and discrete time. Multivariable and optimal methods are introduced. May be taken for either EE or ME credit, but not both. PREREQ: EE 360 or ME 360.

#### EE 564 ROBOTICS AND AUTOMATED SYSTEMS (3-0-3)(F/S).

An introduction to robotics with emphasis on automated systems applications. Topics include: basis components of robotic systems; selection of coordinate frames; homogeneous transformations; solutions to kinematic equations; velocity and force/torque relations; manipulator dynamics; digital simulation of manipulator motion; motion planning; actuators of robots; sensors of robots; obstacle avoidance; and control design. PREREQ: EE 360, ME 360 or PERM/INST.

**EE 570 ELECTRIC MACHINES (3-0-3) (S).** Magnetic materials and magnetic circuits, Transformers. Principles of electromechanical energy conversion, energy and coenergy concepts, forces and torques of electromagnetic origin. Introduction to rotating machines including synchronous machines and induction machines. PREREQ: EE 225 and EE 390.

**EE 571 ELECTRIC MOTOR DRIVES (3-0-3)(F)(Offered even-numbered years).** Induction machines and drives, direct-current and permanent-magnet machines and drives, synchronous machines and drives. Control of single-phase and special machines. PREREQ: EE 360 or ME 360 and EE 470/570, or PERM/INST.

**EE 572 POWER ELECTRONICS (3-0-3)(F).** Power electronic switches, diode and controlled rectifiers, AC-AC phase control, DC-DC converters, inverters, introduction to electric drives and power quality fundamentals. PREREQ: EE 225.

**EE 573 POWER SYSTEM ANALYSIS (3-0-3) (S).** Three-phase AC systems, generators, transformers, transmission lines, one-line diagrams, per-unit system, network calculations, power-flow studies, power-flow control and regulation. PREREQ: EE 225, EE 390.

**EE 614 ADVANCED ANALOG IC DESIGN (3-0-3) (F/S).** Advanced analog design considerations including: noise, common-mode feedback, high-speed, design for signal processing, filter design. PREREQ: EE 411/511.

**EE 615 CMOS MIXED-SIGNAL IC DESIGN (3-0-3) (F/S).** Design of Nyquist-rate A/D and D/A converters, sigma-delta data converters, and custom digital filters. PREREQ: EE 411/511.

#### EE 629 QUANTUM EFFECTS IN MOS DEVICES (3-0-3)

**(F/S).** Computational methods will be used to examine quantum mechanical effects in MOS devices. Effects such as tunneling, triangular quantum well effects and poly-Si depletion will be examined. PREREQ: EE 323 and PHYS 310.

#### EE 636 HARDWARE/SOFTWARE CODESIGN (3-0-3)(F/S).

Covers system level design of embedded systems with a top-down design approach. The students will learn various design steps starting from system specifications to hardware/software implementation and will experience process optimization while considering various design decisions. Students will gain design experience with project/case studies using contemporary high-level methods and tools. PREREQ: EE 436/536.

## EE 637 SYSTEM ON A PROGRAMMABLE CHIP (3-0-3)(F/S).

Covers the design of embedded system within a single integrated circuit. Such a system consists of multiple intellectual property cores interconnected by common infrastructure. This course will also explore the challenges to design and test a complete system on chip. Exercises/projects will be given to design, synthesize, and simulate using modern computer aided design (CAD) tools. Resulting systems will be targeted in reprogrammable hardware. PREREQ: EE 436/536.

#### EE 640 ADVANCED MICROFABRICATION (3-0-3) (F/S).

Advanced micro/nano-fabrication techniques; advanced process modeling and simulation of thermal processes, ion implantation, thin-film deposition, dry etching, CMP, and lithography; CMOS/device integration; process variability and control; metrology; parametric test. PREREQ: EE 440/540.

**EE 646 FRONTIERS OF IC PROCESSING (3-0-3) (F/S).** Recent and proposed developments in semiconductor process technology Course modules: Lithography, Deposition, Doping and Etch processes. PREREQ: EE 440/540.

## EE 651 INFORMATION AND CODING THEORY (3-0-3)(F/S).

Information measures, characterization of information sources, coding for discrete sources, the noiseless coding theorems, construction of Huffman codes. Discrete channel characterization, channel capacity, noisy-channel coding theorems, reliability exponents. Various error-control coding and decoding techniques, including block and convolutional codes. Introduction to waveform channels and rate distortion theory. PREREQ: EE 550.

# **EE 652 ADVANCED COMMUNICATIONS THEORY** (3-0-3)(F/S). Principles of modern communication systems. Elements

# College of Engineering Department of Instructional & Performance Technology

of information theory, source encoding, efficient signaling with coded waveforms, convolutional codes; carrier recovery and synchronization under AGN channel; adaptive equalization; maximum likelihood estimation, Viterbi algorithm. PREREQ: EE 450/550.

## EE 657 ADVANCED DIGITAL IMAGE PROCESSING (3-0-3)

**(F/S).** Advanced course in digital image processing. Topics will include image storage formats, image compression techniques, acquisition system calibration, geometric transformations, edge detection and image segmentation, adaptive techniques, video, halftoning, 3D images and topics of specific student interest. PREREQ: EE 557 or equivalent.

**EE 661 NONLINEAR SYSTEMS (3-0-3) (F/S).** Phenomena peculiar to nonlinear systems. Linearization, iteration and perturbation procedures. Describing function stability analysis. Phase plane methods. Relaxation oscillations and limit cycles. Stability analysis by Lyapunov's method. Popov's theorem. Adaptive control systems. Sensitivity analysis. PREREQ: EE 560.

#### EE 666 MULTIVARIABLE CONTROL SYSTEMS (3-0-3)(S).

Linearization of state variable models. Time response of linear time invariant systems. Controllability, observability, and stability of linear systems. Pole placement by state and output feedback. Observers. Linear quadratic regulator control. PREREQ: EE 560.

**EE 670 POWER SYSTEM DYNAMICS (3-0-3) (F/S).** Dynamic modeling of major power system components and their controls for short-term simulation and stability evaluation of multimachine power systems. Subsynchronous resonance, transient and steady-state stability analysis. Stabilization of electromechanical oscillations via excitation control. Methods of coherency identification and dynamic equivalencing. Voltage stability and control. PREREQ: EE 470/570 and EE 473/573.

#### EE 674 POWER SYSTEM CONTROL (3-0-3)(F/S)(Offered on

**demand).** Faulted power system operation, symmetrical components, power system protection, transient stability, economic dispatch, automatic generation control, voltage and reactive power control. PREREQ: EE 473/573.

**EE 681 MMIC DESIGN (3-0-3) (F/S).** Technology, design and analysis of monolithic microwave integrated circuits; passive and active microwave circuit elements; high frequency substrates, individual design projects utilize modern computer-aided design software. PREREQ: EE 500.

**EE 682 QUANTUM ELECTRONICS (3-0-3) (F/S).** Quantized electromagnetic field, interaction of radiation and atomic systems, laser oscillation, semiconductor lasers, parametric amplification, phase conjugate optics. PREREQ: PHYS 412/512.

# Department of Instructional & Performance Technology

**Chair: Donald Stepich** 

Engineering and Technology Building, Room 327 Telephone 208 426-1312 FAX 208 426-1970 http://ipt.boisestate.edu e-mail: lburnett@boisestate.edu

**Full Graduate Faculty:** Yonnie Chyung, David Cox, Anthony Marker, Donald Stepich, Donald Winiecki

Adjunct Graduate Faculty: Gary Dickelman, Daniel Eastmond, Robert Erickson, Diane Gayeski, Linda Huglin, Patricia Johnson, Linda Lohr, Timothy Newby, Terrell Perry, David Ripley, Penelope Schweibert, Mary Norris Thomas

# Master of Science in Instructional & Performance Technology

**Graduate Program Coordinator:** Donald Stepich Engineering and Technology Building, Room 327 Telephone 208 426-1312 FAX 208 426-1970 http://ipt.boisestate.edu e-mail: lburnett@boisestate.edu

# **General Information**

The Master of Science degree in Instructional & Performance Technology (IPT) is intended to prepare students for careers in the areas of instructional design, training and development, training management, human resources, organizational redesign, and job performance improvement. The IPT program equips students with skills needed to identify, analyze, and solve a variety of human and organizational performance problems in settings such as industry, business, the military, education, and private consulting.

The M.S. program emphasizes scholarly understanding of research and theory as they apply to instructional technology and performance technology. Students are also exposed to a broad range of practical skills and knowledge in instructional systems design, program development, computer-based training, consulting, media selection/utilization, instructional use of computers, and program evaluation. In addition, students learn how to identify and assess needs and how to appraise, select, and design proposed training programs and delivery systems. With respect to training and instruction, the emphasis is not so much on how to personally be a good

# College of Engineering Department of Instructional & Performance Technology

presenter or instructor as it is on how to *design* effective programs that can be "packaged" for implementation by other individuals.

Human performance improvement in organizations requires more than education or training alone. In this program, students explore the many factors that affect job performance, such as knowledge and skills, job expectations, task design, human factors, ergonomic and environmental factors, incentive systems, feedback systems, tools, job aids, and resources. In the IPT program, students learn how to think strategically and design interventions that will address all the needed factors (in addition to training or instruction) to achieve the desired results. They learn how to define and clarify those results and how to integrate instruction with other factors that impact human performance.

# **On-Campus and Online Course Options**

In addition to the traditional on-campus mode of delivering courses, the IPT Department has been in the forefront of technology-delivered education by offering its internationally recognized degree online since 1989. This option constitutes an entirely nonresident course of study for a complete M.S. in IPT. The on-campus and online options are fully accredited by the Northwest Commission on Colleges and Universities (NWCCU).

Online classes are conducted primarily through asynchronous computer conferencing via the Web or Lotus Notes client software. Courses taught in this medium enable students to view the questions and comments of the instructor and students in a 'threaded' discussion that mimics the natural flow of a live classroom. This medium also promotes a high level of interaction between instructor and students and among class members.

Access to online courses makes it possible for students anywhere in the world who have Internet access to obtain a highly useful and versatile Master's degree. These courses have been especially helpful to full-time professionals who need flexibility in time and/or location. Evaluations show that students in the online courses are quite enthusiastic about the rigor and value of the academic experience they receive. Many have reported that these courses have substantially increased their capability and credibility in the workplace. Online courses also make it possible for students who relocate before finishing the on-campus program to complete the IPT degree from their new location.

The online option uses the same admission standards and required courses as the on-campus option. However, the fees are higher for the online courses than for on-campus courses, special equipment is required, and course offerings are scheduled through Extended Studies. The reason for the additional cost is that the online courses are entirely self-supporting and are not subsidized by state taxes. However, a discounted rate is available for Idaho residents and active military personnel. Online courses may follow a schedule different from the one in the course descriptions which follow. Schedules for online courses are available in an official

release from Extended Studies and on the IPT website at http://ipt.boisestate.edu.

# **Graduate Assistantships**

A limited number of graduate assistantships are available for full-time, on-campus students. Graduate assistantships include a stipend and a waiver of fees. Graduate assistantship appointments require approximately 20 hours service per week to the University. The appointment is made for a period of one academic year. Appointments are renewed at the discretion of the IPT Department. Graduate assistants must have been fully admitted into the IPT degree program, must enroll for a minimum of nine credit hours each semester, and must meet any other requirements as set forth by the Graduate College. Applications are available in the IPT office, the Graduate College office, or online. The application deadline is March 1 for the next academic year.

# **Application and Admission Requirements**

Admission requirements will be based on the following information:

- 1. Documented evidence of an earned baccalaureate degree from an accredited institution.
- 2. A cumulative GPA of 3.0 for all undergraduate credits, or a 3.0 GPA for the last 60 credits of undergraduate course work. All course work must be verified by official transcripts. If a person fails to meet the GPA requirement, that person may submit a petition to the IPT Program Committee.
- 3. Appropriateness of background experience and of the fit between the prospective student's career goals and what the IPT program offers. (Applicants must submit a resume and a one-to-two page essay of intent to help determine satisfaction of this requirement.)

## **Admission Procedures**

- Obtain a graduate application and submit it with a \$55
  application fee to the Graduate Admissions Office. Note:
  International students should submit the International
  Student Graduate Application, a \$55 application fee, and
  follow the admission requirements listed in the front of
  this catalog.
- Have the Registrar of ALL institutions attended send official transcripts directly to the Graduate Admissions office. PLEASE DO NOT HAVE TRANSCRIPTS SENT PRIOR TO SUBMITTING YOUR GRADUATE ADMISSION APPLICATION.
- 3. Submit to the IPT office a resume of personal qualifications and work experience and a one-to-two page essay of intent describing why you want to pursue this degree and how it will contribute to your career goals.
- 4. If you do not meet the GPA requirement, you may submit a petition to the IPT Program Committee asking that the requirement be waived.

# College of Engineering Department of Instructional & Performance Technology

- Students intending to take online courses must also complete the IPT Equipment Availability Checklist and have it verified by the IPT Systems Administrator. (Go to http://ipt.boisestate.edu/eac.htm.)
- 6. After Steps 1 through 5 are completed, your records will be evaluated and forwarded to the IPT Program Committee for a decision on your admission to the program. As soon as this process is completed, you will receive official notification as to the decision and, if you are admitted, who your faculty advisor will be.

# **Timing of Application and Admission**

It is extremely important that you complete the above admissions procedures and are officially admitted to the program before you begin taking the courses you hope to apply toward the M.S. degree. Please note that permission from the Graduate Admissions Office to take graduate courses does NOT constitute admission to the IPT program. If, at your own discretion, you enroll in a Boise State graduate course before you are admitted to the M.S. program in IPT, you are urged to complete the admissions procedures before the end of that course. If you are accepted before the semester closes, the credit you receive at the end of the semester is eligible for application toward the degree.

# **Degree Requirements**

Master of Science in Instructional & Performance Technology	
Course Number and Title	Credits
Core Requirements:	24
IPT 529 Needs Assessment4	
IPT 530 Evaluation Methodology4	
IPT 535 Learning Theory for Instructional	
Designers4	
IPT 536 Foundations of Instructional and	
Performance Technology4	
IPT 537 Instructional Design4	
IPT 560 Human Performance Technology 4	
Thesis Option:	12
Electives6	
IPT 593 Thesis (Oral defense required) 6	
(At least one semester of residence on	
campus required.)	
OR	
Project Option:	
Electives6	
IPT 591 Project (Oral defense required)6	
(At least one semester of residence on	
campus required.)	
OR	

— continued —

Master of Science in Instructional & Performance Technology (continued)	ology
Portfolio Option:	
Electives (Oral defense required)12	
OR	
Nonthesis Option:	
Electives (Comprehensive examination	
required)12	
TOTAL	36

### **Academic Scholarship Requirement**

Students are expected to meet the Graduate College academic requirements. In addition, grades below B in required or elective courses cannot be used to meet the requirements of the M.S. degree in IPT. A student who earns a grade of C or lower in a required course will be asked by the IPT Program Committee to retake the course or to take another course deemed to be equivalent in purpose. With special permission of the Program Committee, a student may apply 3 ELECTIVE credits of C toward the degree.

#### **Residency Requirement for Project or Thesis Option**

In order to complete the project or thesis option, students are required to be in residence on campus for at least one semester during which they are enrolled in IPT 591 Project or IPT 593 Thesis. (Petitions for exceptions should be made to the IPT Program Committee.) Consequently, students in the online IPT program are invited to come to campus to participate in the project/thesis option, or they may pursue the portfolio or nonthesis option with no obligation to be on campus at any time.

# **Course Offerings**

# IPT - INSTRUCTIONAL/PERFORMANCE TECHNOLOGY IPT 510 COLLABORATIVE ONLINE COMMUNICATIONS AND

**LEARNING (1-0-1) (F, S, SU).** Students will learn technologies that help develop collaborative online learning communities and learn technical skills that help them become successful online learners. Students will examine synchronous and asynchronous online communication tools to facilitate small and large group communications, and conduct research using online library systems on the web.

#### IPT 520 TRAINING VIDEO PRODUCTION (3-0-3) (Demand).

Focuses on the study of video as a tool in training and instruction. Hands-on projects help students understand video, its production process, its capabilities, its limitations, its ability to complement other media, and its demands on project resource. PREREQ: PERM/INST.

### IPT 523 AUTHORING SKILLS FOR INSTRUCTIONAL

**MULTIMEDIA** (3-0-3) (F). Students learn how to use basic software tools that are used by professionals in authoring computer-based instruction. This course focuses on the mechanics of multimedia authoring, demonstrating how advanced authoring can be used to enhance presentation programs by adding CBT elements, including testing, feedback, and interactive exercises. Topics covered will include an overview of programming code and multimedia integration.

#### **IPT 524 INTERNET APPLICATIONS FOR IPT**

**PROFESSIONALS (3-0-3) (SU).** An examination of the Internet and World Wide Web for instructional and performance technologists. Through the application of practical and relevant activities, students will learn to use electronic communications effectively, search for and access electronic resources, prepare electronic documents for the Web, and examine critical issues related to the Internet, such as

# College of Engineering Department of Instructional & Performance Technology

copyright, censorship, design and usability issues, evaluation of online information, and instructional applications.

#### IPT 525 E-LEARNING PRINCIPLES AND PRACTICES

(3-0-3)(F). Students will explore theoretical foundations for implementing online instruction and knowledge management interventions. They will study e-learning standards, reusable learning objects, shareable content objects, and learning (content) management systems. Students will discuss issues in conducting e-learning readiness assessment. They will also experience designing online courses using a course management system. PREREQ: IPT 537.

**IPT 529 NEEDS ASSESSMENT (4-0-4).** Through analysis of case studies, guided practice, field work, and other methods, students learn to use tools, data, and systematic methods to identify and assess current or future performance problems and their causes, and help decision makers target critical problems with feasible solutions. Students will conduct an authentic project. PREREQ: IPT 536

**IPT 530 EVALUATION METHODOLOGY** (4-0-4)(S). Students learn how to use methods of inquiry and analysis to evaluate the effectiveness of instructional or performance improvement programs. They explore various models of both formative and summative evaluations and ways to implement the results of such research efforts. Students will gain hands-on experience, actually conducting one or more evaluations.

### IPT 531 OVERVIEW OF RESEARCH DESIGN,

**MEASUREMENT, AND STATISTICS (3-0-3)(S).** Students receive a foundation in the relationships among research design, measurement, and statistics. Topics covered include scaling, reliability, validity, norm-vs. criterion-referenced testing, forms of distributions, measures of central tendency & variability, basic quantitative research designs and their appropriate statistical tests, and methods for critiquing quantitative research.

#### IPT 532 ETHNOGRAPHIC RESEARCH IN ORGANIZATIONS

(3-0-3) (F). Ethnography is an approach to learning about the social and cultural life of communities, organizations, institutions and other settings that discovers how the activities of people in those settings contribute to the creation of society and culture. Students receive a foundation in philosophical perspectives and methods supporting ethnographic research, learn when to conduct ethnographic research, and explore strategies for presenting and critiquing ethnographic research. They will also be provided with an opportunity to implement ethnographic research in organizational settings. PREREQ: IPT 536.

#### IPT 535 LEARNING THEORY FOR INSTRUCTIONAL

**DESIGNERS (4-0-4)(S).** Students discover how theories of human learning can be applied to the instructional process in order to make it more effective and efficient. They explore conditions both internal and external to the learner, which are known to affect learning outcomes. They also explore alternative methods, strategies, and technologies that increase instructional effectiveness in various learning situations and circumstances. They conduct a project to apply these principles to an authentic situation of instructional need.

# IPT 536 FOUNDATIONS OF INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY (4-0-4)(F). Foundational

knowledge to become competent practitioners in the field of instructional and performance technology. Historical foundations, prominent figures and important events that contributed to its development. Apply principles and models of instructional performance improvement to real or realistic organizational settings.

**IPT 537 INSTRUCTIONAL DESIGN (4-0-4)(F).** This course gives an overview of several models for instructional systems design and examines the processes involved in designing effective instructional interventions. Working with a real client and instructional need, students conduct a full-scale instructional design project in phases over the duration of the course. PREREQ: IPT 536 and IPT 535, or PERM/INST.

**IPT 538 INSTRUCTIONAL STRATEGIES (3-0-3) (F).** Instructional strategies constitute the "recipes," templates, or prescriptive patterns that guide, simplify, and "automate" the voluminous task of actually designing the learning activities called for by the front-end analysis in an instructional design project. Students will identify, clarify, justify, and experiment with several types of instructional strategies. Given a variety of instructional needs, students will practice selecting and implementing appropriate strategies. PREREQ: IPT 537.

# IPT 540 APPLICATIONS OF LEARNING STYLES IN INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY

(3-0-3)(F). The behavioral characteristics exhibited by different learning/cognitive styles, modalities, personality types, multiple intelligences, and emotional intelligences will be explored. Related preferences for different learning environments, media, instructional and testing methods will be examined, as well as the utility of these constructs for addressing performance problems in the workplace.

# IPT 550 DELIVERY TECHNOLOGY IN INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY (3-0-3)(S). Students

investigate the applications of various types of media and technology to instruction and performance interventions. In the culminating class project, students analyze and evaluate authentic instructional or performance interventions by critically applying analytic and design principles, theories and models. PREREQ: IPT 536.

## IPT 551 DESIGNING COMPUTER-BASED TRAINING

(3-0-3)(F). Students learn to apply the principles of instructional design, instructional message design and human-computer interface design within the context of Computer-Based Training (CBT). PREREQ: IPT 537.

### IPT 560 HUMAN PERFORMANCE TECHNOLOGY (4-0-4)(F).

Students examine the foundations, process models, interventions, professional practice issues, and future trends of the field of human performance technology (HPT) which aims to improve performance in the work place or in learning situations. In a hands-on project, students practice applying HPT to design effective performance interventions. PREREQ: IPT 536 or PERM/INST.

#### IPT 561 HUMAN FACTORS ENGINEERING (3-0-3) (Demand).

This course provides a basic introduction to Human Factors Engineering to design of performance environments (including human-machine interfaces). Students learn principles of work and learning system design that help to improve human performance.

# IPT 563 JOB PERFORMANCE AIDS & ELECTRONIC PERFORMANCE SUPPORT SYSTEMS (3-0-3)(S). Job

Performance Aids (JPAs) and Electronic Performance Support Systems (EPSSs) are non-instructional devices that are used to help human workers overcome cognitive limits and improve job related performance. This course will provide students with a review of research and methods related to prescribing, designing, implementing, evaluating and revising JPAs and EPSSs. Students in this class will analyze a human performance problem; then prototype,

# College of Engineering Department of Instructional & Performance Technology

evaluate and propose revisions on JPAs and EPSSs for the solution of that problem. PREREQ: IPT 536 or PERM/INST.

IPT 564 MOTIVATION IN INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY (3-0-3) (Demand). An in-depth study of motivation as one of the fundamental variables underlying human learning, behavior, and performance improvement. Students examine theories of motivation and apply the principles derived therefrom to produce strategies that motivate learning and improved performance.

**IPT 571 MANAGEMENT CONCERNS FOR PERFORMANCE TECHNOLOGISTS (3-0-3) (Demand).** This course provides students with an exposure to current topics in management which are related to understanding performance systems.

**IPT 572 LINKING PERFORMANCE TO CRITICAL BUSINESS ISSUES (3-0-3) (Demand).** Review, analysis, and discussion of cases based on actual projects. Development of action plans that include effective techniques for transforming requests for training solutions into value-adding work. PREREQ: IPT 536 or PERM/INST.

## **IPT 583 SELECTED TOPICS IN INSTRUCTIONAL**

**TECHNOLOGY (3-0-3) (Demand).** Students explore issues and topics of current interest. Content will be revised continually to reflect current developments in the field of instructional and performance technology. PREREQ: IPT 536 or PERM/INST.

**IPT 584 SELECTED TOPICS: APPLICATIONS OF WEB TECHNOLOGIES (Variable) (F/S/SU).** Basic and intermediate design of instructional and performance interventions using selected web technologies.

**IPT 585 SELECTED TOPICS: PERFORMANCE CONSULTING (3-0-3)(Demand).** Examine the major theoretical foundations, principles and practices of performance consulting. PREREQ: IPT 536 or PERM/INST.

Refer to the "University-wide Graduate Course" section in this catalog for additional course offerings.

# Department of Materials Science and Engineering

**Chair: Amy Moll** 

Engineering and Technology Building, Room 240 Telephone 208 426-5788 FAX 208 426-2470 e-mail: bgee2@boisestate.edu

Engineering Graduate Faculty: Darryl Butt, Kris Campbell, Sean M. Donovan, Megan Frary, Janet Hampikian, William Knowlton, Amy Moll, Peter Mullner Physics Graduate Faculty: Charles Hanna, Alex Punnoose Chemistry Graduate Faculty: Jeff Peloquin, Dale Russell,

Biology Graduate Faculty: Julia Thom Oxford

# **Graduate Degrees Offered**

- Master of Science in Materials Science and Engineering
- Master of Engineering in Materials Science and Engineering

## **General Information**

Martin Schimpf, Don Warner

The Department of Materials Science and Engineering offers two distinct graduate degree programs. The program leading to the Master of Science in Materials Science and Engineering (M.S. MSE) is a thesis-based program designed to prepare students for research and development and further study at the doctoral level. The program leading to the Master of Engineering in Materials Science and Engineering (M.Engr. MSE) is a non-thesis program with a focus on professional development. Both programs are interdisciplinary and involve faculty members from the College of Engineering and the College of Arts and Sciences with expertise in electrical engineering, mechanical engineering, physics, chemistry, and biology.

(See Section on Interdisciplinary Programs for program descriptions and course offerings.)

# College of Engineering Department of Mechanical Engineering

# Department of Mechanical Engineering

Chair: John Gardner

Engineering Technology Building, Room 201 Telephone 208 426-5702 FAX 208 426-4800

e-mail: jgardner@boisestate.edu

**Full Graduate Faculty:** Paul Dawson, Rudy Eggert, James Ferguson, John Gardner, Joe Guarino, Donald Parks, Steven Tennyson

**Associate Graduate Faculty:** Michelle Sabick **Adjunct Graduate Faculty:** Anthony Paris

# **Graduate Degrees Offered**

- Master of Science in Mechanical Engineering
- Master of Engineering in Mechanical Engineering

# **General Information**

The Department of Mechanical Engineering offers two distinct engineering graduate degree programs. The program leading to the Master of Science in Mechanical Engineering (M.S. ME) is a thesis-based program designed to prepare students for research and development and further study at the doctoral level. The program leading to the Master of Engineering in Mechanical Engineering (M.Engr. ME) is a non-thesis program with a focus on professional development.

# **Application and Admission Requirements**

Admission Requirements. An applicant must satisfy the minimum admission requirements of the Graduate College. In addition, the applicant must hold a baccalaureate degree in mechanical engineering from an ABET-accredited program or a baccalaureate degree in a closely related field, and must follow the application procedures specified below. Admission is competitive and the achievement of minimum requirements does not guarantee admission.

Application Procedures. A prospective student may apply at any time and should follow the general graduate application procedure for degree-seeking students (see Applying as a Degree-Seeking Student in this catalog). The applicant must also (1) submit a statement of purpose to the mechanical engineering graduate program coordinator, (2) have three letters of recommendation submitted directly by references to the graduate program coordinator, and (3) arrange to have GRE General Test scores submitted by the Educational

Testing Service (www.ets.org) directly to Boise State University (code R4018). The statement of purpose should give the educational and professional background of the student and his or her motivation for graduate study including career goals. Applicants holding a baccalaureate degree from the College of Engineering of Boise State University are not required to submit GRE scores. Once the applicant's file is complete, it will be evaluated by the Mechanical Engineering Graduate Studies Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the Dean of the Graduate College. In order to ensure proper mentoring of all graduate students, a recommendation for regular or provisional admission will not be forwarded unless a faculty member of the Department of Mechanical Engineering is available to serve as the major advisor. The graduate dean will make the final admission decision and notify the applicant and the Mechanical Engineering Graduate Studies Committee.

# **Advisor and Supervisory Committee**

For a student admitted to the M.S. ME program, the Mechanical Engineering Graduate Studies Committee will initiate the assignment of a supervisory committee including a major advisor who serves as chair. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study. For a student admitted to the M.Engr. ME program, the Mechanical Engineering Graduate Studies Committee will appoint a major advisor; student mentoring will be provided by the major advisor and the chair of the department.

# Master of Science in Mechanical Engineering

**Graduate Program Coordinator:** Rudy Eggert Engineering Technology Building, Room 201 Telephone 208 426-4078 e-mail: reggert@boisestate.edu

# **Degree Requirements**

Students must complete at least 30 graduate credits distributed as shown in the degree requirements table. A written thesis proposal with oral presentation to the supervisory committee is required prior to the completion of 15 credits applicable to the degree requirements. Work on the thesis can only be undertaken after approval of the thesis proposal by the supervisory committee. The thesis must constitute an original contribution to knowledge in mechanical engineering and must be successfully defended at a final oral examination. All work directly related to the thesis must be represented by at least 6 credits of ME 593.

# College of Engineering Department of Mechanical Engineering

Master of Science in Mechanical Engineering	
Course Number and Title	Credits
Graduate ME Courses Graduate courses in mechanical engineering; all courses to be selected with student input and approved by the supervisory committee.	15-24
Other Graduate Courses Graduate courses in mechanical engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-9
Thesis ME 593 Thesis (P/F)	6
TOTAL	30

# Master of Engineering in Mechanical Engineering

**Graduate Program Coordinator:** Rudy Eggert Engineering Technology Building, Room 201 Telephone 208 426-4078 e-mail: reggert@boisestate.edu

# **Degree Requirements**

Students must complete at least 31 graduate credits distributed as shown in the degree requirements table. A maximum of 3 credits of ME 596 Independent Study may be applied to meet the degree requirements. The comprehensive examination cannot be attempted prior to the last semester of the program. If the comprehensive examination is failed on the first attempt, then the student will be permitted a second attempt. Failure on the second attempt will result in dismissal from the program.

Master of Engineering in Mechanical Engineering	
Course Number and Title	Credits
Graduate ME Courses Graduate courses in mechanical engineering; all courses to be selected with student input and approved by the supervisory committee.	18-30
Other Graduate Courses Graduate courses in mechanical engineering or a related field; all courses to be selected with student input and approved by the supervisory committee.	0-12
Comprehensive Examination ME 600 Assessment (P/F)	1
TOTAL	31

**Special Rule on Transfer Credit.** The normal transfer credit policies of the Graduate College hold except that up to 15 transfer credits earned in combination at the University of Idaho and Idaho State University may be applied to either degree program (M.S. ME or M.Engr. ME) with the approval of the supervisory committee.

# **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

**ME - MECHANICAL ENGINEERING** 

#### ME 402G APPLIED NUMERICAL METHODS FOR ENGINEERS

**(3-0-3) (F/S).** Approximate and numerical methods for solving systems of linear and nonlinear equations, and ordinary and partial differential equations with engineering applications. Finite difference and finite element techniques; roots, curve fitting and numerical integration. PREREQ: MATH 333 and structured programming.

**ME 420G THERMODYNAMICS II (3-0-3) (F/S).** Advanced topics and applications of thermodynamics include power and refrigeration cycles, combustion, mixed gas properties, chemical equilibrium, and psychometric applications. PREREQ: ENGR 320 and MATH 275.

**ME 472G VIBRATIONS (3-0-3) (F/S).** Theory and methods for analysis of vibrating physical systems. Natural frequencies, mode shapes, damping, forced vibrations, and frequency-response functions are analyzed by using computer simulation. PREREQ: ENGR 220 and MATH 333.

**ME 474G CONTROLS (2-2-3) (F/S).** Theory and application of analysis and control of physical systems using classical and modern computer based methods. PREREQ: ENGR 220 and MATH 333.

## ME 486G HUMAN FACTORS DESIGN (3-0-3)(F/S).

Anthropometry, biomechanics, and psychology applied to machinery and systems designs which involve human interaction. Design considerations include efficiency, productivity, environmental factors, human capabilities, comfort, and safety. Design projects demonstrate concepts and methodologies. PREREQ: Senior standing.

#### ME 522 ADVANCED THERMODYNAMICS (3-0-3)(F/S).

Advanced topics selected from Statistical Thermodynamics, Thermodynamics of Chemically Reacting Gases, Thermodynamics Property Formulation for Computer Applications and others at the discretion of the professor. PREREQ: ME 420.

**ME 530 FLUID DYNAMICS (3-0-3) (F/S).** Advanced fluid mechanics theory and applications in potential flow, boundary layer theory, viscous flow, turbulence, vorticity dynamics and circulation, compressible flow and gas dynamics, open channel flow, turbomachinery, stratified flow, laws, and introduction to computational fluid dynamics. PREREQ: ENGR 330, MATH 333, and either MATH 275 or MATH 272.

**ME 532 ACOUSTICS (3-0-3) (F/S).** Basic theories of acoustics, wave equations, acoustic response, sound generation, transmission, and attenuation. Measurement techniques and nomenclature. PREREQ: ENGR 330 and MATH 333.

**ME 533 DYNAMIC METEOROLOGY (3-1-3) (F/S).** Atmospheric dynamics, conservation laws, planetary boundary layers, large scale motions and circulations, numerical modeling, prediction, meteorological resources, weather analysis, and forecasting. PREREQ: MATH 333 and either MATH 275 or MATH 272.

#### ME 536 COMPUTATIONAL FLUID DYNAMICS (3-0-3)(F/S).

Theory and numerical modeling in fluid dynamics. Finite difference, finite volume, and finite element techniques will be treated. The course will include projects and research applications in engineering

# College of Engineering Department of Mechanical Engineering

and environmental flows. PREREQ: ENGR 330, structured programming, or PERM/INST.

**ME 538 CONVECTIVE HEAT TRANSFER (3-0-3) (F/S).** Treatment of energy and linear momentum conservation equations; laminar and turbulent forced convective HT in internal and external flow fields; free convection. PREREQ: ME 320, ME 321.

#### ME 550 ADVANCED MECHANICS OF MATERIALS (3-0-3)(F/S).

Extension of stress-strain concepts to three-dimensions, plate and shell analysis, failure theories, and fatigue. Analysis and visualization techniques include Finite Element Analysis and photoelasticity. PREREQ: ENGR 350.

**ME 554 COMPOSITES (3-0-3)(F/S).** Mechanics of composite materials. Solid mechanics principles used to analyze layered composites, long and short fiber composites, and woven composites. Finite Element Analysis reinforces content. PREREQ: Math 275 and ENGR 350.

#### ME 556 INTRODUCTION TO SOLID BIOMECHANICS

(3-0-3)(S). Students will learn to apply the principles of engineering mechanics to the human musculoskeletal system. Topics covered include functional anatomy, human motion analysis, mechanical properties of biological tissues, and modeling of the human body. PREREQ: ENGR 220 or PERM/INST.

**ME 560 COMPUTER AIDED DESIGN (3-0-3) (F/S).** Computer programs used to develop 3-D CAD database for design, analysis, simulation, and manufacturing. Machinery design to meet functional, performance, reliability and manufacturing requirements. Design projects reinforce concepts and methodologies. For students desiring higher level CAD sills prior to taking ME 480. PREREQ: ME 320 and ME 382.

**ME 561 (EE 561) CONTROL SYSTEMS (3-0-3)(S).** Time and frequency domain analysis and design of feedback systems using classical and state space methods. Observability, controllability, pole placement, observers, and discrete time. Multivariable and optimal methods are introduced. May be taken for either EE or ME credit, but not both. PREREQ: EE 360 or ME 360.

**ME 570 FINITE ELEMENT METHODS (3-0-3) (F/S).** Theoretical development of finite element methods, solution algorithm formulation, and problem solving in stress analysis, heat transfer, and fluid flow. PREREQ: ENGR 220, ENGR 350, structured programming, and senior standing.

ME 574 ADVANCED VIBRATIONS (3-0-3) (F/S). Theory and applications of vibrating continuous and discrete multi degree of freedom systems, modal analysis, acquisition and synthesis of data. Experimental and analytical characterization of the vibration response of linear and nonlinear systems, including Transfer and Frequency Response Functions, MIMO and SIMO, and mathematical modeling. PREREQ: ME 472 or PERM/INST.

**ME 576 ADVANCED DYNAMICS (3-0-3) (F/S).** Analytical modeling to predict the performance of linked, multi-body mechanical systems undergoing large displacements and rotations. Theoretical considerations in preparing models for computer simulations and

interpreting results. Application of a state of the art computer package in creating realistic simulations. PREREQ: ME 380 or PERM/INST.

# ME 577 (BIOL 577) (MSE 577) BIOMATERIALS (3-0-3) (F/S).

Theory of biomaterials science. Medical and biological materials and their applications. Selection, properties, characterization, design and testing of materials used by or in living systems. May be taken for BIOL, ME, or MSE credit, but not from more than department. PREREQ: ENGR 245 or CHEM 112.

#### ME 578 DESIGN AND ANALYSIS OF MECHATRONIC SYSTEMS

**(3-0-3) (F/S).** Design and analysis of engineering systems containing mechanical, electro-mechanical and embedded computer elements. The course provides an overview of basic electronics, digital logic, signal processing and electromechanical devices. Fundamentals of event-driven programming will also be covered. PREREQ: ENGR 240.

ME 582 OPTIMAL DESIGN (3-0-3) (F/S). Analytical and computer methods used to provide optimal design of products or processes. Formulation, specification, figures of merit, controllable variables, constraints and relationships among design variables. Single and multi-variable optimization algorithms using linear and nonlinear programming methods to design problems in structures, machine components, and energy systems. PREREQ: MATH 272 or MATH 275, PHYS 211, PHYS 211L.

**ME 584 ROBUST DESIGN (3-0-3) (F/S).** Statistics and probability applied to the design of products and processes. Stochastic modeling and analysis of mechanical systems. Product reliability, series and parallel systems reliability, structural reliability, Taguchi methods, failure modes and effects analysis, and Monte Carlo simulation. PREREQ: ME 320 and ME 382.

**ME 585 VEHICLE DESIGN (3-0-3) (F/S).** Subsystem design for wheeled vehicles including bicycles, motorcycles, cars, trucks and ATVs. Static and dynamic analyses of traction and reaction forces during acceleration, braking and cornering. Suspension response analysis. Subsystem design including suspension, chassis, steering, transmission, brakes, and tires. PREREQ: ENGR 220, ENGR 245, ENGR 350, and ME 280.

#### ME 586 ADVANCED ENGINEERING DESIGN (3-0-3)(F/S).

Integration of systematic methods used to define, develop, and produce competitive products. Topics include: Quality Function Deployment; Functional Decomposition; Design Specification; Failure Modes and Effects Analysis; Design Analysis & Evaluation; Optimal & Robust Design; Design for Manufacture, Assembly, and Service. PREREQ: ME 480 or PERM/INST.

## ME 588 DESIGN FOR MANUFACTURE AND ASSEMBLY

(3-0-3) (F/S). Development and application of design methods for cost-effective and timely product manufacture & assembly. Concept, configuration, and parametric product design refinements evaluated with respect to alternative manufacturing and assembly processes. Case studies and design projects. PREREQ: ME 240, ME 280, ENGR 350.

# College of Health Sciences

**Dean: James Girvan** Telephone 208 426-4116

**Associate Dean: Sarah Toevs** 

Telephone 208 426-3929

**Associate Dean: Pamela Springer** 

Telephone 208 426-4143 Health Sciences Riverside Building, Room 207 FAX 208 426-3469 http://hs.boisestate.edu

Full Graduate Faculty: Les Alm, Edward Baker, Ingrid Brudenell, John Freemuth, James Girvan, Richard Kinney, Elaine Long, James Munger, Uwe Reischl, Larry Reynolds, Robert Rychert, Mark Snow, Caile Spear, Pamela Springer, Dale Stephenson, Sarah Toevs, James Weatherby, Stephanie Witt

Associate Graduate Faculty: Jeffrey Anderson, Patricia Elison-Bowers, Susan Bowers, Cindy Clark, Shoni Davis, Margaret Downey, Mary Hereford, Rosemary Macy, Theodore McDonald, Nancy Otterness, Kathleen Reavy, Vivian Schrader,

Leonie Sutherland, Patricia Taylor, Annette Totten

Adjunct Graduate Faculty: Pat Aksamit, Marnie Basom, Judith Brawer, Kara Cadwallader, Gerald Dunaway, Mark Emerson, Sandra Engebretsen, Sandra Evans, Gary Falk, Judy Farnsworth, Colleen Fillmore, Andrea Fletcher, Nancy Fricke, Susan Gelletly, Georgia Girvan, Gayle Gray, Christine Hahn, Elizabeth Hannah, Margaret Henbest, Lyla Hill, Fred Hutchison, Chris Johnson, David Johnson, Bonnie Lind, Galen Louis, Patricia McGavran, Alison Miller, Joanne Mitten, John Moeller, Richard Olsen, Joan Ormandy, Linda Powell, Richard Remington, Ted Ryan, Leslie Schoch, Norman Semanko, Beth Stamm, Scott Staley, Robert Sterling, Kurt Brown Stevenson, Helen Stroebel, Nancy Van Maren, Pamela Weinberg, Stephen West

**Emeritus Graduate Faculty:** Rudy Andersen, Conrad Colby

# **Graduate Degrees Offered**

- Master of Health Science, Environmental Health
- Master of Health Science, General Research
- · Master of Health Science, Health Policy
- · Master of Health Science, Health Promotion
- Master of Health Science, Health Services Leadership
- Graduate Certificate in Addiction Studies (See Interdisciplinary Programs)
- Graduate Certificate in Gerontological Studies (See Interdisciplinary Programs)
- Graduate Certificate in Health Services Leadership

# Master of Health Science

Graduate Program Director: Theodore McDonald Health Sciences Riverside Building, Room 104 Telephone 208 426-2217 FAX 208 426-2199 http://hs.boisestate.edu/MHS e-mail: tmcdonal@boisestate.edu

## **General Information**

The Master of Health Science (MHS) program is designed primarily for the working health professional employed in state and local health agencies, health care institutions, and in private practice. The program, with its areas of emphasis in health policy, environmental health, general health research, health promotion and health services leadership prepares health professionals to be more effective as advocates, administrators and critics of our health delivery systems. It is designed to serve the working professional without interrupting their employment, yet meet the necessary standards for graduate level work. Students can complete a MHS degree and/or a Graduate Certificate in Addiction Studies, Health Services Leadership, or Gerontological Studies.

Although the MHS program is administered by the College of Health Sciences, graduate faculty are drawn from several programs across campus, including Public Affairs, Economics, Kinesiology, Sociology, Psychology, and Biology. The Master of Public Administration (MPA) program, with lead responsibility in the area of public policy, is a key partner in the health policy area of concentration.

# **Application and Admission Procedures**

An applicant must follow the general application procedures for degree-seeking students (see the Graduate Admission Regulations section of this catalog) and must (1) meet with the program coordinator to discuss the admission process. the applicant's career interests, and reasons for seeking admission to the program, (2) arrange to have three letters of recommendation submitted directly by the references to the graduate program coordinator and (3) submit a formal statement of at least 250 words explaining the applicant's educational and career objectives and how those objectives correspond with the MHS program. Applicants whose native language is not English must submit TOEFL scores. Once the file for an applicant is complete, it will be evaluated by the MHS Admissions Committee and an admissions recommendation (regular, provisional, or denial) will be forwarded to the dean of the Graduate College who will make the final decision and notify the applicant.

## **Conditions for Admission**

The conditions for admission are the minimum admission requirements for the Graduate College (see the Graduate Admission Regulations section of this catalog). Preference will be given to applicants with education and work experience in a health-related field. Applicants selecting the health policy emphasis area must be approved by both the MHS and MPA Program Coordinators. These conditions are necessary for admission to the program but do not guarantee admission.

# **Supervisory Committee**

Each admitted student will be assigned a supervisory committee consisting of a major advisor who serves as chair and two additional members. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study. The graduate program coordinator maintains oversight of the program by monitoring the academic progress of each student.

# **Graduate Assistantships**

Graduate assistantships covering tuition and fee waivers may be available through research grants and contracts. Contact the MHS director for information on assistantships which may be available from these sources.

# **Degree Requirements**

A minimum of 36 credits is required for graduation (excluding internship credits). The MHS student who attends full time will normally be enrolled for a two-year sequence including summers. Typically, however, students maintain their current employment positions and attend the program part time, thereby extending the length of time required to obtain the degree.

The curriculum (36-39 credits) is comprised of required core courses of 18 credits with an additional 18-21 credits of required area of concentration courses, and a thesis, project, or elective courses. All courses must be approved for application to the degree requirements by the supervisory committee and/or the program coordinator in consultation with the major advisor. Elective courses may be chosen from any approved graduate courses at Boise State University and selected courses from Idaho State University's Master of Public Health program. An individual program may include no more than 18 credits representing dual-listed courses and G-courses.

Master of Health Science, Graduate Core	
Course Number and Title	Credits
MHLTHSCI 505 Health Science Inquiry	2
MHLTHSCI 520 Health Care Systems Organization	
and Administration	2
MHLTHSCI 535 Ethics and Health Policy	2
MHLTHSCI/KINES 552 Applied Statistical	
Methods	3
*MHLTHSCI 555 Program Evaluation in the	
Health Sciences	3
**MHLTHSCI 579 Applications in Biostatistics and	
Epidemiology in Public Health	3
MHLTHSCI 600 Assessment (Capstone Course)	3
*Prerequisites include MHLTHSCI 505	
**Prerequisites include introductory course in epidemiology	
and MHLTHSCI 552 or equivalent.	
TOTAL	18

Master of Health Science, Environmental Health	
Course Number and Title	Credits
MHS Graduate Core	18
Select 9 credits from the following:  MHLTHSCI 510 Advanced Environmental Health 3  MHLTHSCI 560 Risk Management	9
In addition, students need one 3 credit elective course and 6 credits of thesis or project or 12 credits of additional electives.	9-12
TOTAL	36-39

NOTE: All applicants for the environmental health emphasis must have met the science requirements for a bachelor's degree in environmental health. Persons who have no experience in environmental health will also be required to take MHLTHSCI 590 Practicum.

Master of Health Science, General Research	h
Course Number and Title	Credits
MHS Graduate Core	18
SOC 500 Advanced Social Statistics	12
In addition, students need 6 credits of thesis/project or 9 credits of elective course work.	6-9
TOTAL	36-39

# College of Health Sciences Master of Health Science

Master of Health Science, Health Policy	
Course Number and Title	Credits
MHS Graduate Core	18
PUBADM 500 Administration in the Public Sector	15
In addition, students need 4 credits of thesis/project or 6 credits of elective course work.	4-6
TOTAL	37-39

Master of Health Science, Health Promotio	n
Course Number and Title	Credits
MHS Graduate Core	18
MHLTHSCI 550 Current Issues in Health Policy 3 MHLTHSCI 570 Health Promotion	12
In addition, students need 6 credits of thesis/project or 9 credits of elective course work.	6-9
TOTAL	36-39

Master of Health Science, Health Services Leadership	
Course Number and Title	Credits
MHS Graduate Core	18
DISPUT 501 Human Factors in Conflict Management	12
In addition, students need 6 credits of thesis/project or 9 credits of elective course work.	6-9
TOTAL	36-39

# **Thesis/Project Options**

The thesis or project provides Health Science graduate students an opportunity to consolidate the knowledge and skills gained during their graduate studies and to carry out an independent scholarly inquiry of a health science topic. Total credits for thesis or project vary from 4 to 6 and are determined by requirements of the emphasis area. No student may enroll for thesis or project credits until successfully completing MHLTHSCI 505 Health Science Inquiry, MHLTHSCI 555 Program Evaluation in the Health Sciences, and being advanced to candidacy following completion of at least 18 credits of selected course work.

# Graduate Certificate in Addiction Studies

(See Section on Interdisciplinary Programs)

# Graduate Certificate in Gerontological Studies

(See Section on Interdisciplinary Programs)

# Graduate Certificate in Health Services Leadership

Graduate Program Director: Theodore McDonald Health Sciences Riverside Building, Room 104 Telephone 208 426-2217 FAX 208 426-2199 http://hs.boisestate.edu/MHS e-mail: tmcdonal@boisestate.edu

The postgraduate Certificate in Health Services Leadership is designed for health professionals employed in state and local health agencies, health care institutions and in private practice. The goal of the certificate program is to prepare students for a variety of leadership and management positions in health related organizations.

# **Application and Admission Requirements**

Students interested in the Graduate Certificate in Health Services Leadership must first submit a graduate application to the Graduate Admissions Office. If approved, the applicant receives a certificate of admission to enroll in courses at Boise State. This certificate is a **prerequisite** to admission into the Graduate Certificate program, but does not by itself guarantee admission into the certificate program. (The student is advised

to consult the General Admission Policies section of this catalog for more detail on admission to the Graduate College.)

Applicants admitted to the Graduate College who wish to apply to the Graduate Certificate in Health Services Leadership program must meet the following requirements prior to enrollment in certificate courses:

- Possess a baccalaureate degree in a health-related field from an accredited institution.
- 2. Demonstrate satisfactory academic competency be attaining an overall GPA of at least 3.0 in previous college-level course work.
- Meet with the MHS Program Director to discuss the admission process, the applicant's career interests, and reasons for seeking admission to the certificate program.
- Submit three letters of reference, in which the applicant's academic potential is evaluated, to the Director, Master of Health Science Program, Boise State University,
   1910 University Drive, Boise, ID 83725-1800. (For applicants whose academic record predates the application by five years or more, supervisors may submit letters of recommendation.)
- 5. Submit letter of interest and resume to MHS Program
  Director
- Provide evidence to the MHS Program Director or individual course instructors that course prerequisites are met.

Applicants who do not meet all of the above requirements MAY be allowed to enroll in the Certificate program with provisional graduate status. However, these students must satisfy all of the conditions of their provisional status before they will be recommended for regular graduate status.

# **Certificate Requirements**

A minimum of 15 credits is required for the completion of the Graduate Certificate in Health Services Leadership. The curriculum comprises 12 credits of required course work and 3 additional credits of elective courses.

Graduate Certificate in Health Services Leadership	
Course Number and Title	Credits
MHLTHSCI 522 Management for Health Professionals MHLTHSCI 525 Leadership for Health Professionals MHLTHSCI 529 Marketing for Health Professionals	3 3 3
DISPUT 501 Human Factors in Conflict Management DISPUT 502 Negotiation Theory and Practice DISPUT 503 Conflict Intervention Methods	1 1 1
A minimum of three credits from one of the following:  ECON 440G Health Economics	3-4
TOTAL	15-16

# **Course Offerings**

Additional course work will be required to receive graduate credit for undergraduate G courses.

**BIOL - BIOLOGY** 

#### **BIOL 415G APPLIED AND ENVIRONMENTAL**

**MICROBIOLOGY** (3-3-4) (S). Microbial populations and processes in soil and water. Water and food-borne pathogens. Microbiological and biochemical methods of environmental assessment. PREREQ: BIOL 303, PERM/INST.

**BIOL 501 BIOMETRY (4-0-4) (F).** An application of statistical methods to problems in the biological sciences. Basic concepts of hypothesis testing; estimation and confidence intervals; t-tests and chi-square tests. Linear and nonlinear regression theory and analysis of variance. Techniques in multivariate and nonparametric statistics. PREREQ: MATH 111 or equivalent, or PERM/INST.

## **DISPUT - DISPUTE RESOLUTION**

# **DISPUT 500 BASIC MEDIATION SKILLS (3-0-3) (F/S).** Students learn the theoretical fundamentals of negotiation and mediation, types of mediation, mediation models, mediation case work skills, building the mediation plan, interpersonal skills for mediation, and various resolution techniques. Students will mediate several actual or simulated practice cases. Cannot be taken if credit has already been received in DISPUT 400.

#### **DISPUT 501 HUMAN FACTORS IN CONFLICT MANAGEMENT**

**(1-0-1)(F).** This course presents communication theories to assist managers understanding, analyzing, and managing conflict. The course focuses on the causes of conflict and includes the influence of gender and culture. The course is pragmatic as well as theoretical.

### **DISPUT 502 NEGOTIATON THEORY AND PRACTICE (1-0-1)**

**(F).** The successful manager in professional settings is involved in a variety of negotiation activities. The tactics, strategies, and operations of effective and ineffective bargaining/negotiation behaviors will be presented. The course develops negotiator skills and knowledge leading to collaborative based action and solutions.

#### DISPUT 503 CONFLICT INTERVENTION METHODS (1-0-1)(F).

This course overviews the various contexts of third party intervention into conflict: facilitation, public involvement processes, mediation, and arbitration, and develops skills at first level supervisor/manager intervention into employee conflicts.

#### DISPUT 504 FACILITATING GROUPS IN CONFLICT (1-0-1)(S).

Public input processes on controversial issues may generate conflict. The causes and skills for facilitating public input processes will be discussed, as well as techniques for facilitating conflict within small and large group meetings.

### **DISPUT 546 MEDIATION COMPETENCY BOARD (0-0-1)**

**(F/S).** Competency-based testing is required by several mediation professional organizations. Students conduct case work and mediate a case from within their emphasis area before a panel of expert mediators. Students discuss issues of mediation within their specialty area. (Pass/Fail) PREREQ: PERM/PROGRAM DIRECTOR.

#### **ECON - ECONOMICS**

**ECON 440G HEALTH ECONOMICS (3-0-3)(S).** Examines the economics and ethics of health and the health care delivery system. Comparisons will be made to the systems in other countries. The

## College of Health Sciences Master of Health Science

role of information and incentives in the system will be considered. PREREQ: ECON 205, Admission to MHS program, or PERM/PROG DIR.

#### **HLTHST - HEALTH STUDIES**

**HLTHST 480G EPIDEMIOLOGY (3-0-3) (F/S).** Study of the distribution and determinants of disease within human populations PREREQ: Upper-division standing and HLTHINFO 205 or MATH 254 or PSYC 295 or SOC 310, or PERM/INST.

# IPT – INSTRUCTIONAL PERFORMANCE TECHNOLOGY IPT 532 ETHNOGRAPHIC RESEARCH IN ORGANIZATIONS

(3-0-3)(F). Ethnography is an approach to learning about the social and cultural life of communities, organizations, institutions and other settings that discovers how the activities of people in those settings contribute to the creation of society and culture. Students receive a foundation in philosophical perspectives and methods supporting ethnographic research, learn when to conduct ethnographic research, and explore strategies for presenting and critiquing ethnographic research. They will also be provided with an opportunity to implement ethnographic research in organizational settings. PREREQ: IPT 536.

IPT 536 INTRODUCTION TO INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY (4-0-4) (F). This course provides students with an overview of the field of Instructional and Performance Technology. Students study the historical and theoretical foundations of the field and learn about prominent figures and important events that contributed to the development of the field. Students produce mini-projects by applying performance improvement principles and models to real or realistic organizational settings.

# IPT 540 APPLICATIONS OF LEARNING STYLES IN INSTRUCTIONAL AND PERFORMANCE TECHNOLOGY

(3-0-3)(F). The behavioral characteristics exhibited by different learning/cognitive styles, modalities, personality types, multiple intelligences, and emotional intelligences will be explored. Related preferences for different learning environments, media, instructional and testing methods will be examined, as well as the utility of these constructs for addressing performance problems in the workplace.

# MBA – MASTER OF BUSINESS ADMINISTRATION MBA 522 ACCOUNTING AND FINANCIAL ANALYSIS

(3-0-3)(F). Introduces basic concepts, standards, and practices of financial reporting so students can read and understand published financial statements. Fundamentals of accounting and finance as it relates to developing a framework for analyzing a firm's investment and financing decisions are emphasized. Topics may include income statement and balance sheet preparation, as well as valuation and capital budgeting techniques.

MBA 527 CREATION AND DISTRIBUTION OF GOODS AND SERVICES (3-0-3)(S). An introduction to the creation and distribution of goods and services. Course integrates both marketing and operations management concepts and will discuss the activities associated with product pricing, product promotion, and the manufacturing and delivery of goods and services.

**MBA 531 STRATEGIC PERSPECTIVES (1-0-1)(F,S).** Examines the five major forces transforming business: boundaries of the firm, market and competitive analysis, dynamics of developing and

sustaining advantages, internal organization, major forces in the environment. MBA students should take MBA 531 the first semester of their advanced course work. PREREQ: MBA 512, MBA 514, MBA 522, MBA 527.

## MBA 534 INFORMATION TECHNOLOGY FOR MANAGERS

**(3-0-3)(S).** Examines management's role in designing, implementing, and managing information systems, and the role of information and information technology for achieving a competitive advantage. PREREQ/COREQ: MBA 531.

#### MBA 535 LEGAL ISSUES IN BUSINESS RELATIONSHIPS

(3-0-3)(S). Exposes future managers to the major legal issues involved in intellectual property, private and public equity financing, cyber law, and product liability. Emphasis will be on what managers should know in order to make decisions that will not trigger legal problems. PREREQ/COREQ: MBA 531.

#### MBA 537 MANAGING PEOPLE IN ORGANIZATIONS

(2-0-2)(F). Provides an opportunity to acquire knowledge and refine basic skills for managing the flow of employees into, through, and out of organizations. Human resource planning, employee recruitment, selection, performance coaching, and appraisal topics will be covered in the context of how policies and decisions support and further a company's strategic goals. The impact of changing technology and demographics on "best" practices for managers dealing with employees will be discussed.

MBA 538 ORGANIZATIONAL ISSUES (2-0-2)(S). Application of behavioral sciences principles and skills in an organizational setting. Emphasis is on an interactionist perspective (individual, group, and organizational dynamics), towards understanding behavior in organizations. Topics include team building, motivation, leadership, problem solving, negotiation, and self-management. The course is geared towards managers and the application of concepts to experience. PREREQ/COREQ: MBA 531.

#### MHLTHSCI - MASTER OF HEALTH SCIENCE

MHLTHSCI 501 EPIDEMIOLOGY FOR HEALTH PROFESSIONALS (2-0-2) (F/S/SU). Study of the distribution and determinants of disease within human populations. PREREQ: Graduate standing.

MHLTHSCI 504 (NURS 504) HEALTH CARE ECONOMICS, FINANCING AND DELIVERY (3-0-3) (F/S/SU). Differentiates health care economics, financing and payment systems as context for fiscal management and budgeting; examines health care delivery from organizational and operational perspectives, all of which are applied in writing proposals. May be taken for MHLTHSCI or NURS credit, but not both. PREREQ: Admission to Graduate Program in Master of Health Science or Nursing.

MHLTHSCI 505 HEALTH SCIENCE INQUIRY (2-0-2) (F/S). Basic inquiry into the history of modern health science research and the scientific method. Problem solving strategies and methodologies for research and study will be discussed. Students will each develop a prospectus of study. The course is to be completed before a project or thesis is undertaken. PREREQ: Statistics and admission to MHS program or PERM/INST.

#### MHLTHSCI 510 ADVANCED ENVIRONMENTAL HEALTH

**(3-0-3)(F/S).** As a review for the practicing professional and foundation for the recent graduate, discussion will focus on current issues in environmental health management. The course will provide

an overview of basic concepts of water quality management, food protection, solid and hazardous waste management, vector and occupational hazard control and others, and will emphasize effective management and decision-making models. PREREQ: Admission to MHS program or PERM/INST.

MHLTHSCI 512 (NURS 512) EDUCATIONAL LEADERSHIP

**(2-0-2) (F/S/SU).** Integrates and synthesizes leadership, educational and other theories and frameworks using simulated and/or real experiences to develop strategies in presentational leadership for advanced nursing. May be taken for MHLTHSCI or NURS credit, but not both. PREREQ: Admission to Graduate Program in Master of Health Science or Nursing.

#### MHLTHSCI 515 OCCUPATIONAL SAFETY & HEALTH

(2-3-3)(F/S). Recognition, evaluation, and control of environmental health hazards or stresses (chemical, physical, biological) that may cause sickness, impair health, or cause significant discomfort to employees or residents of the commity. The course is taught concurrently with an undergraduate session, with additional course work and/or projects required of graduate students. PREREQ: Admission to MHS program and one year each undergraduate physics and organic chemistry, or PERM/INST.

MHLTHSCI 517 PRINCIPLES OF TOXICOLOGY (2-0-2)(F/S). An examination of the absorption, distribution, and excretion of toxicants in humans and health effects on target organs. Toxicologic evaluation, risk assessment, fate of hazardous substances in the environment and policies for the control of such substances will also be discussed. The course is taught concurrently with an undergraduate session, with additional course work and/or projects required of graduate students. PREREQ: Admission to MHS program and one year each undergraduate chemistry and biology for science majors, or PERM/INST.

#### MHLTHSCI 518 ENVIRONMENTAL HEALTH LAW

**(2-0-2)(S)** (Even years). Various aspects of environmental and health protection law are discussed, including sources of regulatory authority, legal procedures, agency roles, and specific statutes.

MHLTHSCI 520 HEALTH CARE SYSTEMS ORGANIZATION AND ADMINISTRATION (2-0-2) (F). Examines the history, organization, and effectiveness of United States health care and public health systems. Topics will include the underlying constructs of health, the structure of the industry, funding for health care, and the role of managers and personnel in the system. PREREQ: Admission to MHS program or PERM/PROG DIR.

## MHLTHSCI 522 MANAGEMENT FOR HEALTH

**PROFESSIONALS (3-0-3)(F/SU).** In-depth discussion of management strategies as they apply to healthcare, with emphasis on communication, program planning, organization, staff development, program coordination, and evaluation of results.

MHLTHSCI 525 LEADERSHIP FOR HEALTH PROFESSIONALS (3-0-3) (S/SU). An overview of various approaches to leadership, authority, motivation, adaptation, and organizational conflict as they relate to the health care supervisor's role in accomplishing organizational goals and objectives.

**MHLTHSCI 529 MARKETING FOR HEALTH PROFESSIONALS** (3-0-3) (F/S). Examination of marketing models used in health and health care including identification of consumer needs, market segmentation, and designing a balanced marketing program. PREREQ:

Admission to MHS program or HSL Graduate Certificate program or PERM/INST.

**MHLTHSCI 530 DEVELOPING INSERVICE EDUCATION (3-0-3) (F/S/SU).** Developing, presenting, and evaluating inservice and continuing education programs to professional peers and subordinates in traditional and non-traditional health care settings. Includes Development of Instructional Design Exercise (INDEX) and group presentations.

#### MHLTHSCI 535 ETHICS AND HEALTH POLICY (2-0-2)(S).

Systematic examination of ethics as it relates to decision making in health policy. Discussion includes the moral issues of health care quality, right to life and right to death. PREREQ: Admission to MHS program or PERM/INST.

## MHLTHSCI 540 HEALTH INFORMATION MANAGEMENT

(3-0-3)(S). The use of health information systems as a management tool in health policy and the impact of computer information systems on the structure and function of health care organizations, including administrative research to support decision making and problem solving using local and national computer data networks. PREREQ: Statistics and PERM/INST.

#### MHLTHSCI 542 HAZARDOUS WASTE MANAGEMENT

**(2-0-2)(S).** Historical, regulatory and technical aspects of hazardous waste management, relating primarily to the requirements of the Resource Conservation and Recovery Act and the Comprehensive Environmental Reclamation, Compensation and Liability Act.

MHLTHSCI 543 (COUN 543) ASSESSING AND MANAGING ADOLESCENT SUBSTANCE ABUSE AND MENTAL HEALTH RISKS (3-0-3)(S) (Odd years). Introduction to comprehensive adolescent risk assessment and treatment planning. Examination of current and available comprehensive adolescent assessments, current and available specialized assessments, report writing approaches and effective treatment processes. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

MHLTHSCI 544 (COUN 541) ALCOHOL/DRUG ABUSE AND THE FAMILY (3-0-3) (F/S). An examination of the effects of chemical abuse on the family system. Included are the roles family members assume to accommodate the chemically dependent person, and the financial and emotional costs to the entire family. Special attention is given to intervention and other treatment approaches. May be taken for MHLTHSCI or COUN credit, but not both.

MHLTHSCI 545 (COUN 545) FOUNDATIONS OF CHEMICAL DEPENDENCY (3-0-3) (F/S). An overview of the pharmacological and physiological effects of chemical dependency. Special attention is given to how substance abuse impacts brain chemistry, and how brain chemistry impacts substance abuse. May be taken for MLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

MHLTHSCI 547 (COUN 547) CHEMICAL ADDICTIONS AND VIOLENCE PREVENTION (3-0-3)(S) (Even years). Introduction to professional, ethical, legal, and practical aspects of chemical addictions and violence prevention (primary and secondary) in the schools and other setting (e.g., adolescent treatment). Examination of current research and available curriculum models, current identification and intervention approaches, and effective prevention programming. Historical and social contexts (e.g., Safe and Drug Free Schools and communities Initiatives) also included. May be taken

# College of Health Sciences Master of Health Science

for MHLTHSCI or COUN credit, but not both. PREREQ: Graduate or Senior standing.

MHLTHSCI 548 COUNSELING TECHNIQUES FOR HEALTH PROFESSIONALS (3-0-3) (F). Topics to include interviewing and questioning techniques, client observation and influencing skills, and ethics. Special emphasis is given to confrontation techniques which can help break through the denial system of patients and help determine sound treatment plans.

MHLTHSCI 549 (COUN 549) COUNSELING TECHNIQUES FOR CHEMICAL DEPENDENCY (ED-CIFS 549) (3-0-3) (F/S). A study of counseling techniques and practices used in dealing with people of all ages who are chemically dependent. Special attention will be paid to the impact of chemical dependency in family members and counseling strategies for adolescents. May be taken for COUN or MHLTHSCI credit, but not both. PREREQ: PERM/INST.

#### MHLTHSCI 550 CURRENT ISSUES IN HEALTH POLICY

(3-0-3)(F/S). Examines current issues in health care policy in the United States health care system. The structure, administration and financing of the health care system are reviewed and recent changes and their effects on cost, quality, and access to health care are discussed. Some attention is given to health policy issues in other countries as they influence and impact policy in the United States. PREREQ: Admission to MHS program or PERM/INST.

MHLTHSCI 552 (KINES 552) APPLIED STATISTICAL METHODS (3-0-3) (F,S). An introduction to statistical techniques utilized in the treatment of data. The techniques to be covered include measures of central tendency and variability, correlation measures, probability, analysis of variance, and regression analysis. May be taken fro KINES or MHLTHSCI credit, but not both. PREREQ: Completion of an undergraduate statistics or measurement course.

MHLTHSCI 555 PROGRAM EVALUATION IN HEALTH DELIVERY SETTINGS (3-0-3) (S). Topics include evaluation overview, models, and evaluative study objectives, methodological design, interpretation of data, and final report preparation. The course includes a thorough review of statistics and sampling as they apply to program evaluation methodologies. PREREQ: Undergraduate statistics, MHLTHSCI 505 and admission to MHS program, or PERM/INST.

MHLTHSCI 560 RISK MANAGEMENT IN THE HEALTH SCIENCES (3-0-3) (F). Critical examination of risk theory and strategies to mitigate or prevent that risk. Topics of discussion will include assessment of risk, hazards and vulnerabilities, cost-benefit analysis, insurance, disaster management, and risk communication. PREREQ: Admission to MHS program or PERM/INST.

MHLTHSCI 564 (COUN 544) ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART I (3-0-3) (F). Emphasis on screening and assessment tools/procedures for substance abuse. Application of current interventions and screening processes. Legal, social, ethical, and health implications will be investigated. May be taken for MHLTHSCI or COUN credit, but not both.

MHLTHSCI 565 (COUN 546) ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART II (3-0-3)(S). Application of concepts and principles presented in Part I. Special emphasis is placed on case management techniques. Continued investigation of legal, social, ethical, and health implications. May be taken for

MHLTHSCI or COUN credit, but not both. PREREQ: MHLTHSCI 564 or COUN 544 or PERM/INST.

MHLTHSCI 566 COMPLEMENTARY & ALTERNATIVE THERAPIES (2-0-2) (F/S). An exploration of the ethical, legal and policy issues surrounding non-conventional medical practices. Discussion on current research of efficacy and consumer acceptance will accompany clinical demonstrations of selected modalities, such as acupuncture and massage therapy.

MHLTHSCI 567 (COUN 567) CLINICAL SUPERVISION PRINCIPLES AND PRACTICE (1-0-1)(F) (Even years). Theory and skill development for practitioners who are or will be supervising interns and/or professionals in school, agency, and other settings. Topics include ethical issues in clinical supervision, models and best practices, documentation, and troubleshooting problematic dynamics. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

MHLTHSCI 568 (COUN 550) DIAGNOSES, ASSESSMENT AND TREATMENT PLANNING (2-0-2) (F) (Odd Years). Examination of concepts of "mental disorders," DSM classification systems, and the diagnostic benefits and diagnostic problems inherent in such systems. An introduction and overview of the major psychopathological syndromes of adolescents and adults (especially in the area of Co-morbidity of Substance Abuse/Dependence and other DSM IV diagnoses) to facilitate appropriate use of assessment—diagnostic—treatment links (including treatment planning). May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

## MHLTHSCI 570 (KINES 570) HEALTH PROMOTION (3-0-3)

**(F/S).** A critical examination of health promotion and education policy with an emphasis on planning, implementation and evaluation of health programs for various public sectors. May be taken for MHLTHSCI or KINES credit, but not both.

MHLTHSCI 571 (COUN 571) (SOCWRK 571) FUNDAMENTALS OF HEALTH AGING (3-0-3) (F). Overview of gerontology presented by examining major issues related to aging. Content includes theories of aging; the impact of an aging population; and future implications at local, national, and international levels. May be taken for MHLTHSCI, COUN, or SOCWRK credit, but only from one department.

MHLTHSCI 572 (KINES 572) GRANT WRITING (3-0-3) (SU). Examination of the process of securing resources from external entities. Students will learn and apply a variety of techniques employed in proposal development and grant authorship. May be

taken for MHLTHSCI or KINES credit, but not both.

MHLTHSCI 574 (KINES 574) HEALTH PROMOTION AND OPTIMAL AGING (3-0-3) (F) (Even Years). Focus on promoting healthful behavior and quality of life among older adults. Application of theory, research, and practice to gerontological health promotion and wellness. May be taken for KINES or MHLTHSCI credit, but not both. May be taken for MHLTHSCI or KINES credit, but not both.

MHLTHSCI 576 HEALTH POLICY MAKING AND ISSUES IN AGING (3-0-3)(S)(Alternate years). Examination of the policy making process in relationship to health policies and services for the elderly at the national, state, and local levels. State and Local policies and services will be studied to determine quality and effectiveness, identify gaps, and develop strategies to meet the increasing demands of a rapidly aging population.

#### MHLTHSCI 579 APPLICATIONS IN BIOSTATISTICS AND

**EPIDEMIOLOGY (3-0-3) (F/S).** Application of advanced statistical and epidemiological methods in health sciences and public health. Emphasizes the role statistics and epidemiology plays in problem solving and research. PREREQ: HLTHST 480-480G or MHLTHSCI 501 or equivalent and MHLTHSCI 552 or equivalent.

MHLTHSCI 590 PRACTICUM/INTERNSHIP (0-V-3).

MHLTHSCI 591 PROJECT (0-V-6).

MHLTHSCI 593 THESIS (0-V-6).

MHLTHSCI 596 DIRECTED RESEARCH (0-V-3).

MHLTHSCI 597 SPECIAL TOPICS (0-V-3).

MHLTHSCI 598 SEMINAR IN HEALTH POLICY (2-V-2).

## MHLTHSCI 600 ASSESSMENT (CAPSTONE COURSE)

(3-0-3)(F/S). This course serves as the final comprehensive assessment of student knowledge and abilities related to program competencies and must be taken during the final semester of the student's graduate program. PREREQ: PERM/CHAIR.

#### **PSYCH - PSYCHOLOGY**

## PSYCH 331G THE PSYCHOLOGY OF HEALTH (3-0-3)(F/S).

Principles that have emerged from the experimental analysis of behavior will be examined. The principles include, but are not limited to, operant and classical conditioning. The course will deal with applications of these principles to the understanding and change of phobias, obesity, smoking, alcoholism, aberrant behavior, and similar problems. PREREQ: PSYC 101.

**PSYCH 438G COMMUNITY PSYCHOLOGY (3-0-3)(F,S).** Focuses on human and social problems in a systemic context. Primary prevention and community empowerment strategies employed for individual, community, and social benefit are emphasized.

### **PUBADM - PUBLIC AFFAIRS**

### PUBADM 500 ADMINISTRATION IN THE PUBLIC SECTOR

(3-0-3)(F/S). Designed to introduce students to the broad field of public administration at the graduate level. The course emphasizes three major themes: American government, statistical methods, and the philosophy of public administration. PREREQ: Admission to MHS program or PERM/PROG DIR.

**PUBADM 501 PUBLIC POLICY PROCESS (3-0-3) (S).** Process of policymaking both within an agency and within the total governmental process, emphasizing policy and program planning, policy implementation and the value system of administrators. PREREQ: Admission to MHS program or PERM/PROG DIR.

#### PUBADM 502 ORGANIZATIONAL THEORY (3-0-3) (F/S).

Theories of organization behavior and management, with special attention given to public sector organizations. Issues and problems related to the nonprofit sector will also be addressed. PREREQ: Admission to MHS program or PERM/PROG DIR.

#### PUBADM 504 PUBLIC BUDGETING AND FINANCIAL

**MANAGEMENT (3-0-3) (F/S).** Determination of fiscal policy, budgeting processes, and governmental forms of budgeting. Consideration of fiscal policy and processes in various program areas. Emphasis on the interface between technical and political processes.

PUBADM 540 NATURAL RESOURCE AND ENVIRONMENTAL POLICY AND ADMINISTRATION (3-0-3) (F/S). Examines the major issues, actors, and policies in the area of natural resources. Topics include: land and water management and use, the natural resource policy environment, the roles and behaviors of natural resource agencies, and alternative natural resource policy futures.

**PUBADM 541 ENVIRONMENTAL AND REGULATORY POLICY AND ADMINISTRATION (3-0-3) (F/S).** Examines aspects of environmental regulatory politics and policy. Topics examined include the politics of regulation, pollution and waste policy, and intergovernmental environmental management.

#### SOC - SOCIOLOGY COURSES

**SOC 500 ADVANCED SOCIAL STATISTICS (3-0-3)(S).** The methods of nonparametric statistics in the analysis of sociological data are examined in depth with application to research. PREREQ: SOC 101 and SOC 310 or equivalents as determined by consultation with department chair.

#### **SOC 502 QUALITATIVE SOCIAL RESEARCH METHODS**

**(3-0-3)(F).** An intensive course in interpretive social science, covering the practice of fieldwork ethnography, the use of computers in qualitative research, techniques of qualitative data analysis, and the writing of qualitative research reports. PREREQ: Graduate standing.

**SOC 512 SOCIAL DEMOGRAPHY (3-0-3) (F/S).** Techniques and methods for analyzing population growth, trends, and movement as reflected in actuarial data, birth-death rate; mobility, fertility and fecundity as these affect the societal patterns, especially planning for human service programs.

## **Idaho State University Courses:**

MPH 601 Applications in Epidemiology MPH 602 Introduction to Biostatistics MPH 603 Applications in Biostatistics MPH 606 Environmental Health

# College of Social Sciences and Public Affairs

**Dean: Michael Blankenship** 

Telephone 208 426-3776

Interim Associate Dean: Joanne Klein

Telephone 208 426-1368 Education Building, Room 717 FAX 208 426-4318 http://sspa.boisestate.edu

## **General Information**

The mission of the College of Social Sciences and Public Affairs (SSPA) includes the following:

SSPA is the lead institution in the state of Idaho for providing education and scholarship in Public Affairs and Social Sciences, SSPA promotes excellence in teaching, research, and service to address major social and political issues, with an emphasis on urban issues. SSPA faculty and administration work to balance the theoretical and applied natures of our disciplines to best meet the needs of our student and community constituents.

Faculty within the college teach a full range of social sciences classes, comprising 24% of Boise State University's total offerings. They conduct research in areas of vital concern to public policy, human behavior, and the working of society. In addition, faculty provide leadership as expert consultants to local, state, and national groups and participate in public-service activities within the local community.

The departments of Communication, Criminal Justice Administration, History, Public Policy and Administration, and Social Work, prepare students for careers in public and private sectors by offering the following graduate programs:

- Master of Arts in Communication
- Master of Arts in Criminal Justice Administration
- Master of Arts in History
- Master of Applied Historical Research
- Master of Public Administration
- Master of Social Work, Two Year Program
- Master of Social Work, Advanced Standing
- Graduate Certificate in Community and Regional Planning
- · Graduate Certificate in Conflict Management
- Graduate Certificate in Gerontological Studies (See Interdisciplinary Programs)

The College also prepares students for careers in secondary education in history and the social sciences. In addition, the College's location in the state's population, business, and government hub provides outstanding opportunities for students to serve as interns in government agencies, the Idaho legislature, corporations, nonprofit agencies and numerous other places in the public and private sector.

# Department of Communication

**Chair: Rick Moore** 

Communication Building, Room 102 Telephone 208 426-3562 FAX 208 426-1069 http://comm.boisestate.edu

**Full Graduate Faculty:** Peter Lutze, Suzanne McCorkle, Ed McLuskie, Janet Mills, Rick Moore, Dan Morris, Natalie Nelson Marsh, Robert Rudd, Mark Shevy, Laurel Traynowicz, Peter Wollheim

**Associate Graduate Faculty:** Dawn Craner, Renu Dube, Marty Most, Heidi Reeder

# Master of Arts in Communication

**Graduate Program Coordinator:** Peter Wollheim Communication Building, Room 222

Telephone 208 426-3532 FAX 208 426-1069

e-mail: pwollhe@boisestate.edu

# **General Information**

The M.A. in Communication offers students the opportunity to work with a faculty varied in their approaches, yet unified in their vision to provide a comprehensive study of human communication. The faculty has a regional and national reputation for excellence in research and teaching. The graduate program encourages mentoring relationships for students desiring to pursue individualized research interests. Course offerings reflect the strengths and interests of the faculty within three areas of concentration offered each semester:

(1) COMM 505 Selected Topics: Theory and Philosophy of Communication, (2) COMM 506 Selected Topics: Interpersonal Communication, and (3) COMM 507 Selected Topics: Organizational Communication. The department annually publishes a two-year schedule of course offerings so that each M.A. candidate may coordinate course work which culminates in a thesis or project. Note: Consult the department's published two-year course plan for specific content regarding COMM 505, COMM 506, and COMM 507.

The M.A. degree in Communication requires a minimum 31 credits, which must include COMM 598, fifteen credits from COMM 505, COMM 506, and COMM 507. Beyond these requirements, students design individualized programs of study to meet their specific goals from graduate courses in the

department and from courses approved for graduate credit throughout the university. The M.A. experience culminates in successful completion and defense of a thesis or project approved by each student's graduate committee.

## **Admission Requirements**

Admission will be granted to applicants who hold a Bachelor's degree from an accredited undergraduate college or university, who are admitted to the Graduate College, and who fulfill the additional requirements below. Receiving a certificate of admission to graduate classes from the Graduate College in no way guarantees admission to the M.A. in Communication.

To be considered for admission to the M.A. in Communication, an applicant must:

- Be admitted to the Graduate College at Boise State University.
- 2. Have a 3.0 GPA during the last sixty hours of undergraduate course work.
- Have completed an undergraduate social sciences research methods course and a communication theory and theorizing course.
- 4. Complete a Communication Department Application Form, including:
  - A. An essay explaining his or her academic goals and how those goals match the M.A. program at Boise State.
  - Indicate the name and semester of the undergraduate social science research methods course.
  - C. Indicate the name and semester of the undergraduate theory and theorizing course.
- Submit a paper demonstrating competence in scholarly writing.
- 6. Supply two academic letters of reference, along with the names, titles, addresses, and phone numbers of the references.

Completed applications should be received by August 1 for Fall enrollment and by November 1 for Spring enrollment. Applicants seeking a Department of Communication Graduate Teaching Assistantship or a Department of Communication Graduate Research Assistantship must submit all application materials and an Application for Graduate Assistantship by April 1.

Applications for Admission to the Graduate College are available from the Graduate Admissions Office. Request Department Application Packets from:

Graduate Admissions Committee Department of Communication Boise State University 1910 University Drive Boise, Idaho 83725-1920

### **Degree Requirements**

Master of Arts in Communication	
Course Number and Title	Credits
COMM 598 Graduate Seminar (May be repeated once for credit toward degree)	1-2
COMM 591 Project <b>OR</b> COMM 593 Thesis	3
Selected Topics (chosen from):  COMM 505 Selected Topics in Theory and Philosophy COMM 506 Selected Topics in Interpersonal Communication COMM 507 Selected Topics in Organizational Communication	15
Additional Electives (selected from within or outside the department)	12
TOTAL	31-32

## **Course Offerings**

**COMM - COMMUNICATION** 

#### **COMM 501 SELECTED TOPICS IN RESEARCH METHODS**

**(Variable credit) (F/S).** Specific issues or approaches to research methodology in the social sciences. Course content will vary from semester to semester. Consult current class schedule for specific topics to be offered each semester. Course may be repeated for credit.

**COMM 505 SELECTED TOPICS IN COMMUNICATION THEORY AND PHILOSOPHY (Variable credit) (F/S).** Course content will vary from semester to semester. Consult current class schedule for specific topics to be offered each semester. Course may be repeated for credit.

**COMM 506 SELECTED TOPICS IN INTERPERSONAL COMMUNICATION (Variable credit) (F/S).** Course content will vary from semester to semester. Consult current class schedule for specific topics to be offered each semester. Course may be repeated for credit.

## COMMUNICATION (Variable gradit) (F/S) Course conta

**COMMUNICATION (Variable credit) (F/S).** Course content will vary from semester to semester. Consult current class schedule for specific topics to be offered each semester. Course may be repeated for credit.

## College of Social Sciences and Public Affairs Department of Communication

**COMM 590 PRACTICUM.** Upon selection of an approved project or thesis, the student will prepare a documentary and an oral report of the topic, defending it before fellow graduate students and faculty.

**COMM 591 PROJECT (0-V-3).** In lieu of completing a Thesis, students may create some product other than a scholarly paper which embodies original research and substantiates a specific view.

**COMM 593 THESIS (0-V-3).** A scholarly paper embodying results of original research which are used to substantiate a specific view.

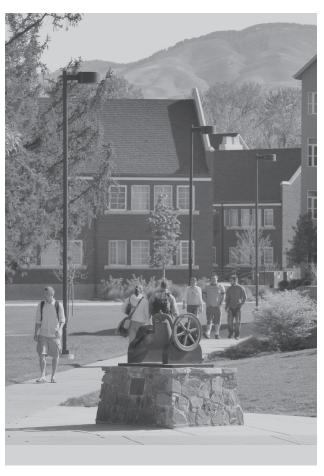
#### **COMM 594 WORKSHOP**

**COMM 595 READING AND CONFERENCE.** Directed reading on selected materials in communication and discussion of those materials, as arranged and approved through the student's major advisor. No more than nine credits of COMM 595 may be applied toward the M.A. in Communication.

**COMM 596 DIRECTED RESEARCH.** A special project undertaken as advanced tutorial study in a specialized area according to the needs and interests of the student. The course usually involves conducting research with a designated faculty member, along with writing a paper covering the subject of independent study. No more than nine credits of COMM 596 may be applied toward the M.A. in Communication.

#### **COMM 597 SPECIAL TOPICS**

**COMM 598 GRADUATE SEMINAR (1-0-1).** A required public forum wherein graduate students and faculty present and discuss their original research and/or thesis or project proposals. May be repeated once for credit toward degree.



## Department of Criminal Justice Administration

Chair: Andrew Giacomazzi

Library, Room 166 Telephone 208 426-4114 FAX 208 426-4371 http://cja.boisestate.edu e-mail: sraney@boisestate.edu

Full Graduate Faculty: Jeremy Ball,

Lisa Growette Bostaph, Andrew Giacomazzi, Craig Hemmens, Robert Marsh, David Mueller, Mary Stohr, Anthony Walsh

Adjunct Graduate Faculty: Christine Isaacs

## Master of Arts in Criminal Justice Administration

Graduate Program Coordinator: David Mueller

Library, Room 166E Telephone 208 426-2645

e-mail: dmueller@boisestate.edu

#### **General Information**

The master's degree in Criminal Justice Administration is designed to provide a foundation in applied research and theory, in substantive areas of criminal justice activity, and focused scholarship on issues of importance in Idaho. Curricula are organized into two sections. The first section, called the Foundation Series, is a set of core classes that will provide students with the intellectual skills needed for the study of more complex material. The second section, the Seminar Series, promotes the development of scholarship in particular substantive areas in criminal justice. Students will also be required to take electives and write either a project or a thesis.

## **Admission Requirements**

To be considered for regular status as a graduate student in the Department of Criminal Justice Administration, students must meet general Graduate College requirements and the following department requirements:

- 1. An undergraduate degree in Criminal Justice or related social or behavioral science with at least a 3.0 average is required for admission to graduate study.
- 2. Completion of an undergraduate statistics course.
- 3. CJA 101 Introduction to Criminal Justice or its equivalent (required for all entering students).

### College of Social Sciences and Public Affairs Department of Criminal Justice Administration

## **Application Requirements**

Application for admission to the Criminal Justice Administration graduate program may be made at any time. However, it is recommended that the prospective student make application to the Graduate Admissions Office at least one full semester prior to expected enrollment. At that time the student will pay the application fee, complete an application form and arrange to have transcripts for all schools of higher education previously attended sent directly to the Boise State University Graduate Admissions Office.

Applicants must also send directly to the Department of Criminal Justice Administration a Statement of Purpose explaining the student's reasons for seeking admission and what they hope to achieve, and three letters of recommendation from individuals competent to judge the student's likelihood of success in graduate studies. It is recommended that the applicant also schedule an interview with the Criminal Justice Graduate Program Coordinator.

The Department of Criminal Justice Administration will take no action on the application until all of the above materials have been received. Applicants who wish to enroll in the Fall semester should complete applications by May 1 (November 1 for the Spring semester).

## **Degree Requirements**

Students are required to complete 33 hours of graduate study at the 500 level and above for the Master of Arts degree in Criminal Justice Administration. Students complete 15 credits from CJA 501, CJA 502, CJA 503, 504, and CJA 506. Students are also required to elect at least 9 additional credit hours from among criminal justice courses in the Seminar Series. A master's thesis or project must be completed prior to the award of the degree. Six hours of graduate study will be awarded upon successful completion of the thesis and three for completion of the project. Elective credit must be approved and be consistent with the student's course of study. Students may pursue up to three hours of study in other approved graduate classes in or outside the department if they select the thesis option, and six if they select the project option. Consistent progress toward the degree and maintenance of a cumulative 3.0 average are required for continuation in the program. Upon completion of the thesis or project and course work, an oral examination is required of all students and will be administered by the student's thesis or project committee. An overall grade point average of 3.0 is required for graduation.

Master of Arts in Criminal Justice Administration	
Course Number and Title	Credits
Foundation Series  The following core courses are required of all students. It is recommended that these courses be taken prior to other graduate work.  CJA 501 Crime and Criminal Justice	15
Seminar Series Students are required to complete nine credits from the following list of courses. It is recommended that core courses be completed prior to enrolling in seminar series courses.  CJA 505 Law and Social Control	9
Electives  Electives may be taken anywhere in the university but must be approved by the student's graduate committee and the CJA graduate coordinator. The student must demonstrate, to the committee's satisfaction, how the electives are to fit into the student's program of study and career objectives. Boise State graduates with any listed course in undergraduate work which applied to the undergraduate degree may not apply that course to the graduate degree.	3-6
Thesis or Project Option CJA 591 Project	3-6
TOTAL	33

## **Course Offerings**

CJA - CRIMINAL JUSTICE

#### FOUNDATION COURSES

**CJA 501 CRIME AND CRIMINAL JUSTICE (3-0-3) (F).** This class locates the profession of criminal justice within historical, theoretical, and political perspectives. The class will focus on contemporary theoretical perspectives, including sociological, social-psychological, biosocial, cultural, genetic, linguistic, and evolutionary. The nature and scope of the discipline are defined through the discussion of the relationships among theory, policy, and practice.

**CJA 502 ORGANIZATION AND MANAGEMENT OF CRIMINAL JUSTICE (3-0-3)(S).** The structures, functions, and operations of criminal justice organizations are analyzed. Issues within these areas are approached with attention to their cultural, social, and political implications. The relationship between formal and informal structures and their social, political and legal environment is examined.

### College of Social Sciences and Public Affairs **Department of Criminal Justice Administration**

CJA 503 CRIMINAL JUSTICE RESEARCH (3-0-3)(F). Basic methods of quantitative and qualitative research and their application to the field. The relationship among theory, research, and social policy. The development and interpretation of research reports.

#### CJA 504 STATISTICS FOR CRIMINAL JUSTICE (3-0-3)(S).

Statistical analysis. Univariate and introductory multivariate techniques. Use of computerized statistical packages in the social and behavioral sciences. Statistical problem-solving using various datasources. PREREQ: Undergraduate statistics.

CJA 506 THEORIES OF CRIME (3-0-3)(F). Major explanations of crime and its control. Efforts toward an integration of existing approaches are explored and consideration of the development of general theory is discussed.

#### **SEMINAR SERIES**

#### CJA 505 SEMINAR: LAW AND SOCIAL CONTROL (3-0-3)(F).

A focus on the nature of law and legal institutions and the relationships between law and other forms of social control. Theory and research on the development of law and its implementation at various stages of the legal process is reviewed.

#### CJA 507 SEMINAR: ISSUES IN CONTEMPORARY POLICING

(3-0-3)(S). In-depth consideration of issues affecting policing today. Police organization, management and leadership, policy formulation, community policing and related issues are among the topics considered. Particular attention will focus on the role of police officers in a changing society.

#### CJA 508 SEMINAR: THE LEGAL PROCESS (3-0-3)(F).

Consideration of specific aspects of criminal adjudication, including prosecution and defense, bail determination, plea-bargaining, jury decision-making, and alternative sentencing practices. Specific subject matter will vary by semester.

CJA 509 SEMINAR: JUVENILE JUSTICE (3-0-3) (F). A detailed examination of the historical development and current practices of juvenile courts and juvenile correctional institutions. Research on program evaluation is presented, with an emphasis on developments in delinquency theory as related to practice.

#### CJA 510 SEMINAR: PUNISHMENT AND CORRECTIONS (3-0-3)

(S). An in-depth study of issues related to the philosophy and practice of punishment and corrections. Topics include correctional theory, the prison and jail environment, work and rehabilitation programs, corporal punishment, parole, overcrowding, capital punishment, and alternatives to imprisonment.

#### CJA 511 SEMINAR: COMMUNITY CORRECTIONS (3-0-3)(S).

An assessment of contemporary trends in community corrections, with a particular focus on considerations of effectiveness. This class will focus on the types of community corrections options available, program characteristics, and implications for broader correctional policy. The contribution of rehabilitative and deterrent philosophies to corrections will provide a backdrop to a consideration of the diverse contemporary perspectives on community corrections.

CJA 512 SEMINAR: GENDER AND JUSTICE (3-0-3)(F). An exploration of the theory, research, and practice related to women's involvement in the justice system in the United States. Analysis will be directed toward the various roles and treatment of women as offenders, victims/survivors, and practitioners in the system.

CJA 520 GOVERNOR'S CLASS (3-0-3)(S). This class focuses on legislative policy in Idaho as it pertains to crime and criminal justice. This class will be a forum for the application of practical knowledge of policy theory and evaluation to crime law in Idaho. Legislative policy makers will be invited to present their views on crime and criminal justice. The process of preparing and legislating crime bills will be discussed. The Governor will be invited to provide a presentation and engage the class in discussion each semester the class is offered.

#### CJA 521 CRIMINAL JUSTICE ISSUES AND POLICY IN IDAHO (3-0-3)(S). Problem-solving and policy implementation in Idaho. Executives across the Criminal Justice field in Idaho will be invited to discuss issues they have confronted and strategies they have used to

resolve those issues. This class will not focus on a particular field, but instead seek professionals from different components of the system.

CJA 522 JUVENILE OFFENDERS, CRIME, AND CRIMINAL JUSTICE IN IDAHO (3-0-3) (F). Examination of current processes in juvenile justice, policy, probation, and utilization of community based resources in Idaho. Emphasis will be placed on understanding issues and policy applications at the local and state level. PREREQ: CJA 509 or CJA 512.

CJA 523 RURAL CRIMINAL JUSTICE (3-0-3) (F). This class addresses the problems of criminal justice in a rural setting. This class is developed with the recognition that criminal justice in Idaho has emerged to deal with crime in the sparsely populated intermountain west. This class will provide perspective on the organization and delivery of criminal justice and the types of crime confronted by small municipal and Sheriff departments, and how those problems are being met locally.

CJA 591 PROJECT (0-V-3). In lieu of completing a thesis, students may create some scholarly or research product that embodies original research. A project involving secondary data analysis may be approved by the committee. Graded Pass/Fail.

CJA 593 THESIS (0-V-6) (F,S,SU). Development of a research design and analysis of data relating to an issue of theoretical and empirical significance. Students are expected to display the ability to integrate the elements of the core courses and related program of study. Graded Pass/Fail.

CJA 595 READINGS AND CONFERENCE (3-0-3) (F,S,SU). With faculty supervision, students will pursue a program of readings related to specific issues in criminal justice, and participate in a seminar for the purpose of discussing the readings and to develop a paper based upon the materials.

CJA 596 DIRECTED RESEARCH (3-0-3) (F,S,SU). Directed research on an issue of contemporary significance in criminal justice, culminating in the development of a research paper.

## **Department of History**

#### **Chair: Peter Buhler**

Library Building, Room 192 Telephone 208 426-2129 Fax 208 426-4058 http://history.boisestate.edu

e-mail: historygradbsu@boisestate.edu

**Full Graduate Faculty:** Barton Barbour, Lisa Brady, Peter Buhler, Jill Gill, Errol Jones, Joanne Klein, Lynn Lubamersky, Lisa McClain, Nicholas Miller, Charles Odahl, Sandra Schackel, Todd Shallat, Shelton Woods, Michael Zirinsky

Associate Graduate Faculty: John Bieter

## **Graduate Degrees Offered**

- · Master of Arts in History
- Master of Applied Historical Research

## **General Information**

The Master of Arts in History and the Master of Applied Historical Research degrees prepare students for work in the field of history. The History Masters programs are based upon a solid, committed faculty and multiple resources. With fifteen permanent and many adjunct faculty, the department of history offers courses in a wide variety of topics in the fields of non-western, United States, and European history. Graduate faculty are deeply involved in research and writing in their respective major fields (for more information on the faculty, see the department web page: http:// history. boisestate.edu). The department of history encourages a collegial atmosphere in which students and faculty work closely together. Its main goal is to prepare students for further study or for a successful career in history. Besides a faculty rich in its diversity and talents, the location of the university in the capital city of Idaho gives students access to the State Archives, Idaho State Historical Museum, the state's Law Library, the Survey Research Center, the Frank Church Archive, and other research facilities. Boise State University's Albertsons library has a collection of almost 550,000 bound volumes and periodicals and subscribes to more than 4,900 serials. It is also a selective US Government and Canadian document depository, as well as an Idaho State depository. The interlibrary loan system makes the holdings of other excellent collections accessible to Boise State students. Several large corporations with home offices in Boise have opened their archives to students and faculty doing research on department-supported topics.

Advising of Incoming Graduate Students: The coordinator of graduate studies in history will act as temporary advisor for all newly admitted students. The student will establish a supervisory committee as soon as possible, normally during the first semester enrolled. The committee chair will act as advisor and thesis or project director. Other

members of the committee will be chosen by the student and his or her advisor. The entire program leading to the degree will be planned by the student in conjunction with his or her supervisory committee.

## **Application and Admission Requirements**

**Application Procedures:** The history department accepts new candidates for the fall or spring semesters. To be admitted for the fall semester, applications must be completed prior to January 15. By that time the student will need to have deposited the following with the graduate college: the application fee, an application form, and transcripts from all schools of higher education previously attended.

Applicants must also send directly to the director of graduate studies in history a letter of application explaining why the student wishes to be admitted, a sample of the applicant's writing skills (e.g., seminar paper, senior thesis, or published article), and at least two letters of recommendation from persons competent to judge the applicant's potential for graduate study in history. Students also must provide their Graduate Record Examination (GRE) scores. To be considered for a Graduate Assistantship, the GRE scores must be received by January 15. One year of a foreign language is required to graduate; the language credits will not count towards the degree. Until a student completes the language requirement, s/he will retain provisional status. The History Department can take no action on the application until all of the above materials have been received.

**Admission:** Minimum requirements include a bachelor's degree in history, or its equivalent, from an accredited institution or a strong history background (more than 20 semester hours) within their undergraduate program. Minimum standards for admission with regular status to the history graduate program include a minimum GPA of 3.00 with 3.20 in history and 3.20 for the last two years of undergraduate study. Students not meeting these minimum requirements for admission with regular status may be granted provisional status.

## Master of Arts in History

#### **Coordinator of Graduate Studies:**

Fall:Nicholas Miller; Spring: Jill Gill Library Building, Room 179 Telephone 208 426-2129

e-mail: historygradbsu@boisestate.edu

**Master of Arts in History:** The Master of Arts in History prepares students to work as research historians or to continue in history doctoral programs. The degree culminates with the completion of a thesis, which is a written examination of a historical topic, based on primary source research, and defending a hypothesis that is original and compelling. The topic and scope of the thesis will be determined by the student in consultation with the advisory committee.

### College of Social Sciences and Public Affairs Department of History

## **Degree Requirements**

Master of Arts in History	
Course Number and Title	Credits
HIST 500 Historians and Historical Interpretation	3
HIST 501 Sources of Human Traditions	3
Approved History Electives21	21
OR	
Approved History Electives	
Approved Electives Outside of History9	
HIST 593 Thesis	6
TOTAL	33
Note: One year of foreign language is required for graduation; thes	e credits

## Master of Applied Historical Research

#### **Coordinator of Graduate Studies:**

do not count towards the required 33 credits for the degree.

Fall:Nicholas Miller; Spring: Jill Gill Library Building, Room 179 Telephone 208 426-2129

e-mail: historygradbsu@boisestate.edu

Master of Applied Historical Research: The Masters in Applied Historical Research gives students the opportunity to combine an existing expertise with the study of history. Possible emphases include public history, urban affairs, the environment, policy studies (local, state, or international), and applied cultural studies. The applied research project is the cumulative activity for the Master of Applied Historical Research. All projects, regardless the medium, must include a substantial written portion of no less than 5,000 words. The written portion must place the research in appropriate scholarly context. It must demonstrate scholarly competence in writing, research, analysis, and historical documentation.

## **Degree Requirements**

Master of Applied Historical Research	
Course Number and Title	Credits
HIST 500 Historians and Historical Interpretation	3
HIST 501 Sources of Human Traditions	3
HIST 502 Topics in Applied Historical Research	3
Approved History Electives	18
Approved History electives	
HIST 591 Project	6

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Master of Applied Historical Research (continued)	
TOTAL	33
Note: One year of foreign language or a technical equivalent is required for	

## **Course Offerings**

Also see University-wide Graduate Course Descriptions.
HIST 500 HISTORIANS AND HISTORICAL INTERPRETATION

**(3-0-3) (F).** A study of major historians and schools of historical interpretation from Ancient Greece to the twentieth century. Discussion concentrates on written history and the problems of interpretation. Oral and written participation and a major paper are required. PREREQ: admission to graduate program or PERM/CHAIR.

**HIST 501 SOURCES OF HUMAN TRADITION (3-0-3)(S).** Topics in the History of Humanity beginning with the Classical Greeks and other ancient traditions through the present era. A comparative study of intellectual and cultural trends reflected in the human philosophical tradition, both secular and religious. PREREQ: Admission to the graduate program or PERM/CHAIR.

HIST 502 APPLIED HISTORICAL RESEARCH (3-0-3)(S). A seminar on the use and abuse of history in nonacademic settings. Potential topics include the application of historical thinking and methods in foreign policy, business history, city planning, historic preservation, environmental assessment, library and archives, historic sites, and museums. PREREQ: Admission to the graduate program or PERM/CHAIR.

HIST 580 SELECTED TOPICS: GRADUATE SEMINAR IN EUROPEAN HISTORY (3-0-3) (F/S/SU). Critical analyses of source materials and historical scholarship on topics of restricted scope in European history. Emphases placed upon student reports, class discussions, individual research on relevant topics and the writing of historical papers. PREREQ: Admission to graduate program or PERM/CHAIR.

HIST 581 SELECTED TOPICS: GRADUATE SEMINAR IN U.S. HISTORY (3-0-3)(F/S/SU). Critical analyses of source materials and historical scholarship on topics of restricted scope in U.S. History. Emphases placed upon student reports, class discussions, individual research on relevant topics and the writing of historical papers. PREREQ: Admission to graduate program or PERM/CHAIR.

HIST 582 SELECTED TOPICS: GRADUATE SEMINAR IN REGIONAL HISTORY (3-0-3) (F/S/SU). Critical analyses of source materials and historical scholarship on topics of restricted scope in Regional history. Emphases placed upon student reports, class discussions, individual research on relevant topics and the writing of historical papers. PREREQ: Admission to the graduate program or PERM/CHAIR.

## Department of Public Policy and Administration

Chair: Les Alm

Public Affairs and Art West Building, Room 127 Telephone 208 426-1476 FAX 208 426-4370 http://ppa.boisestate.edu

**Full Graduate Faculty:** Les Alm, Patricia Fredericksen, John Freemuth, Richard Kinney, Susan Mason, Janet Mills, Gary Moncrief, James Weatherby, Stephanie Witt

**Adjunct Graduate Faculty:** Daniel Chadwick, Kenneth McClure, Charles Moss, Cathy Silak, William Whelan, Stephen Wilson, Jeffrey Youtz

## **Graduate Degrees Offered**

- · Master of Public Administration
- Graduate Certificate in Community and Regional Planning
- · Graduate Certificate in Conflict Management

## Master of Public Administration

**Director of Graduate Studies:** Les Alm Public Affairs and Art West Building, Room 127 Telephone 208 426-1476 e-mail: mpa@boisestate.edu

### **General Information**

Public Administration Education: The Department of Public Policy and Administration offers the master's degree in public administration (MPA), an important academic nucleus of the University's designated area of emphasis in public affairs. As the urban university in Idaho located in the capital city, Boise State has been given the mandate to provide educational opportunities related to public affairs. The Department offers this degree to help fulfill that mandate. It is the only MPA accredited by the National Association of Schools of Public Affairs and Administration (NASPAA) in Idaho and one of only seven in the six states surrounding Idaho.

The MPA is designed to prepare pre-service students and in-service professionals for positions of leadership in public service. Administrators and other staff members in all levels of government, non-profit organizations and private sector governmental affairs departments take advantage of the general administrative and policy analysis curriculum offered in the MPA. The curriculum provides the theoretical and practical dimensions of public management necessary to assist students seeking public service careers. The MPA has three concentrations: (1) General Public Administration (2) Environmental and Natural Resource Policy and Administration, and (3) State and Local Government Policy and Administration.

Based upon its lead role in public policy, the Master of Public Administration plays an important role in the administration and delivery of courses in the Master of Health Science, Health Policy emphasis.

**Public Administration Applied Research and Service:** 

In keeping with the University's role and mission in public affairs, **The Public Policy Center** is involved in a number of important training and applied research activities that have major statewide impact. In addition to a number of specialized projects funded by grants and contracts, the Center sponsors the annual Mountain West Municipal Clerks and Treasurers Institute, and the City Managers and Administrators Conference.

The Center also produces handbooks that are widely used by officials throughout the state: the *Idaho Legislative Manual* for legislators, and the *Handbook for Elected County Officials*.

In 1995, the U.S. Environmental Protection Agency designated Boise State University as the location for its Region 10 **Environmental Finance Center**, one of only nine in the U.S. The Center's central goal, under the administration of the Department of Public Policy and Administration, is to help create sustainable environmental systems for protecting public health and the environment by educating and training state and local officials.

## **Application and Admission Requirements**

Students interested in the MPA program must first submit a graduate application to the Graduate Admissions Office. If approved, the applicant receives a certificate of admission to enroll in courses at Boise State. This certificate of admission is a **prerequisite** to admission into the MPA program, but does not by itself guarantee admission into the MPA program. (The student is advised to consult the Graduate Admission Policies section of this catalog for more detail on admission to the Graduate College.)

Applicants admitted to the Graduate College who wish to apply to the MPA program must meet the following requirements prior to enrollment in MPA courses:

- Meet with the MPA Director of Graduate Studies to discuss the admission process, the applicant's career interests, and reasons for seeking admission to the MPA program.
- Possess a baccalaureate degree from an accredited institution.
- 3. Demonstrate satisfactory academic competency by attaining an overall GPA of at least 3.0 and a minimum combined score of 1,000 on the Graduate Record Examination (GRE) verbal and quantitative sections. The GRE requirement can be waived for students who have earned a master's degree from an accredited program.
- Submit official transcripts from all previous academic institutions to the Graduate Admissions Office.

- Submit three letters of reference, in which the applicant's academic potential is evaluated, to the MPA Admissions Committee, Department of Public Policy and Administration, Boise State University, 1910 University Drive, Boise, ID 83725-1935.
- 6. Submit the MPA Data Form, and a formal statement of at least 500 words explaining the applicant's educational and career objectives.
- 7. Applicants who do not meet all of the above requirements MAY be recommended by the MPA Admissions Committee for admission with provisional graduate status. However, these students must satisfy all of the conditions of their provisional status before they will be recommended for regular graduate status. Application files are due February 1 for Fall admission and September 1 for Spring admission.
- 8. Students may not take more than 9 credits (3 of which can be a core class) prior to official acceptance into the MPA program.
- During the semester following acceptance into the MPA program, students should 1) meet with their advisor;
   complete their Program Development Form; and 3) enroll in PUBADM 500.
- 10. Students accepted into the MPA Program who have earned a Certified Public Managers Certificate (CPM) from the State of Idaho may petition to the Director of Graduate Studies, DPPA to have the number of credits needed to receive an MPA Degree reduced from 39 to 36, with the reduction coming from the 18 required elective credits.
- 11. Students are allowed only 3 credits of pass/fail and 3 credits of workshop to count toward their MPA degree.
- 12. All students not officially accepted to the MPA program must get permission numbers from instructors to enroll in MPA classes.

## **Degree Requirements**

Master of Public Administration	
Course Number and Title	Credits
MPA students must successfully complete at least 39 semester credit hours of approved MPA course work. Twenty-one semester credit hours are core courses. The eighteen additional semester credit hours are in the student's area of emphasis and/or in the electives requirement. Some students may also be required to complete the public service internship which is explained below.	
Course Selection Selection of courses is to be made in consultation with the student's academic advisor.	

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Master of Public Administration (continued)	
Core Requirements  Each MPA student is required to complete the following core courses. The core courses emphasize the knowledge and skills necessary to be effective in public service management and leadership. Each class includes an exploration of student values and public service ethics.  PUBADM 500 Administration in the Public Sector 3 PUBADM 501 Public Policy Process	21
Area of Emphasis Requirements  An area of emphasis is a concentration or major in the program. Each MPA student is to complete 12 semester credit hours in one of the following three areas of emphasis. Selected Topics courses will be offered to supplement area of emphasis requirements.  1. General Public Administration: This area of emphasis is provided to accommodate those students desiring preparation in public administration as a "generalist" rather than a "specialist" in a particular area. Students should select the 12 credit hours of course work from the non-core MPA courses listed in this catalog.	12
2. Environmental and Natural Resource Policy and Administration:  PUBADM 540 Contemporary Issues in Natural Resource and Environmental Policy and Administration	

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Policy and Administration......3

Master of Public Administration (continued)	
3. State and Local Government Policy and Administration:  All students in this area of emphasis take the following course:  PUBADM 560 State and Local Government Policy and Administration	
PUBADM 540 Contemporary Issues in Natural Resource and Environmental Policy and Administration <b>OR</b> PUBADM 541 Environmental and Regulatory Policy and Administration	
Electives Students must complete 6 elective semester credit hours in addition to their area of emphasis and core requirements. These credits may be taken as course work or as a Directed Research (PUBADM 696) which relates to their area of emphasis.	6

#### **Transfer of Graduate Courses**

**TOTAL** 

Because of a cooperative agreement made with Idaho State University and the University of Idaho, the MPA credits earned at those institutions can, with approval, be accepted into the Boise State University program. Transfer of credit from all other institutions is limited to nine (9) semester credits.

39

#### **Public Service Internship**

Those MPA students without at least one year of administrative experience in a public sector or other public affairs agency are to complete a public service internship. The internship is served in a government office at the local, state or national level or in an appropriate public affairs organization, such as a private, nonprofit agency. The credits received for the internship are in addition to the 39 semester credit hours from the core area and area of emphasis. The internship component comprises six (6) semester credit hours. The internship is meant to be a meaningful experience for both the MPA student and the organization in which the internship is served. Through the internship, students can further enhance their preparation for administrative work. At the same time, they are expected to make a valuable contribution to their assigned organizations. The internship is usually served when the student is near completion of the MPA program.

## Graduate Certificate in Community and Regional Planning

**Director of Certificate Program:** Susan Mason Public Affairs and Art West Building, Room 126F Telephone 208 426-2658 Fax 208 426-4370

e-mail: susanmason@boisestate.edu

#### **General Information**

The Graduate Certificate in Community and Regional Planning assists working professionals and students to understand and respond to community needs in planning. The certificate program focuses on a general understanding of the elements and current practices in planning, as well as technical skills needed by practicing planners.

## **Application and Admission Requirements**

A prospective student may apply at any time but must follow the general application procedures for admission to a graduate program (see the Graduate Admission Regulations section of this catalog). If approved by the Graduate College, the applicant receives permission to enroll in graduate courses at Boise State. The Admission to the Graduate College is a prerequisite to admission to the graduate Certificate in Community and Regional Planning Program but by itself is not a guarantee of admission into the Community and Regional Planning Certificate Program.

Applicants admitted to the Graduate College who wish to apply to the Graduate Certificate in Community and Regional Planning Program must meet the following requirements prior to enrollment in the planning certificate courses:

- Possess a baccalaureate degree from an accredited institution.
- Demonstrate satisfactory academic competency by attaining an overall GPA of at least 3.0 in previous collegelevel course work.
- Meet with the Director of the Certificate in Community and Regional Planning Program to discuss the admission process, the applicant's career interests, and the reason for seeking admission to the Graduate Certificate in Planning Program.
- 4. Submit three letters of reference, in which the applicant's academic potential is evaluated, to the Director, Certificate of Community and Regional Planning Program, Boise State University, 1910 University Drive, Boise, ID 83725-1935. (For applicants whose academic record predates the application by five years or more, supervisors may submit letters of recommendation.)
- Submit a letter of interest and resume to the Director of the Community and Regional Planning Certificate Program.

- 6. Applicants who do not meet all of the above requirements MAY be allowed to enroll in the program with provisional graduate status in the Certificate Program. However, these students must satisfy all of the conditions of their provisional status before they will be recommended for regular graduate status in the Certificate Program. Application files are due February 1 for Fall admission and September 1 for Spring admission.
- Students may not take more than 6 credits (3 of which can be a core class) prior to official acceptance into the Certificate Program.
- 8. Prior to the first the semester of course work students must meet with the Director to complete their Program Development Form.

Once the file for an applicant is complete, it will be evaluated by the Director of the Graduate Certificate in Community and Regional Planning Program and its admission faculty committee. An admission recommendation will be forwarded to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant. Admission to and successful completion of the Graduate Certificate in Community and Regional Planning Program does not guarantee admission to any other graduate program.

If students would like to simultaneously enroll in another Graduate degree program, they may do so subject to the conditions outlined in the Regulations for Graduate Certificate Programs (under Simultaneous Enrollment in Graduate Certificate and Degree Program) in this catalog.

## **Certificate Requirements**

A minimum of 15 credits is required for the completion of the Graduate Certificate in Community and Regional Planning. The curriculum is comprised of 9 credit hours of required course work and 6 additional credits of elective courses.

Graduate Certificate in Community and Regional Planning	
Course Number and Title	Credits
Core courses	9
Each Community and Regional Planning Certificate	
student is required to complete nine credit hours of	
core courses.	
PUBADM 520 Introduction to Community and	
Regional Planning3	
PUBADM 521 Intergovernmental Relations <b>OR</b>	
PUBADM 560 State and Local Government 3	
PUBADM 582 Selected Topics: Public Policy and	
Policy Analysis: Introduction to Policy	
Formation: Geographic Information Systems	
(GIS) <b>OR</b>	
GEOG 560 Introduction to Geographic	
Information Systems 3	

— continued —

Graduate Certificate in Community and Regional Planning (continued)	
<b>Elective Courses</b>	6
Students must complete 6 credit hours from the	
electives listed below or other graduate courses.	
Note: Not more than three credit hours of DISPUT	
courses may be counted toward the certificate	
requirements.	
CMGT 570 Land Development3	
DISPUT 502 Negotiation Theory and Practice 1	
DISPUT 503 Conflict Intervention Methods 1	
PUBADM 522 Planning: Process and Practice 3	
PUBADM 523 Planning and Zoning 3	
PUBADM 586 Selected Topics: Community and	
Regional Planning1-3	
Other Graduate Courses—Graduate courses in a	
related field. All courses to be selected with student	
input and approved by the supervisory committee.	
TOTAL	15

## **Course Offerings**

#### PUBADM - PUBLIC ADMINISTRATION

#### PUBADM 500 ADMINISTRATION IN THE PUBLIC SECTOR

**(3-0-3)(F/S).** Designed to introduce students to the broad field of public administration at the graduate level. The course emphasizes three major themes: American government, statistical methods, and the philosophy of public administration.

#### PUBADM 501 PUBLIC POLICY PROCESS (3-0-3)(F/S).

Process of policy-making both within an agency and within the total governmental process, emphasizing policy and program planning, policy implementation and the value system of administrators.

#### PUBADM 502 ORGANIZATIONAL THEORY (3-0-3) (F/S).

Theories of organization behavior and management, with special attention given to public sector organizations. Issues and problems related to the non-profit sector will also be addressed.

#### PUBADM 503 RESEARCH METHODS IN PUBLIC

**ADMINISTRATION (3-0-3) (F/S).** An introduction to quantitative and qualitative data analysis with an emphasis on using descriptive and inferential statistics as tools in both public policy analysis and public program analysis. The use of quantitative analysis to support management decision making is examined. Computers, especially microcomputers, will be used in the analysis of quantitative data. PREREQ: PUBADM 500.

## PUBADM 504 PUBLIC BUDGETING AND FINANCIAL

**ADMINISTRATION (3-0-3) (F/S).** Determination of fiscal policy, budgeting processes, and governmental forms of budgeting. Consideration of fiscal policy and processes in various program areas. Emphasis on the interface between technical and political processes.

#### PUBADM 505 PUBLIC PERSONNEL ADMINISTRATION

**(3-0-3) (F/S).** An examination of the personnel/human resource management role as it has evolved in the public sector. The multiple responsibilities of personnel managers in the public sector will be examined, and the link between public policy and personnel management will be identified.

PUBADM 511 DECISION TECHNIQUES FOR PUBLIC ADMINISTRATORS (3-0-3) (F/S). Methods for operations research

and management science are used to analyze decisions as well as to plan and monitor program implementation. The usefulness of these methods in public sector and other public affairs organizations is considered.

**PUBADM 520 INTRODUCTION TO COMMUNITY AND REGIONAL PLANNING (3-0-3) (F/S).** A study of the theories, objectives, techniques, and problems of governmental planning within cities, metropolitan areas and regions, as well as at the national level of government in the United States. A discussion of the planning profession and the politics of planning.

**PUBADM 521 INTERGOVERNMENTAL RELATIONS (3-0-3) (F/S).** Interunit cooperation and conflict in the American federal system, including national-state-local, and interlocal relations.

**PUBADM 522 PLANNING: PROCESS AND PRACTICE** (3-0-3) (F/S). Examines the role of planners and the processes and techniques used in the planning profession. Types of economic analysis, forces in the development of cities, human capital and non-labor resources, making plans, strategic planning, involving the public and citizen participation.

**PUBADM 523 PLANNING AND ZONING (3-0-3) (F/S).** Examines zoning theory, concepts, techniques and procedures in the practice of zoning. An introduction to zoning; the process; the legal aspects of zoning and its financing; implementing the comprehensive plan and integrating city and regional plans; responsible growth; and the transportation/land use connection.

**PUBADM 530 ADMINISTRATIVE LAW AND REGULATION** (3-0-3) (F/S). Sources of power and duties of administrative agencies, rules and regulations made by agencies through investigation and hearings, judicial decisions and precedents relating to administrative activities.

**PUBADM 531 LABOR RELATIONS IN THE PUBLIC SECTOR** (3-0-3) (F/S). A case study of the trends and development of the legal context of labor-management relations in the public sector, including collective bargaining relationships, management rights and responsibilities, political and civil rights of public employees, and alternative modes of dispute resolution. Collective bargaining and grievance exercises will be conducted.

PUBADM 540 CONTEMPORARY ISSUES IN NATURAL RESOURCE AND ENVIRONMENTAL POLICY AND ADMINISTRATION (3-0-3) (F/S). Examines current and topical

issues and controversies in natural resource and environmental policy from the perspective of public policy and public administration.

PUBADM 541 ENVIRONMENTAL AND REGULATORY POLICY AND ADMINISTRATION (3-0-3) (F/S). Examines aspects of environmental regulatory politics and policy. Topics examined include the politics of regulation, pollution and energy policy, and intergovernmental environmental management.

**PUBADM 542 SCIENCE, DEMOCRACY AND THE ENVIRONMENT (3-0-3) (F/S).** Examines the role of science and scientists in the formation of U.S. environmental policy making. Special attention is given to the tension between elite and democratic forms of decision making.

**PUBADM 543 PUBLIC LAND AND RESOURCE POLICY AND ADMINISTRATION (3-0-3) (F/S).** Examines the major issues, actors, and policies affecting the public lands and resources of the United States. Special attention is paid to the processes, institutions, and

organizations that influence how public land policy and resource policy is made.

PUBADM 550 THE EXECUTIVE AND THE ADMINISTRATIVE PROCESS (3-0-3) (F/S). This course covers the powers and responsibilities of elected and appointed executives in the public sector. Concepts examined in the class include leadership and management, executive roles, management theories and styles, relationships with the separate branches of government and other actors in the political environment. The unique position of the executive between politics and administration and the relevant activities in policy formation through implementation form the basis of discussion.

**PUBADM 560 STATE AND LOCAL GOVERNMENT ADMINISTRATION (3-0-3) (F/S).** This course examines state and local government administration in a political and organizational context and the role of state and local governments in policy administration within the U.S. federal system.

PUBADM 570 PUBLIC MANAGEMENT SKILLS AND TECHNIQUES (3-0-3) (F/S). This course addresses such knowledge and skills for managers and leaders in public organizations as: personal assessment; leading and managing others; aspects of self and others which underlie behavior; managing stress and time; decision making; public participation; working with elected and appointed public officials; working with the media; solving problems; communicating supportively and assertively; appropriately using power and influence; understanding motivational processes; managing conflicts; empowering and delegating; and building teams.

PUBADM 571 ETHICS IN THE PUBLIC SECTOR (3-0-3) (F/S). Examination of ethical dilemmas facing civil servants and elected officials utilizing case studies, current ethics statutes, and approaches in the public administration literature to the subject.

**SELECTED TOPICS (1-3 Variable).** To be offered as staff availability permits:

PUBADM 580 ADMINISTRATIVE THEORY AND PRACTICE

PUBADM 581 NATURAL RESOURCE & ENVIRONMENTAL POLICY

PUBADM 582 PUBLIC POLICY AND POLICY ANALYSIS PUBADM 583 PUBLIC MANAGEMENT SKILLS AND TECHNIQUES

PUBADM 584 STATE AND LOCAL GOVERNMENT POLICY AND ADMINISTRATION

PUBADM 585 INTERGOVERNMENTAL RELATIONS
PUBADM 586 COMMUNITY AND REGIONAL PLANNING

#### PUBADM 590 PUBLIC SERVICE INTERNSHIP (Variable

**credit).** Arranged as field experience for those students with no prior experience in governmental or other organizational assignments. Such internships will be established and arrangements made for placement through the MPA Internship Director.

PUBADM 595 READING AND CONFERENCE (1-4 credits).

Directed reading on selected materials in public administration and discussion of these materials, as arranged and approved through major advisor.

**PUBADM 597 SPECIAL TOPICS (1-3 credits).** These courses are offered occasionally. Examples of Special Topics courses offered include Grant Writing, The Politics of Volunteerism, Organizational

Leadership, and Practical Management Strategies for Non-Profit Organizations.

#### PUBADM 599 CONFERENCE OR WORKSHOP (1 credit).

Conferences or workshops covering various topics in public administration may be offered on an irregularly scheduled basis, according to student interest and staff availability. No more than 3 credits provided through conferences or workshops can be applied toward the MPA.

**PUBADM 600 ASSESSMENT (3-0-3) (F/S).** This course serves as the final comprehensive assessment of student knowledge of the major ideas that define public administration and must be taken during the final semester of a student's graduate program. PREREQ: PERM/CHAIR.

**PUBADM 696 DIRECTED RESEARCH (3-6 credits).** Students work with a single professor in completing a project that includes original research.

## Graduate Certificate in Conflict Management

Graduate Program Director: Suzanne McCorkle

Public Affairs and Arts West, Room 123F Telephone 208 426-3928 FAX 208 426-4370

e-mail: smccork@boisestate.edu

#### **General Information**

The Graduate Certificate in Conflict Management assists working professionals and students to understand and respond to interpersonal and group conflict. The certificate program focuses on understanding the causes and productive responses to interpersonal conflict, including third-party facilitation and mediation, as well as upon the understanding of conflict in larger groups and the skills of facilitating high conflict meetings.

## **Admission Requirements**

- 1. Admission to the Graduate College
  - A. Send Graduate Admission Application and applicable fee to the Graduate Admissions Office
  - B. Request official transcripts from each institution previously attended be sent directly to the Graduate Admissions Office.

Contact the Director of the Boise State University Office
of Conflict Management Services for an advising and
admissions interview. All applicants will be notified of the
admission decision by regular mail.

Suzanne McCorkle, Ph.D.
Director, Office of Conflict Management Services
Boise State University
Boise, Idaho 83725-1935
208 426-3928
smccork@boisestate.edu

 Admission to and successful completion of the Conflict Management certificate program does not guarantee admission to any other graduate program.

## **Certificate Requirements**

Graduate Certificate in Conflict Management Generalist Option	
Course Number and Title	Credit
*DISPUT 500 Basic Mediation	3
DISPUT 501 Human Factors in Conflict Management	1
DISPUT 502 Negotiation Theory and Practice	1
DISPUT 503 Conflict Intervention Methods	1
DISPUT 504 Facilitating Groups in Conflict	1
DISPUT 505 Culture and Conflict	1
Electives	
DISPUT 597, 594, or other approved electives	4
TOTAL	12

\*Candidates who have already completed DISPUT 400 or other equivalent undergraduate basic mediation courses will waive DISPUT 500 and then take three additional graduate credits of approved elective coursework.

#### Graduate Certificate in Conflict Management Competency Option\*\* **Course Number and Title** Credit \*DISPUT 500 Basic Mediation 3 DISPUT 501 Human Factors in Conflict Management 1 DISPUT 502 Negotiation Theory and Practice 1 DISPUT 504 Facilitating Groups in Conflict 1 DISPUT 505 Culture and Conflict 1 2 DISPUT 590 Internship DISPUT 546 Competency Exam 1 Electives 2 DISPUT 597, 594, or other approved electives TOTAL

- \*Candidates who have already completed DISPUT 400 or other equivalent undergraduate basic mediation courses will waive DISPUT 500 and then take three additional graduate credits of approved elective coursework.
- \*\*Current Idaho Mediation Association Certified Practicing Mediators may waive the internship and competency exam and substitute three additional graduate credits of approved elective coursework.

## **Course Offerings**

#### **DISPUT - DISPUTE RESOLUTION**

**DISPUT 500 BASIC MEDIATION SKILLS (3-0-3) (F/S).** Students learn the theoretical fundamentals of negotiation and mediation, types of mediation, mediation models, mediation case work skills, building the mediation plan, interpersonal skills for mediation, and various resolution techniques. Students will mediate several actual or simulated practice cases. Cannot be taken if credit has already been received in DISPUT 400.

#### DISPUT 501 HUMAN FACTORS IN CONFLICT MANAGEMENT

(1-0-1)(F). This course presents communication theories to assist managers understanding, analyzing, and managing conflict. The course focuses on the causes of conflict and includes the influence of gender and culture. The course is pragmatic as well as theoretical.

#### **DISPUT 502 NEGOTIATION THEORY AND PRACTICE (1-0-1)**

**(F).** The successful manager in professional settings is involved in a variety of negotiation activities. The tactics, strategies, and operations of effective and ineffective bargaining/negotiation behaviors will be presented. The course develops negotiator skills and knowledge leading to collaborative based action and solutions.

#### DISPUT 503 CONFLICT INTERVENTION METHODS (1-0-1)(F).

This course overviews the various contexts of third party intervention into conflict: facilitation, public involvement processes, mediation, and arbitration, and develops skills at first level supervisor/manager intervention into employee conflicts.

#### DISPUT 504 FACILITATING GROUPS IN CONFLICT (1-0-1)(S).

Public input processes on controversial issues may generate conflict. The causes and skills for facilitating public input processes will be discussed, as well as techniques for facilitating conflict within small and large group meetings.

**DISPUT 505 CULTURE AND CONFLICT (1-0-1)(S).** Managing conflicts with persons from other cultural backgrounds than oneself is particularly challenging. Common errors in interpersonal conflict management and mediation will be discussed, along with perspectives to ameliorate the difficulties in conflict management across cultural lines.

#### **DISPUT 546 MEDIATION COMPETENCY BOARD (0-0-1)**

**(F/S).** Competency-based testing is required by several mediation professional organizations. Students conduct case work and mediate a case from within their emphasis area before a panel of expert mediators. Students discuss issues of mediation within their specialty area. (Pass/Fail) PREREQ: PERM/PROGRAM DIRECTOR.

## School of Social Work

**Director: Roy Rodenhiser** 

Education Building, Room 716 Telephone 208 426-1568 FAX 208 426-4291 http://www.boisestate.edu/socwork

nttp.//www.boisestate.edu/socwork

Full Graduate Faculty: Gretchen Cotrell, Daniel Harkness, Daniel Huff, William Whitaker

Associate Graduate Faculty: Robin Allen,

Denice Goodrich Liley

Adjunct Graduate Faculty: James Knapp

## **Degree Requirements**

- Master of Social Work Two Year Program
- Master of Social Work Advanced Standing
- Graduate Certificate in Gerontological Studies

### Master of Social Work

**Graduate Program Coordinator:** William Whitaker Education Building, Room 716 Telephone 208 426-4044 e-mail: wwhitak@boisestate.edu

### **General Information**

The MSW is a two-year full-time graduate program, accredited by the Council on Social Work Education (reaffirmed in 1999). The program is designed to prepare students for advanced social work practice with individuals and families. Students learn clinical, organizational, policy, and administrative skills necessary for promoting social justice and equality, and enhancing the quality of life for all people. The program provides a broad and in-depth knowledge base in order to prepare students for advanced social work practice in a wide array of settings.

## **Application and Admission Requirements**

Applications for both programs (two year and advanced standing) are available online at www.boisestate.edu/socwork. Applications for both programs are processed and reviewed starting January 1 on a continuous basis until program enrollment limits are met. Closing date for admission into the two year program is August 1. Closing date for advanced standing is June 15. Enrollment in both programs is limited

and the admission process is very competitive. Early application is strongly advised. When enrollment capacities are filled, a waiting list of qualified applicants is started. As seats become available, qualified applicants on the wait list are notified of program availability and offered admission into the program. Accepted applicants must reserve their seat in the class. Typically students are not admitted with a composite GRE score under 900 on the verbal and quantitative sections; however, factors such as education (GRE, GPA, and continuing education courses), social work experience (paid and/or voluntary), personal information, and diversity are considered in the admission decision. Criteria for admission into the MSW program:

- 1. Completion of the Boise State University Graduate Admissions Application and The School of Social Work Application for admission as a graduate student.
- 2. Completion of the Graduate Record Examination (GRE) within five years preceding the application. The verbal and quantitative sections of the GRE test will be reviewed.
- 3. A bachelor's degree from an accredited college or university with a distribution of liberal arts courses (70 quarter credits or 46 semester credits) and a minimum of 10 quarter credits or 6 semester credits in each of the general distribution areas: humanities, social sciences, and natural sciences/mathematics. Applicants must have also completed coursework with a minimum of a "C" letter grade in a human biology course with a lab (4 semester credits) and a course which contains content on descriptive and inferential statistics (3 semester credits).
- 4. An overall undergraduate grade point average (GPA) of 3.0 or higher and a GPA of 3.0 or higher for the junior and senior years of undergraduate study. Note: Applicants may not receive academic credit for work experience in the field or for life experience.

The Master of Social Work Program has one concentration: Advanced direct practice with individuals and families. Students in the two year program must complete a total of 61 credits including 18 credits in Field Practicum. Students in the Advanced Standing program complete 38 credits with 12 credits in Field Practicum.

Note: Students may receive certification to practice school social work in the State of Idaho by completing SOCWRK 597 School Social Work, SOCWRK 575 and 576 in an approved K-12 educational setting under the supervision of a professional social worker, and all other requirements for the Master of Social Work degree.

## **Degree Requirements**

Master of Social Work Two Year Program	
Course Number and Title	Credits
Year One	
Fall Semester	
SOCWRK 502 History and Philosophy of Social	
Welfare3	
SOCWRK 503 General Methods I: Small Systems	
(Micro)3	
SOCWRK 504 Social Work Practice Skills 2	
SOCWRK 512 Human Development Through the	
Life Cycle3	
SOCWRK 514 Ethnicity, Gender and Class 1	
SOCWRK 530 Foundation Research I	
Total Credits	15
Spring Semester	
SOCWRK 505 Social Policy Analysis3	
SOCWRK 515 General Methods II: Larger Systems	
(Macro)3	
SOCWRK 521 Social Dimensions of Human	
Behavior3	
SOCWRK 570 Field Practicum6	
Total Credits	15
Year Two Fall Semester	
SOCWRK 506 Individuals and Families: Policy and	
Legislation3	
SOCWRK 532 Research II: Evaluation3	
SOCWRK 550 Advanced Interventions-Comparative	
Theories3	
SOCWRK 575 Advanced Practicum 6	
Total Credits	15
Spring Semester	
SOCWRK 525 Advanced Clinical Practice with	
Individuals and Families	
SOCWRK 526 Mental Disorders	
SOCWRK 576 Advanced Practicum II	
*Two electives (2 credits each)4  Total Credits	16
	10
TOTAL	61
*Specialization Electives (2 credits each)	
Selected Topics	
(Elective options will vary from year to year, and may	
include these or other pertinent issues.)	
Violence in the Family Rural Social Work	
Substance Abuse School Social Work Women's Issues Aids Issues	
Social Work with the Elderly Family Therapy Social Work Supervision Health Issues	
Grant Writing/Administration Group Therapy	
International Social Work Political Social Work	
Social Work with People of Color	
Note: Curriculum Guidelines established by the Council on	
Social Work Education are available in the School of Social Work office.	

Master of Social Work Advanced Standing	
Course Number and Title	Credits
Applicants who are graduates of a CSWE accredited baccalaureate program in Social Work may request admission to the advanced program. The advanced standing option is an eleven-month program beginning in July of each year. Students will complete SOCWRK 514, SOCWRK 521, and SOCWRK 530 in summer school and enter the second year of the two-year program that fall.	
Criteria for admission for Advanced Standing study in the MSW program are:  1. Graduation from a CSWE Accredited Baccalaureate Social Work Program.  2. Minimum GPA of 3.0 in social work courses from an accredited undergraduate program. Students with an individual social work course with a grade less than C will be required to complete	
<ul> <li>additional equivalent content.</li> <li>This degree must have been completed within five years of the applicant's planned entry into Boise State University's MSW program OR within seven years if the applicant has substantial paid social work experience.</li> <li>All other requirements equivalent to regular admissions.</li> <li>Note: Applicants may not receive academic credit for work</li> </ul>	
experience in the field.	
TOTAL	38

## Graduate Certificate in Gerontological Studies

(See Section on Interdisciplinary Programs)

## **Course Offerings**

SOCWRK - SOCIAL WORK

#### SOCWRK 502 HISTORY AND PHILOSOPHY OF SOCIAL

**WORK** (3-0-3) (F). The major purpose of this course is to place the profession of Social Work within historical context. The course explores the development of social welfare institutions and the social work profession in the United States, emphasizing social welfare issues and social policy and programmatic responses since 1945. This course also examines the impact of human diversity on socioeconomic and political statuses and access to social welfare resources and social work services. PREREQ: Admission to MSW Program.

#### SOCWRK 503 GENERAL METHODS I: SMALL SYSTEMS

(MICRO) (3-0-3)(F). Using a strengths perspective, this course focuses on the development of professional skills associated with the provision of human services to individuals, families, and small groups. Topics include the process and content of social work interactions and professional relationships and the theoretical underpinnings

of empowerment and strengths-based practice. Students gain knowledge about social work values and ethical issues encountered in practice settings. Approaches and practice skills with individuals from differing social, gender, cultural, racial, religious, spiritual, and class backgrounds are examined. COREQ: SOCWRK 504. PREREQ: Admission to MSW Program.

#### SOCWRK 504 SOCIAL WORK PRACTICE SKILLS

(2-0-2)(F). Using a strengths perspective, this course focuses on the development and practice of interpersonal and communication skills associated with the provision of human services to individuals, families, and small groups. The major emphasis in this experiential course is on the acquisition of skills utilized in the helping interview. Communication and practice skills with individuals from differing social, gender, cultural, racial, religious, spiritual, and class backgrounds are discussed. COREQ: SOCWRK 503. PREREQ: Admission to MSW Program.

examines contemporary welfare policies, in a value-analytic framework, and in the context of the United States political economy. Emphasis is placed on values of equity, adequacy and universality of access to basic social and economic security. Policy practice skills include identification and evaluation of policy problems, including their empirical and value-dimensions, and skills in policy advocacy with legislators and with the general public. Major importance is placed on policies and programs that impact populations-at-risk, such as women and families, people of color including leading ethnic minority groups in Idaho and the region, and such easily disadvantaged groups as children, persons of varying physical and mental ability, and the aged. Professional practice values are emphasized. PREREQ: Admission to MSW Program.

#### SOCWRK 506 INDIVIDUALS AND FAMILIES: POLICY AND

**LEGISLATION (3-0-3) (F).** This advanced policy course is designed to prepare students with the knowledge and skills to analyze, design, and advocate for social welfare policy and programs, with a specific focus on policies and programs which affect families and children. The course examines various theoretical approaches to articulating family policy, as well as current policy issues and legislation. Emphasis is placed on the examination of research on family needs, and the critique of cultural values and ideological orientations which undergird policy preferences. An introduction to family policy approaches in other nations sharpen this critique. PREREQ: SOCWRK 505 or admission to Advanced Standing MSW Program.

#### SOCWRK 512 HUMAN DEVELOPMENT THROUGH THE LIFE

**CYCLE (3-0-3) (F).** Theories of human development, life stage, and subordinate group oppression will be the focus of this course. In particular, psychodynamic and cognitive humanist theories will be examined, as well as current theories of the psychologies of women and people of color. The interrelationships of sociohistorical, sociocultural, socioeconomic, interpersonal, and psychological influences on human development will be explored, with an emphasis on factors of gender, affectional orientation, ethnicity, race, and class. PREREQ: Admission to MSW Program.

#### **SOCWRK 514 ETHNICITY, GENDER AND CLASS**

**(1-0-1)(F,SU).** This experiential course in a small group format is designed to provide a positive environment for students' exploration of their attitudes toward human diversity. The major objective is that students will increase their knowledge and awareness of

the experiences of people of oppressed groups, in relation to historical prejudice and discrimination. Students will gain insight in sociohistorical and familial roots of their own biases and increase their ability to sensitively work with individuals and groups who are subjected to oppression, based on race ethnicity, gender, affectional orientation, class, and other stigmatizing characteristics. PREREQ: Admission to MSW Program.

**SOCWRK 515 GENERAL METHODS II: LARGER SYSTEMS** (MACRO) (3-0-3) (S). This course considers the many ways and means by which people organize to meet their needs and solve community issues. It develops knowledge and skills for social work practice in organizations and communities and focuses on social change toward the goal of social justice in the structure and functioning of social institutions. Skills include working with task-oriented groups, community networking and coalition-building for political advocacy and for social service program planning, needs assessment, and methods to foster community participation in community development and social action. PREREQ: Admission to MSW Program, SOCWRK 503 and SOCWRK 504.

**SOCWRK 521 SOCIAL DIMENSIONS OF HUMAN BEHAVIOR** (3-0-3)(S,SU). This course explores the impact of social systems on human behavior, in terms of sociopolitical and sociocultural forces, from an ecological systems perspective. Knowledge on the ways in which systems promote or deter the maintaining or achieving of well-being and optimal health is provided. Particular emphasis is given to the effects of prejudice and discrimination on individuals and groups, based on their particular race, ethnicity, gender, affectional orientations, class, or other stigmatizing characteristics. There is a special emphasis on working with the Hispanic/Latino population. PREREQ: SOCWRK 512 or admission to Advanced Standing MSW Program.

SOCWRK 525 ADVANCED CLINICAL PRACTICE WITH INDIVIDUALS AND FAMILIES (3-0-3)(S). The primary focus of this course is the understanding of children from a developmental perspective within the context of the family and the expanding social environment. In addition to developmental and systems theory, psychodynamic, behavioral, cognitive, structural, and current models of family therapy are examined. Understanding of assessment includes consideration of health as well as unhealthy responses and a

strengths-based perspective is encouraged. Students are expected to address ethical issues in working with families and children. PREREQ: Admission to MSW Program.

**SOCWRK 526 MENTAL DISORDERS (3-0-3) (F/S).** This course prepares students to conduct systematic biopsychosocial assessments, formulate differential diagnoses in accordance with the Diagnostic and Statistical Manual of Mental Disorders, and recommend treatment plans informed by the state-of-the-art. Championing the development of robust helping relationships that empower consumers by building on strengths, students are taught to monitor their practice for bias related to affectional orientation, disability, ethnicity, gender and race. PREREQ: Admission to MSW Program.

**SOCWRK 530 FOUNDATION RESEARCH I (3-0-3) (F,SU).** This course will distinguish science from other forms of knowledge and introduce students to ethical standards of scientific inquiry with human subjects. Addresses the scientific literature; research questions and hypotheses; measurement and error; qualitative and quantitative research methodologies; descriptive and inferential statistics; and the interpretation of findings. PREREQ: Undergraduate course with content on descriptive and inferential statistics, admission to MSW Program.

SOCWRK 532 RESEARCH II: EVALUATION (3-0-3) (F). Research II builds on the knowledge, skills, and values learned in Research I. Students learn the methods and techniques used in social work evaluation research with individuals, families and small groups. A major purpose of the course is to prepare students to participate in research and utilize outcome evaluation of practice in their agency settings. The critical role of outcome evaluation for the profession in emphasized. Students learn the scientific principles of research including conceptualization, operationalization of concepts, measurement, sampling, and analysis of data as they relate to evaluation of outcome. Methods of observation including single subject and group designs are covered. Students are required to complete an evaluation of outcome project including analysis of data utilizing statistical packages such as SPSS or SASS. PREREQ: SOCWRK 530 or admission to Advanced Standing MSW Program.

SOCWRK 550 ADVANCED INTERVENTIONS – COMPARATIVE THEORIES (3-0-3)(F). This course introduces students to the theoretical frameworks used in social work practice to bring about

change with individuals, families, and groups. Utilizing a strengths perspective, particular emphasis is placed on individualizing treatment strategies in order to address the needs of diverse, minority, oppressed, and at-risk populations. PREREQ: SOCWRK 503 and SOCWRK 504, or admission to Advanced Standing MSW Program.

**SOCWRK 570 FIELD WORK (0-20-6) (S).** This internship provides students with a supervised social work practice experience in a community social service agency. It includes experiential learning in foundation social work practice skills as well as opportunities to work with diverse populations. The internship requires 20 clock hours per week in the agency setting. Students are expected to abide by The Code of Ethics of the National Association of Social Workers in their practice with clients and agencies. Grade Policy: Students receive a Pass/Fail in the internship. PREREQ: SOCWRK 503 or admission to Advanced Standing MSW Program.

SOCWRK 571 (COUN 571) (MHLTHSCI 571) FUNDAMENTALS OF HEALTHY AGING (3-0-3) (F). Overview of gerontology presented by examining major issues related to aging. Content includes theories of aging; the impact of an aging population; and future implications at local, national, and international levels. May be taken as COUN, MHLTHSCI or SOCWRK credit, but only for one department.

**SOCWRK 575 ADVANCED SOCIAL WORK PRACTICUM I** (0-20-6) (F). This internship provides students with a supervised social work practice experience in a community social service agency. It includes experiential learning in advanced social work practice skills in a specialized setting. Experience with client groups will reflect racial, ethnic, cultural and gender diversity. The internship requires 20 clock hours per week in the agency setting. Students are expected to abide by The Code of Ethics of the National Association of Social Workers in their practice with clients and agencies. Grade Policy:

Students receive a Pass/Fail in the internship. PREREQ: SOCWRK 570 or admission to Advanced Standing MSW Program.

**SOCWRK 576 ADVANCED SOCIAL WORK PRACTICUM II** (0-20-6) (S). This internship provides students with a continued supervised social work practice experience in a community social service agency. It includes experiential learning in advanced social work practice skills in a specialized setting. Experience with client groups will reflect racial, ethnic, cultural and gender diversity. The internship requires 20 clock hours per week in the agency setting. Students are expected to abide by The Code of Ethics of the National Association of Social Workers in their practice with clients and agencies. Grade Policy: Students receive a Pass/Fail in the internship. PREREQ: Admission to MSW Program, SOCWRK 575.

#### SELECTED TOPICS.

SOCWRK 580 SOCIAL WORK WITH DIVERSE POPULATIONS.

SOCWRK 581 SOCIAL WORK WITH FAMILIES. SOCWRK 582 SOCIAL WORK WITH THE ELDERLY. SOCWRK 583 SOCIAL WORK WITH SPECIAL NEEDS POPULATIONS.

SOCWRK 584 SOCIAL WORK WITH CHILDREN AND YOUTH.

SOCWRK 585 ADVANCED SOCIAL WORK PRACTICE WITH ORGANIZATIONS AND COMMUNITIES. SOCWRK 586 SOCIAL WORK WITH GROUPS. SOCWRK 587 SOCIAL WORK SUPERVISION.

SOCWRK 594 CONFERENCE OR WORKSHOP.

SOCWRK 595 READINGS AND CONFERENCE.

SOCWRK 596 INDEPENDENT STUDY.

SOCWRK 597 SPECIAL TOPICS.

SOCWRK 696 DIRECTED RESEARCH.

## Interdisciplinary Programs

## **General Information**

Interdisciplinary graduate programs cross boundaries and involve faculty members from more than one discipline.

Interdisciplinary Programs Offered

- Master of Science in Hydrologic Sciences
- · Master of Arts in Interdisciplinary Studies
- · Master of Science in Interdisciplinary Studies
- Master of Science in Materials Science and Engineering
- Master of Engineering in Materials Science and Engineering
- · Graduate Certificate in Addiction Studies
- Graduate Certificate in Gerontological Studies

## Master of Science in Hydrologic Sciences

College of Arts and Sciences
Department of Geosciences
Graduate Program Coordinator: James McNamara

Math/Geosciences Building, Room 225 Telephone 208 426-1581 FAX 208 426-4061 e-mail: jmcnamar@boisestate.edu http://earth.boisestate.edu

#### College of Engineering Department of Civil Engineering

Engineering Technology Building, Room 201C Telephone 208 426-3764 FAX 208 426-4800 e-mail: mgribb@boisestate.edu http://coen.boisestate.edu

**Full Graduate Faculty:** Warren Barrash, Paul Dawson, Molly Gribb, Michael Knoll, Mitchell Lyle, Jodi Mead, James McNamara, George Murgel, Walter Snyder, David Wilkins

**Associate Graduate Faculty:** Shawn Benner, Jennifer Pierce

## **General Information**

The program leading to the degree of Master of Science (M.S.) in Hydrologic Sciences requires completion of a core curriculum in the hydrologic sciences, elective courses chosen to meet student goals, and original research that culminates in a publicly defended thesis. The emphasis is on the scientific principles governing the movement of water and water-borne material through natural systems, the interaction of water with

geological and biological systems, and tools to quantify and predict those movements and interactions. Participation by faculty members from both the Department of Geosciences and the Department of Civil Engineering provides enriched delivery of courses and enhanced student guidance.

## Graduate Teaching and Research Fellowships

Graduate fellowships including tuition and fee waivers are funded from three sources: appropriated state funds, endowments, and research grants and contracts. Applicants to the M.S. in Hydrologic Science program who submit all documents required by the admission procedure by February 1 of any given year will be considered for a state appropriated or endowed graduate fellowship to start the following fall semester. Information on graduate fellowships funded by research grants and contracts is available from the coordinator of the graduate program in hydrologic science. Prospective students are encouraged to contact individual faculty members for further information about research projects.

#### **Student Guidance**

The graduate program coordinator will assign a temporary faculty advisor to each student prior to the first semester of enrollment. By the end of the first semester, the advisor, in consultation with the student, will initiate the appointment of a three-person supervisory committee that will assume responsibility for student guidance.

## **Application and Admission**

An applicant must follow the general application procedures for admission to a graduate program (see Graduate Admission Regulations). Applicants are required to have a baccalaureate degree in a science or engineering discipline from an accredited college or university, and undergraduate courses equivalent to one year each of calculus, chemistry, and calculus-based physics. An applicant must also provide GRE General Test scores, three letters of recommendation from academic faculty, a letter of intent outlining goals for graduate study, and a course summary form; detailed instructions may be obtained on the internet at http://earth.boisestate.edu/ GraduatePrograms/index.htm, or from the graduate program coordinator. Once the file for an applicant is complete, it will be evaluated and an admission recommendation (regular, provisional, or denial) will be forwarded to the graduate dean. The graduate dean will make the final admission decision and notify the applicant. Admission is competitive and is not guaranteed to any applicant.

### Interdisciplinary Programs Master of Science in Hydrologic Sciences

## **Degree Requirements**

Master of Science in Hydrologic Science		
Course Number and Title	Credits	
Hydrologic Science Core	9	
GEOL 512 or CE 512 Hydrogeology3		
GEOL 516 or GEOPH 516 Physical Hydrology 3		
GEOL 526 or CE 527 Aqueous Geochemistry 3		
Electives Approved by the Supervisory Committee	15	
<b>Culminating Activity</b>		
GEOL 593 or CE 593 Thesis		
(minimum requirement)6		
TOTAL	30	

## **Course Offerings**

GEOL GEOLOGY

#### GEOL 511 ADVANCED ENVIRONMENTAL GEOLOGY

(3-0-3)(S). Land-use planning, techniques for investigation of surficial materials and water resources. Geologic hazards, surficial deposits and their engineering and hydrologic properties, ground and surface water, waste disposal. Term reports required, field trips required. PREREQ: GEOL 221 or PHYS 220.

**GEOL 512 HYDROGEOLOGY (CE 512) (3-0-3) (F).** The study of subsurface water and its relationship to surface water, the hydrologic cycle, and the physical properties of aquifer systems. Flow nets and flow through porpou and fractured media. Methods of determination of aquifer characteristics and performance and groundwater modeling. PREREQ: MATH 175.

#### GEOL 516 (GEOPH 516) PHYSICAL HYDROLOGY (3-0-3)(S).

An introduction to all aspects of physical hydrology with emphasis on the dynamics of watersheds. Topics include global circulation, precipitation, evapotranspiration, snow and snowmelt, streamflow, rainfall-runoff relations, and watershed hydrology. PREREQ: MATH 170, GEOL 101.

**GEOL 517 WATERSHED PROCESSES (3-0-3) (F).** In this course we will investigate the theoretical and empirical foundations of physical processes that govern the morphology of watersheds focusing on hillslope and fluvial processes. Our objective is to extract basic physical concepts from laws and equations that are used to describe and model various geomorphic phenomena. The course will involve a mix of lectures, student led discussion, and fieldwork. PREREQ: GEOL 313, MATH 175, PHYS 211.

#### GEOL 518 HYDROLOGIC MEASUREMENTS AND MODELING.

(3-0-3)(F)(Alternate years). An introduction to hydrologic data acquisition techniques with an emphasis on electronic logging systems, and an overview of computer models commonly used to simulate hydrologic processes. PREREQ: GEOL 416 or PERM/INST.

#### GEOL 526 (CE 527) AQUEOUS GEOCHEMISTRY (3-0-3)(F/S).

Basic tools and topics of aqueous geochemistry with an emphasis on low temperature processes in natural waters. Essentials of thermodynamics, kinetics, aqueous speciation, mineral-water interaction, and elemental cycling in the contest of surficial earth processes and environmental challenges. PREREQ: PERM/INST.

#### GEOL 530 (CE 530) VADOSE ZONE HYDROLOGY

(3-0-3)(F). Laboratory and field methods for characterizing physical and hydraulic properties of soils, solution of variably saturated flow problems using analytical and numerical techniques. Computer simulations of flow and transport in variably saturated soils. Course may be taken for either Geology or Civil Engineering credit, but not both. PREREQ: CE 412, or GEOL 412, or CE 512, or GEOL 512, or PERM/INST.

#### GEOL 533 (CE 533) CONTAMINANT TRANSPORT (3-0-3)(S).

The fate and transport of dissolved solutes and non-aqueous phase liquids in groundwater systems. Students will analyze field data and develop conceptual models for contaminated sites. The role of engineers and hydrologists in environmental litigation will be addressed through case studies. Course may be taken for either Geology or Civil Engineering credit, but not both. PREREQ: CE 412, or CE 512, or GEOL 412, or GEOL 512, or PERM/INST.

**GEOL 570 (GEOG 570) EARTH SYSTEM SCIENCE AND GLOBAL WARMING (3-0-3) (F/S).** Survey of interactions among physical biogeochemical processes involved in climate and climate feed back. Explore in detail scenarios of global warming for the next century and their reliability. PREREQ: PERM/INST.

#### GEOL 603 (GEOPH 603) SURFICIAL PROCESSES (2-2-3)

**(F/S).** Investigation of the fundamental physics of major geomorphic, hydrologic and thermal processes operating at the surface of the Earth. The objective is to deduce basic physical behavior from mathematical laws and models used to describe various surficial phenomena. Some student-led discussion and field work required. PREREQ: GEOL 313, GEOPH 502, or PERM/INST.

**GEOL 605 ADVANCED GEOMORPHOLOGY (3-0-3)(F/S).** A treatment of modern geomorphic analysis, quantifying the influences of hydrologic, biologic, atmospheric, tectonic and climatic drivers on landscape evolution and ecosystems development. PREREQ: PERM/INST.

## GEOL 623 (CE 623) (GEOPH 623) ADVANCED

HYDROGEOLOGY (3-0-3) (F). Treatment of groundwater occurrence and flow, theory fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls. Course may be taken for either Geology, Geophysics, or Civil Engineering credit, but not for credit in more than one department. PREREQ:

MATH 275, MATH 333, and GEOL 412 or GEOL 512 or CE 412 or CE 512, or PERM/INST.

#### GEOL 624 (CE 624) (GEOPH 624) APPLIED HYDROGEOLOGY

(3-0-3)(S). Quantitative determination of hydrologic parameter values and groundwater flow conditions. Conceptual models are geologic context, boundary condition, analytical and numerical solution techniques, measurement methods, applications to engineering and environmental problems. Course may be taken for either Geology, Geophysics, or Civil Engineering credit, but not for credit in more than one department. PREREO: GEOL 623 or GEOPH 623 or PERM/INST.

#### GEOL 636 STABLE ISOTOPE GEOCHEMISTRY

**(3-0-3)(S)(Alternate years).** Comprehensive overview of theory, methods, and applications of stable isotope geochemistry to a wide range of earth science problems. PREREQ: PERM/INST.

**GEOL 651 BIOGEOCHEMICAL CYCLES (3-0-3) (F/S).** A detailed investigation of the global cycling of elements and water and the

## Interdisciplinary Programs Master of Science in Hydrologic Sciences

coupled physical, chemical and biological processes and controls.  $\mbox{PREREQ: PERM/INST.}$ 

#### GEOL 653 GROUNDWATER MICROBIOLOGY (3-0-3)(F/S).

An exploration of the interface of microbiology and hydrogeology and aqueous geochemistry with an emphasis microbial processes and ecology and redox transformations produced by natural and contaminant-related disequilibrium in the subsurface. PREREQ: PERM/INST.

**GEOL 655 COUPLED BIOGEOCHEMICAL KINETICS AND TRANSPORT (3-0-3) (F/S).** A detailed investigation of the smaller scale (kilometer to micrometer) flow of elements and water through coupled physical, chemical and biological processes, with an emphasis on the interplay of mass and energy transfer rates and biogeochemical kinetic constraints. PREREQ: PERM/INST.

#### GEOL 657 REACTIVE TRANSPORT MODELING (3-0-3) (F/S).

The application of geochemical and reactive transport computer codes to coupled flow and reactive transport problems with an emphasis on subsurface systems. PREREQ: PERM/INST.

## Master of Arts in Interdisciplinary Studies

## Master of Science in Interdisciplinary Studies

**Director: Daryl Jones** 

College of Arts and Sciences Education Building, Room 601 Telephone 208 426-1414 FAX 208 426-3006

e-mail: ids@boisestate.edu

## **General Information**

Boise State University offers a Master of Arts/Master of Science degree program in Interdisciplinary Studies. In consultation with faculty, students may combine courses from more than one college or more than one department to create an individualized program of educational experience. The program is designed for mature students who wish to continue education at the graduate level but do not seek specialized training in a major area. The program is not a substitute for the traditional master's degree; rather, it is intended for students with broader interests in several fields or those whose career goals do not match fully with a single, identifiable academic unit or department. Emphasis is placed on continued intellectual and cultural development in a constantly changing society where new intellectual and career interests may extend over several traditional specializations.

The Interdisciplinary Studies (IDS) Program is administered by the Graduate College, housed in the College of Arts and Sciences, and directly supervised by the Director of Interdisciplinary Studies. A university-wide Interdisciplinary

Studies Committee consists of the Graduate Dean and one member from each academic College appointed by the respective Deans. The Director of Interdisciplinary Studies serves as the chair of that committee and oversees the program. Each student in the program also has a graduate committee composed of three faculty members from the disciplines making up the student's interdisciplinary program. The student's graduate committee has the responsibility of helping the student select a particular program of study and recommends to the Interdisciplinary Studies Committee that it be accepted as the student's formal plan of study, thereby indicating that the members of the committee regard it as a viable program of graduate study. The Interdisciplinary Studies Committee is responsible for approving the members of the proposed graduate committee and for deciding whether to approve the student's plan of study.

## **Application and Admission Requirements**

A prospective student must first satisfy general admission requirements and complete the process for admission to the Graduate College, as described in the Graduate Admission Policies and Procedures section of the *Boise State University Graduate Catalog*. General admission to the Graduate College does not guarantee admission to a graduate program in Interdisciplinary Studies. For admission to the MA or MS Program in Interdisciplinary Studies, a student must meet the following requirements:

- 1. A cumulative GPA in all prior college level work of at least 3.0 (although students who fall below this requirement but who have a cumulative GPA of at least 3.25 for the most recent 60 credit hours will also be considered).
- 2. Successful completion of the IDS Program's application process, which includes:
  - meeting with the IDS Program Director to discuss expectations and be advised as to the remainder of the application process,
  - b. selection of a graduate committee composed of 3 graduate faculty members, one of whom is to serve as committee chair,
  - c. meeting with graduate committee to discuss and prepare a degree plan,
  - d. submission of a completed Personal Data form,
  - e. submission of a completed form stating committee has met and approved that degree plan,
  - f. submission of a degree plan and three-page written statement of justification which:
    - states intellectual, professional, or vocational reasons for requesting entry into the program;
    - explains why traditional degree programs do not meet the applicant's needs; and
    - justifies the selection of courses in relation to the conception of the individualized program as a whole.
  - g. submission of two letters of recommendation,

## Interdisciplinary Programs Master of Arts or Science in Interdisciplinary Studies

h. approval of the graduate committee and degree plan by the university-wide IDS Committee.

Although each applicant's prior academic record will be examined to determine whether there are compelling reasons for making an exception, normally the Interdisciplinary Studies Committee will not consider proposed degree plans from students who fail to meet requirement (1). Applicants who wish to submit additional supporting materials such as GRE scores, letters of recommendation, or a preliminary description of their proposed program of study may do so. Letters of recommendation and preliminary program descriptions should be sent directly to the Director of the IDS Program.

Applications to the IDS Program are considered only twice a year, in October and in March. Application materials as described above must be submitted by October 1 for processing during the fall semester or by March 1 for processing during the spring semester. Applicants are strongly encouraged to submit completed IDS application materials by March 1st or October 1st of the semester prior to the semester of proposed entry into the program, so as to avoid commencing course work which may not be accepted as part of an approved degree plan. The student's graduate committee and degree plan must be approved before the completion of more than 6 credits toward the program.

## **Degree Requirements**

#### Master of Arts or Master of Science Interdisciplinary Studies

Each program is developed individually according to the student's interests and background but must be intellectually defensible and clearly interdisciplinary in nature. In addition to any Graduate College requirements not mentioned here, the requirements of the IDS Program are as follows:

- Course work must be selected from a minimum of two academic areas.
- No more than 6 credits of work completed prior to approval of the degree plan by the IDS Committee may be included in the program.

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## Master of Arts or Master of Science in Interdisciplinary Studies (continued)

- 3. No more than 11 credits of 300G or 400G courses may be applied toward the program.
- 4. No more than 9 transfer credits may be included in the program.
- 5. No more than 9 credits of directed research (596) may be included in the program.
- 6. Courses may not be challenged for credit.
- 7. The degree will consist of a total of no less than 33 credits, of which no more than 16 credits may be earned in the College of Business. Students may select (with IDS Committee approval) from a thesis/project option or a written examination option. The thesis/project will carry 6 credits. Under either option, the student will be required to draw critically upon the two or more disciplines studied and to integrate disciplinary insights.
- Students completing the thesis/project option will, upon completion of that option, meet with their 3-person graduate committee for a final review of the thesis or project.
- Students completing the examination option will take a
  written examination prepared by their 3-person graduate
  committee, with whom they will subsequently meet for a
  review of results.
- 10. Minor revisions to the plan of study may be approved by the Director of Interdisciplinary Studies upon the recommendation of the student's graduate advisor; major changes must be approved by the university-wide IDS Committee.
- All work toward the MA/MS degree in Interdisciplinary Studies must be completed within a period of seven years.

## **Course Offerings**

#### INTDIS - INTERDISCIPLINARY STUDIES

**INTDIS 591 PROJECT (0-V-6).** Students are expected to draw critically upon the two or more disciplines studies and to integrate disciplinary insights. Before beginning the Project, a prospectus must be approved by the student's graduate committee. After its completion, the Project must be defended at an oral examination scheduled by the graduate advisor. PREREQ: Admission to candidacy.

**INTDIS 593 THESIS (0-V-6).** A Thesis must reflect scholarly integration of the two or more disciplines studied and demonstrate original research or new and logical interpretation of existing data. Before beginning the Thesis, a prospectus must be approved by the student's graduate committee. After its completion, the Thesis must be defended at an oral examination scheduled by the graduate advisor. PREREQ: Admission to candidacy.

## Master of Science in Materials Science and Engineering

College of Engineering
Department of Materials Science and Engineering
Graduate Program Coordinator: Darryl Butt

Engineering and Technology Building, Room 240

Telephone 208 426-5788 FAX 208 426-2470

e-mail: bgee2@boisestate.edu

**Engineering Graduate Faculty:** Darryl Butt, Kris Campbell, Sean M. Donovan, Megan Frary, Janet Hampikian, William Knowlton, Amy Moll, Peter Mullner

**Physics Graduate Faculty:** Charles Hanna, Alex Punnoose **Chemistry Graduate Faculty:** Jeff Peloquin, Dale Russell, Martin Schimpf, Don Warner

Biology Graduate Faculty: Julia Thom Oxford

#### **General Information**

The Department of Materials Science and Engineering offers two distinct graduate degree programs. The program leading to the Master of Science in Materials Science and Engineering (M.S. MSE) is a thesis-based program designed to prepare students for research and development and further study at the doctoral level. The program leading to the Master of Engineering in Materials Science and Engineering (M.Engr. MSE) is a non-thesis program with a focus on professional development. Both programs are interdisciplinary and involve faculty members from the College of Engineering and the College of Arts and Sciences with expertise in electrical engineering, mechanical engineering, physics, chemistry, and biology.

## Admission Requirements and Application Procedures

**Admission Requirements.** An applicant must satisfy the minimum admission requirements of the Graduate College. In addition, the applicant must hold a baccalaureate degree in engineering from an ABET-accredited program or a baccalaureate degree in physics or chemistry, and must follow the application procedures specified below. Admission is competitive and the achievement of minimum requirements does not guarantee admission.

**Application Procedures.** A prospective student may apply at any time and should follow the general graduate application procedure for degree-seeking students (see Applying as a Degree-Seeking Student in this catalog). The applicant must also (1) submit a statement of purpose to the graduate program coordinator, (2) have three letters of recommendation submitted directly by the references to the graduate program coordinator, and (3) arrange to have GRE General Test scores submitted by the Educational Testing Service (www.ets.org) directly to Boise State University (code R4018). The statement of purpose should give the educational

and professional background of the student and his or her motivation for graduate study including career goals. Once the applicant's file is complete, it will be evaluated by the Materials Science and Engineering Graduate Studies Committee and an admission recommendation (regular, provisional, or denial) will be forwarded to the Dean of the Graduate College. In order to ensure proper mentoring of all graduate students, a recommendation for regular or provisional admission will not be forwarded unless a faculty member of the Department of Materials Science and Engineering is available to serve as the major advisor. The graduate dean will make the final admission decision and notify the applicant and the Materials Science and Engineering Graduate Studies Committee.

## **Advisor and Supervisory Committee**

The Materials Science and Engineering Graduate Studies Committee will initiate the assignment of a supervisory committee for each admitted student. The supervisory committee will include a major advisor who serves as chair and at least two additional members appointed such that the committee contains a representative from the College of Engineering and from the College of Arts and Sciences. The role of the supervisory committee is to guide the student in all aspects of his or her graduate study.

## **Degree Requirements**

Students must complete at least 30 graduate credits distributed as shown in the degree requirements table. A written thesis proposal and oral presentation to the supervisory committee is required prior to the completion of 15 credits applicable to the degree requirements. Work on the thesis can only be undertaken after approval of the thesis proposal by the supervisory committee. The thesis must constitute an original contribution to knowledge in materials science and engineering and must be successfully defended at a final oral examination. All work directly related to the thesis must be represented by at least 6 credits of MSE 593, PHYS 593, or CHEM 593.

Master of Science in Materials Science and Engineering	
Course Number and Title	Credits
Required Courses	13
MSE 505 Bonding and Structure of Materials 3	
MSE 508 Solid State Thermodynamics and	
Kinetics4	
PHYS 515 Solid State Physics	
PHYS 523 Physical Methods of Materials	
Characterization3	

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Master of Science in Materials Science and Engineering (co	ntinued)
Other Graduate Courses	11
Graduate courses selected from the list below and	
approved by the supervisory committee (at least 11	
credits).	
MSE 510 Electrical, Optical, and Magnetic	
Properties of Materials3	
MSE 511 Semiconductor Materials3	
MSE 512 Mechanical Properties of Materials 3	
MSE 549 Advanced Topics in Materials Science &	
Engineering3	
CHEM 411G Analytical Chemistry3	
CHEM 440G Spectrometric Identification	
CHEM 501 Advanced Inorganic Chemistry 3	
EE 540 Intro to Integrated Circuit and Mems	
Processing3	
EE 540L Intro to Integrated Circuit and Mems	
Processing Lab1	
EE 542 Photolithography3	
EE 542L Photolithography Lab1	
EE 546 Frontiers of IC Processing	
PHYS 512 Introductory Quantum Mechanics 3	
PHYS 530 Optics	
PHYS 532 Thermal Physics3	
PHYS 534 Optics Lab1	
Thesis	6
MSE 593 Thesis <b>OR</b>	
PHYS 593 Thesis <b>OR</b>	
CHEM 593 Thesis (P/F)	
TOTAL	30

## Master of Engineering in Materials Science and Engineering

College of Engineering
Department of Materials Science and Engineering
Graduate Program Coordinator: Darryl Butt
Engineering and Technology Building, Room 240
Telephone 208 426-5788
FAX 208 426-2470
e-mail: bgee2@boisestate.edu

## **Degree Requirements**

Students must complete at least 31 graduate credits distributed as shown in the degree requirements table. A maximum of 3 credits of MSE 696 Directed Research may be applied to meet the degree requirements. The comprehensive examination cannot be attempted prior to the last semester of the program. If the comprehensive examination is failed on the first attempt, then the student will be permitted a second attempt. Failure on the second attempt will result in dismissal from the program.

Master of Engineering in Materials Science and Engineering	
Course Number and Title	Credits
Required Courses  MSE 505 Bonding and Structure of Materials	13
Other Graduate Courses Graduate courses selected from the list below and approved by the supervisory committee (at least 17 credits).  MSE 510 Electrical, Optical, and Magnetic Properties of Materials	17
PHYS 534 Optics Lab	
Comprehensive Examination MSE 600 Assessment (P/F)	1
TOTAL	31

Special Rule on Transfer Credit. The normal transfer credit policies of the Graduate College hold except that up to 15 transfer credits earned in combination at the University of Idaho and Idaho State University may be applied to either degree program (M.S. MSE or M.Engr. MSE) with the approval of the supervisory committee.

## **Course Offerings**

Additional work will be required to receive graduate credit for undergraduate G courses.

CHEM - CHEMISTRY

CHEM 411 G ANALYTICAL CHEMISTRY (3-0-3) (F). Advanced analytical methodology with a focus on modern chemical instrumentation, signal processing, and error analysis. PREREQ: CHEM 212 and CHEM 322.

### **Interdisciplinary Programs** Master of Science in Materials Science and Engineering

#### CHEM 440G SPECTROMETRIC IDENTIFICATION (3-0-3)(S).

Identification of compounds using modern spectrometric techniques. PREREQ: CHEM 318 and CHEM 321.

#### CHEM 501 ADVANCED INORGANIC CHEMISTRY (3-0-3) (F).

Atomic structure, molecular structure using valence bond and molecular orbital theories, elementary group theory, transition metal coordination chemistry, acids and bases, descriptive transition and nontransition metal chemistry. PREREQ: CHEM 322 or PERM/INST.

#### **EE - ELECTRICAL ENGINEERING**

#### EE 540 INTRO TO INTEGRATED CIRCUIT AND MEMS

PROCESSING (3-0-3)(F). Fundamentals of integrated circuit and micro electromechanical systems (MEMS) fabrication technology; semiconductor substrates; theory of unit processes such as diffusion, oxidation, ion implantation, rapid thermal processing, photolithography, wet etching and cleaning, dry etching, thin-film deposition; chemical mechanical polishing; process integration; metrology; statistical process control; TCAD. COREQ: EE 540L. PREREO: ENGR 320 or PERM/INST.

### EE 540L INTRO TO INTEGRATED CIRCUIT AND MEMS

**PROCESSING LAB (0-3-1) (F).** Semiconductor cleanroom practices: heavy lab safety; students will fabricate and test simple structures in lab; application of TCAD to practical problems. COREQ: EE 540.

EE 542 PHOTOLITHOGRAPHY (3-0-3) (F/S). Principles of optics, diffraction, interference, superposition of waves, imaging systems, fundamentals of microlithography, resolution, contact and projection lithography, photoresist processing, metrology. Phase shift masks, anti-reflective coatings, deep-ultraviolet lithography, off-axis annular illumination. Use of TCAD lithography simulation software. COREQ: EE 340.

EE 542L PHOTOLITHOGRAPHY LAB (0-3-1) (F/S). Cleanroom lab experience utilizing a projection-printing wafer stepper, photoresist wafer track, SEM, and optical metrology equipment. Use of TCAD lithography simulation software. PREREQ: EE 342. COREQ: EE 442.

EE 546 FRONTIERS OF IC PROCESSING (3-0-3) (F/S). Recent and proposed developments in semiconductor process technology Course modules: Lithography, Deposition, Doping and Etch processes. PREREQ: EE 440/EE540.

## MSE - MATERIALS SCIENCE AND ENGINEERING

#### MSE 505 BONDING AND STRUCTURE OF MATERIALS

(3-0-3) (F/S). Bonding, atomic arrangements and crystal structures of metals, ceramics, electronic materials and polymers; electronic structure of solids; physical properties of solids; defects in solids; relationship between processing, microstructure and properties of materials, PREREQ: ENGR 245.

#### MSE 508 SOLID STATE THERMODYNAMICS AND

KINETICS (4-0-4)(S). The laws of thermodynamics are applied to multicomponent, multiphase reacting systems, and electrochemical systems. These concepts are used to discuss equilibrium phase diagrams. The energy effects due to the geometry of solid surfaces are discussed in regards to capillarity effects. The field of kinetics is introduced using applications of thermodynamics to mass transport (e.g., diffusion and drift) and chemical reaction kinetics. Differential equations describing coupled diffusion and reaction kinetics are examined. PREREQ: MATH 333, CHEM 322 or ENGR 320 or PHYS 432.

## MSE 510 ELECTRICAL, OPTICAL, AND MAGNETIC

PROPERTIES OF MATERIALS (3-0-3) (F/S). Introduction to the physical principles underlying the electric, optical and magnetic properties of modern solids. Crystalline and energy band structure of materials, thermal properties and electrical conduction in semiconductors and metals, optical and magnetic properties of solids are covered. PREREQ: ENGR 245.

#### MSE 511 SEMICONDUCTOR MATERIALS (3-0-3)(F/S).

Examination of the physical properties of semiconductors including electronic structure, free carrier statistics, optical properties, crystallography, and defects. Study of thermodynamic properties as related to lattice vibrations and diffusion. PREREQ: ENGR 245.

#### MSE 512 MECHANICAL PROPERTIES OF MATERIALS (3-0-3)

(F/S). Study of deformation and fracture in engineering materials, including elastic and plastic deformations; dislocation theory; alloy hardening and creep deformation; fracture mechanisms; linear elastic and nonlinear elastic fracture mechanics; toughening of metals, ceramics, and composites; environmentally assisted failure. PREREQ: ENGR 245.

#### MSE 549 ADVANCED TOPICS IN MATERIALS SCIENCE & ENGINEERING (3-0-3) (F/S) (Offered on demand). Selected

advanced topics from current research in Materials Science and Engineering such as defects in solids, physics of thin films, nanomaterials, optoelectronics, computational materials science, corrosion, reliability physics. PREREQ: ENGR 245.

#### MSE 561 MICROELECTRONIC PACKAGING MATERIALS

(3-0-3)(F/S). Engineering analysis of electronic packaging materials and their affect on electrical design, assembly, reliability, and thermal management. Selection process for packaging materials, manufacturing and assembly, single and multi-chip packaging. PREREQ: ENGR 245.

#### MSE 577 (BIOL 577) (ME 577) BIOMATERIALS (3-0-3) (F/S).

Theory of biomaterials science. Medical and biological materials and their applications. Selection, properties, characterization, design and testing of materials used by or in living systems. May be taken for BIOL, ME or MSE credit, but only from one department. PREREQ: ENGR 245 or CHEM 112.

#### MSE 588 BIOCOMPATIBILITY AND ENVIRONMENTAL

**DEGRADATION** (3-0-3) (F/S). Theory of environmental degradation of metals, ceramics, polymers and biomaterials. The scientific principles of materials degradation with emphasis on material interactions within a living organism (in vivo). PREREQ: CHEM 112 or ENGR 245.

#### PHYS - PHYSICS

#### PHYS 512 INTRODUCTORY QUANTUM MECHANICS

(3-0-3) (F/S). Introduction to fundamentals of quantum mechanics, including Schroedinger equation, energy levels, angular momentum, electron spin, perturbations, and scattering. Applications, such as tunneling, orbitals, magnetic resonance, and nanoscale effects. PREREO: PHYS 309.

PHYS 515 SOLID STATE PHYSICS (3-0-3) (F/S). Quantum physics applied to understanding the properties of materials, including semiconductors, metals, superconductors, and magnetic systems. PREREQ: PHYS 309.

#### PHYS 523 PHYSICAL METHODS OF MATERIALS

**CHARACTERIZATION** (3-0-3) (S). Physical principles and practical methods used in determining the structural, electronic optical, and magnetic properties of materials. Course topics will include optical, electron, and scanning microscopies, diffraction, surface analysis, optical spectroscopy, electrical transport, and magnetometry. Individual projects will focus on the application of an analytical technique to solve a specific problem. PREREQ: PHYS 309 or permission of instructor.

**PHYS 530 OPTICS (3-0-3).** Geometrical and physical optics, including lenses, fiber optics, Fourier optics, polarization, interference, diffraction, lasers, and holography. PREREQ: PHYS 212, MATH 333. COREO: PHYS 534.

PHYS 532 THERMAL PHYSICS (3-0-3)(S). Discussion of temperature, work, specific heat, and entropy. The laws of thermodynamics are discussed and applied to physical problems. Ideal gases, statistics, Gibbs free energy, and cryogenics. Work on heat transfer of lattice vibrations and phonons will be required. PREREQ: Graduate standing or PERM/INST.

**PHYS 534 OPTICS LABORATORY (0-3-1).** Laboratory to be taken concurrently with PHYS 530. Experiments in optics, including optical systems, thick lenses, interference, diffraction, Fourier optics, image processing, and holography. COREQ: PHYS 530.

## Graduate Certificate in Addiction Studies

College of Education
Department of Counselor Education
Graduate Program Coordinator: Ken Coll

Education Building, Room 614 Telephone 208 426-1821 e-mail: kcoll@boisestate.edu

College of Health Sciences Master of Health Science Program

Graduate Program Coordinator: Theodore McDonald

Health Science Riverside, Room 122 Telephone 208 426-2452

e-mail: tmcdonal@boisestate.edu http://hs.boisestate.edu/MHS

## **General Information**

The Graduate Certificate in Addiction Studies is an **interdisciplinary program** offered by the Department of Counselor Education (College of Education), and the Master of Health Science Program (College of Health Sciences). The **postgraduate certificate** is designed for professionals employed in substance abuse education, prevention or intervention settings. The goal of the certificate program is to prepare students for a variety of positions in the addiction field. The graduate certificate meets the didactic experiences required to become a nationally credentialed

Master Addictions Counselor (MAC if holding a Master's in Counseling), and an Idaho Certified Alcohol and Drug Counselor (CADC) or Advanced Certificate Alcohol and Drug Counselor (ACADC, if holding a related graduate degree).

## **Admission and Application Requirements**

Admission Requirements: Applicants are required to have a baccalaureate degree from an accredited institution, to have completed COUN 545/MHLTHSCI 545 Foundations in Chemical Dependency or its equivalent, and must have achieved a cumulative undergraduate GPA of at least 3.00 on a 4.00 scale. However, these minimum requirements do not guarantee admission to the program. Admission recommendations will be based upon a review of the student's transcripts and resume, letters of reference, Statement of Purpose, and interview.

**Application Procedures:** An applicant should follow the general application procedures for graduate degree-seeking students (see Applying as a Degree-Seeking Student in the Graduate Admission Policies and Procedures section of this catalog). In addition, an applicant must submit the following documents to the Graduate Certificate Program Advisor in either the College of Health Sciences or College of Education:

- 1. a resume:
- a statement of purpose in which the student explains his/her motivation for pursuing a Graduate Certificate in Addiction Studies and describes his/her career interests; and
- 3. three letters of reference from previous professors evaluating the applicant's academic potential. (For applicants whose academic record predates the application by five years or more, supervisors may submit the letters of reference. For applicants who applied for a graduate program within 3 years, those references can be used.)

Once the applicant's file is complete, the Addiction Studies Graduate Certificate Committee will evaluate, interview, and an admission recommendation (regular, provisional, or denial) will be forwarded to the Program Directors (Chairs) of the Counselor Education and Master of Health Science Program. In the case of a recommendation for provisional admission, the Committee will also establish the stipulations that must be satisfied by the student to advance to regular status. Admission to the Certificate in Addiction Studies does not guarantee subsequent admission to any other certificate or graduate degree programs.

## **Degree Requirements**

A minimum of 18 credits is required for completion of the Graduate Certificate in Addiction Studies.

Prerequisite for the certificate program is COUN 545/ MHLTHSCI 545 Foundations in Chemical Dependency (Offered every Fall semester, evening class once per week).

## Interdisciplinary Programs Graduate Certificate in Addiction Studies

Graduate Certificate in Addiction Studies		
Course Number and Title	Credits	
COUN 541/MHLTHSCI 544 Alcohol/Drug Abuse and the Family	3	
COUN 543/MHLTHSCI 543 Assessing and Managing Adolescent Substance Abuse and Mental Health Risks	3	
COUN 544/MHLTHSCI 564 Assessment of Alcohol and Drug Problems, Part I	3	
COUN 546/MHLTHSCI 565 Assessment of Alcohol and Drug Problems, Part II	3	
COUN 547/MHLTHSCI 547 Chemical Addictions and Violence Prevention	3	
COUN 550/MHLTHSCI 568 Diagnosis, Assessment and Treatment Planning	2	
COUN 567/MHLTHSCI 567 Clinical Supervision Principles and Practice	1	
TOTAL	18	

Course prerequisites or permission of the instructor must also be met. Students who wish to enroll in courses other than those specified may do so by permission of he Addiction Studies Graduate Certificate Committee. Students must maintain a minimum 3.0 GPA in all certification course work.

## **Course Offerings**

COUN 541 (MHLTHSCI 544) ALCOHOL/DRUG ABUSE AND

**THE FAMILY (3-0-3)(F/S).** An examination of the effects of chemical abuse on the family system. Included are the roles family members assume to accommodate the chemically dependent person, and the financial and emotional costs to the entire family. Special attention is given to intervention and other treatment approaches. May be taken for MHLTHSCI or COUN credit, but not both.

COUN 543 (MHLTHSCI 543) ASSESSING AND MANAGING ADOLESCENT SUBSTANCE ABUSE AND MENTAL HEALTH RISKS (3-0-3)(S)(Odd years). Introduction to comprehensive adolescent risk assessment and treatment planning. Examination of current and available comprehensive adolescent assessments, current and available specialized assessments, report writing approaches and effective treatment processes. PREREQ: PERM/INST.

COUN 544 (MHLTHSCI 564) ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART I (3-0-3) (F). Emphasis on screening and assessment tool-procedures for substance abuse. Application of current interventions and screening processes. Legal, social ethical, and health implications will be investigated. May be taken for MHLTHSCI or COUN credit, but not both.

COUN 546 (MHLTHSCI 565) ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART II (3-0-3) (S). Clinical application of concepts and principles presented in Part I. Special emphasis is placed on case management techniques. Continued investigation of legal, social, ethical, and health implications. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: MHLTHSCI 564 or COUN 544, or PERM/INST.

COUN 547 (MHLTHSCI 547) CHEMICAL ADDICTIONS AND VIOLENCE PREVENTION (3-0-3)(S) (Even years). Introduction to professional, ethical, legal, and practical aspects of chemical addictions and violence prevention (primary and secondary) in the schools and other settings (e.g., adolescent treatment). Examination of current research and available curriculum models, current identification and intervention approaches, and effective prevention programming. Historical and social contexts (e.g., Safe and Drug Free Schools and Communities Initiative) also included. May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: Graduate or

COUN 550 (MHLTHSCI 568) DIAGNOSES, ASSESSMENT, AND TREATMENT PLANNING (2-0-2) (F) (Odd years). Examination of concepts of "mental disorders," DSM classification systems, and the diagnostic benefits and diagnostic problems inherent in such systems. An introduction and overview of the major psychopathological syndromes of adolescents and adults (especially in the area of Co-morbidity of Substance Abuse/Dependence and other DSM IV diagnoses) to facilitate appropriate use of assessment-diagnostic-treatment links (including treatment planning). May be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

COUN 567 (MHLTHSCI 567) CLINICAL SUPERVISION PRINCIPLES AND PRACTICE (1-0-1)(F)(Even years). Theory and skill development for practitioners who are or will be supervising interns and/or professionals in school, agency, and other settings. Topics include ethical issues in clinical supervision, models and best practices, documentation, and troubleshooting problematic dynamics. PREREQ: PERM/INST.

## Graduate Certificate in Gerontological Studies

College of Education
Department of Counselor Education

**Coordinator:** Bobbie Birdsall Education Building, Room 614 Telephone 208 426-3204 e-mail: bbirdsa@boisestate.edu

Senior standing.

College of Health Sciences
Master of Health Science Program
Coordinator: Theodore McDonald

Health Science Riverside Building, Room 104

Telephone 208-426-2217

e-mail: tmcdonal@boisestate.edu http://hs.boisestate.edu/MHS

College of Social Sciences and Public Affairs School of Social Work

**Coordinator:** Denise Liley Education Building, Room 716 Telephone 208 426-4395 e-mail: dliley@boisestate.edu

### Interdisciplinary Programs Graduate Certificate in Gerontological Studies

#### **General Information**

The Graduate Certificate in Gerontological Studies is an interdisciplinary program offered by the College of Education, Master of Arts in School Counseling (MASC) and Department of Kinesiology, College of Health Sciences, Master of Health Science Program (MHS), and College of Social Science and Public Affairs, Master of Social Work (MSW). The certificate program is administered by the Graduate Coordinators from the MASC, MHS, and MSW programs in conjunction with the Center for Study of Aging.

The postgraduate certificate is intended for students enrolled in any graduate degree program and for local professionals. The goal of the certificate program is to enable students to choose a unified, coherent group of courses in gerontological studies and related fields that improve their understanding of issues related to aging. The program curriculum is in compliance with the Core Principles and Outcomes of the Association for Gerontology in Higher Education.

## **Admission Requirements**

The minimum requirements of admission to the certificate program are a baccalaureate degree from a regionally accredited college or university and admission to the Graduate College. In addition, admission will be based upon a review of the student's transcripts, resume and letter of interest summarizing his or her background and motivation for enrolling in the certificate program.

Admission to the Graduate Certificate in Gerontological Studies does not guarantee subsequent admission to any other certificate or graduate degree programs.

## **Application Procedures**

An applicant should follow the general application procedures of the Graduate College for admission into a graduate program. The applicant must also submit a letter of interest and resume to the MASC, MHS or MSW Graduate Coordinator. Once the applicant's file is complete, it will be reviewed by the Gerontological Studies Admissions Committee members who will provide an admission recommendation to the Dean of the Graduate College. The Dean will make the final admission decision and notify the applicant.

## **Certificate Requirements**

A minimum of 18 credits (9 credits of core and 9 credits from a concentration area) is required or the completion of the Graduate Certificate in Gerontological Studies.

Graduate Certificate in Gerontological Studies	
Course Number and Title	Credits
Required Core Courses:  COUN/MHLTHSCI/SOCWRK 571 Fundamentals of Healthy Aging	9
Area of Concentration (select one area of concentration)	
Counseling Concentration  COUN 517 Family Issues in Later Life	9
Health Science Concentration HLTHST 410 Health and Aging	9
Social Perspectives Concentration SOC 511 The Sociology of Age Group Stratification	9
Health Promotion/Exercise Science Concentration BIOL 300 Biology of Aging	9
TOTAL	18

Students who wish to enroll in courses other than those specified may do so by permission of Coordinator. Course prerequisites or permission of the instructor must also be met.

## **Additional Graduate Courses**

NOTICE: The 500-level courses listed below are not offered on a regular basis. Students interested in these courses should consult with an advisor in the Department before completing their application.

#### ANTH - ANTHROPOLOGY

#### ANTH 501 SYNCHRONIC METHODS IN ANTHROPOLOGY

(3-0-3)(F). A reading-intensive survey of the major issues, methods, and findings relevant to anthropological studies of human societies. This course will focus on social processes and phenomenon occurring at one time, including human-resource relationships, social, economic, and political organization and decision-making, microdemographics, and spatial patterning of human groups.

#### ANTH 502 DIACHRONIC METHODS IN ANTHROPOLOGY

**(3-0-3)(S).** A reading-intensive survey of the major issues, methods, and findings relevant to anthropological studies of humans. This course will focus on social processes and phenomenon occurring across time, including basic paleoanthropology, primatology, behavioral ecology, human evolutionary biology, and genetics.

#### ANTH 503 HISTORY AND THEORY IN ANTHROPOLOGY

**(3-0-3)(F).** A reading-intensive survey of history and theory in anthropology from classical times through the 20th century. A review of history and philosophy of science with emphasis upon innovations in 19th and 20th century theory relevant to current issues and debates.

#### ANTH 504 QUANTITATIVE METHODS IN ANTHROPOLOGY

**(3-0-3)(S).** Methods of multivariate statistics in the analysis of anthropological data.

#### ANTH 505 QUALITATIVE METHODS IN ANTHROPOLOGY

**(3-0-3)(F/S)(alternate years).** An introduction to qualitative methods research and analysis including in-depth interviewing, participant observation, focus groups, and discourse analysis.

## ANTH 520 QUATERNARY STRATIGRAPHY AND

**PALEOENVIRONMENTS (3-0-3) (F/S) (alternate years).** An introduction to qualitative methods research and analysis including in-depth interviewing, participant observation, focus groups, and discourse analysis.

#### **ANTH 521 NORTH AMERICAN PALEOENVIRONMENTS**

**(3-0-3)(F/S)(alternate years).** Examines the application of physical and biotic evidence to evaluate changing environments and their relationship to prehistoric human populations. Focus is on past environmental change in western North America placed within continental-scale and global-scale contexts.

#### ANTH 522 HUNTER-GATHERER ETHNOARCHAEOLOGY

**(3-0-3) (F/S) (alternate years).** Examination of variability in adaptations by modern hunter-gatherer populations emphasizing subsistence, mobility, and social organization. Focus is on examination of lithic technology, faunal analysis, and site structure as sources of archaeological interpretation.

#### ANTH 523 ADVANCED ARCHAEOLOGICAL FIELD METHODS

**(3-0-3)(SU).** Emphasis upon developing research designs, decision-making, and in-field project management. Open to students with previous field experience and graduate work in archaeology. PREREQ: PERM/INST.

## ANTH 530 ADVANCED TOPICS IN EVOLUTIONARY ANTHROPOLOGY (3-0-3)(F/S)(alternate years). This

course provides the theoretical foundation for testing evolutionary hypotheses about human cultural variation, human physiological adaptations and social behavior, and life-history evolution, marriage, reproduction, inheritance, and subsistence. The course provides a broad, empirical view of hominid-behavioral evolution and ecology. PREREQ: PERM/INST.

#### ANTH 531 ECONOMIC ANTHROPOLOGY (3-0-3)

**(F/S)** (alternate years). The comparative study of economic behavior in hunter-gatherer, tribal, and complex societies. The course examines subsistence strategies, craft production and specialization, and exchange, as well as theoretical debates surrounding the economic topic of transition.

#### ANTH 532 GAME THEORY AND HUMAN COOPERATION

(3-0-3)(F/S)(alternate years). Designed as an advanced introduction to the origins and development of human sociality from the perspective of game theory and evolutionary biology. This course will review and discuss classic and new papers from anthropology, biology, economics, political science, and psychology. Issues to be explored include widespread pro-social behavior among humans, living in small vs. large groups, rank and status, sexual division of labor, and obstacles to building cooperation and peace on a number of social scales.

## ANTH 533 CROSS-CULTURAL ISSUES IN AGING, DEATH, AND DYING: AN ANTHROPOLOGICAL APPROACH (3-0-3)

**(F/S) (alternate years).** This course is designed as an introduction to the variety of ways in which cultures in the United States and around the world approach the aging process, the treatment of those who are dying, and the various collective responses to death. The course relies on the examination of published work in the area of cross-cultural health care, gerontology, and ritual.

#### ANTH 534 SEX AND GENDER: AN ETHNOLOGICAL

**APPROACH** (3-0-3)(F/S)(alternate years). This course will explore changing definitions and perceptions of sex and gender within a variety of cultures throughout the world. Biological determinism, homosexuality, transsexuality, and culturally determined concepts of male and female behavior are placed within the global discussion of gender that includes, but extends beyond, academic social theory.

#### ANTH 580 SELECTED TOPICS IN ANTHROPOLOGY (F/S).

Philosophical and theoretical issues in anthropology. Developments in methodology and technical advances in anthropological research. Seminar topics will vary.

#### ANTH 600 ASSESSMENT: Preliminary Examination (F/S).

Based on guidance from their faculty advisory committee, students prepare for and successfully complete their preliminary examination. Graded pass/fail (P/F) only.

#### **BUSCOM - BUSINESS COMMUNICATION**

#### BUSCOM 538 MANAGING TECHNICAL COMMUNICATION

(3-0-3)(F/S). An advanced study of technical communication for managers and technical professionals who must originate, specify,

and/or approve technical instructions, proposals, reports, and realted documents. Students will acquire proficiency in writing and designing these documents by applying syntactic, semantic, and pragmatic theory and visual design principles to applied problems in document design, information access, and human information processing.

#### CHEM - CHEMISTRY

**CHEM 411 G ANALYTICAL CHEMISTRY (3-0-3) (F).** Advanced analytical methodology with a focus on modern chemical instrumentation, signal processing, and error analysis. PREREQ: CHEM 212 and CHEM 322.

**CHEM 431G BIOCHEMISTRY I (3-0-3) (F).** A study of the chemistry of biologically important compounds and an introduction to metabolism. PREREQ: CHEM 301 or CHEM 309.

CHEM 432G BIOCHEMISTRY LABORATORY (0-6-2)(F/S).

Identification, isolation, and reactions of biologically important compounds. PREREQ: CHEM 431.

**CHEM 433G BIOCHEMISTRY II (3-0-3)(S).** The function of biological compounds, including intermediary metabolism and synthesis of proteins. Cellular control mechanisms of these processes are integrated into the material. PREREQ: CHEM 431.

CHEM 440G SPECTROMETRIC IDENTIFICATION (3-0-3)(S).

Identification of compounds using modern spectrometric techniques. PREREQ: CHEM 318 and CHEM 321.

**CHEM 500 HISTORY OF CHEMISTRY (3-0-3).** The study of the development of chemistry from its early stages through alchemy. Emphasis will be placed on the development of chemical concepts, the important contributors to these concepts and the interrelationships between chemistry and the general course of history. PREREQ: Two years of college chemistry and one year of history or PERM/INST.

#### CHEM 501 ADVANCED INORGANIC CHEMISTRY (3-0-3)(F).

Atomic structure, molecular structure using valence bond and molecular orbital theories, elementary group theory, transition metal coordination chemistry, acids and bases, descriptive transition and nontransition metal chemistry. PREREQ: CHEM 322 or PERM/INST.

#### **CHEM 508 INTRODUCTION TO POLYMER CHEMISTRY**

**(3-0-3) (F/S).** An introduction to the concepts of polymer synthesis, characterization, structure, properties, and basic fabrication processes. Emphasis is on the practical polymer preparation, fundamental kinetics and mechanisms of polymerization, structure-property relationship, industrial and biomedical applications. PREREQ: CHEM 301 or CHEM 309, or PERM/INST.

#### **CHEM 509 CHEMISTRY OF LIFE PROCESSES**

(3-0-3). The course introduces the student to basic concepts of biochemistry associated with a coverage of current topics ranging from allied health field areas to environmental chemistry. Classroom demonstration material will be correlated with lecture material. PREREQ: One year of general chemistry and organic chemistry. Offered on demand.

#### **CHEM 510 ORGANIC POLYMER SYNTHESIS**

(3-0-3)(F/S). A study of the synthesis and reactions of polymers. Emphasis is on practical polymer preparation and on the fundamental kinetics and mechanisms of polymerization reactions. Topics include: relationship of synthesis and structure, characterization of polymer structure, step-growth polymerization, chain-growth polymerization

via radical, ionic and coordination intermediates, copolymerization. PREPREQ: CHEM 309 or PERM/INST.

#### CHEM 511 ADVANCED ANALYTICAL CHEMISTRY

**(3-0-3).** Stoichiometry involved in separations and instrumental methods of analysis. The course will be flexible in nature to adapt to the varied background of the expected students. PREREQ: CHEM 212 and CHEM 322 or PERM/INST. Offered on demand.

**CHEM 515 NUCLEAR AND RADIOCHEMISTRY (3-0-3).** Atomic and nuclear structure, radioactivity, nuclear reactions, radioactive decay laws, interaction of radiation with matter, detection chemistry. Offered on demand.

**CHEM 521 QUANTUM CHEMISTRY (3-0-3) (F/S/SU).** Formal introduction to quantum mechanics, Dirac notation, angular momentum and operator algebra. Emphasis will be placed on electronic structure theory, reaction mechanisms and the use of modern quantum chemistry theoretical packages. PREREQ: CHEM 321 or PHYS 309 or PERM/INST.

CHEM 522 SPECTROSCOPY (3-0-3) (F/S/SU). Concepts and practical usage of modern chemical spectroscopic techniques, including electronic absorption, infrared/Raman, X-Ray/EXAFS, magnetic resonance and magnetic circular dichroism. Emphasis will be placed on the application of these techniques to the structure/function characterization of chemical and biochemical system. PREREQ: CHEM 521 or PERM/INST.

#### **CHEM 523 THERMODYNAMICS AND STATISTICAL**

**MECHANICS (3-0-3) (F/S/SU).** Application of thermodynamics and statistical mechanics to chemical reactions as well as solid and liquid phases. Special emphasis will be placed on applications involving glasses, polymers and proteins as well as molecular mechanical simulations of dynamics. PREREQ: CHEM 322 or PERM/INST.

#### **CHEM 560 INTRODUCTION TO NMR SPECTROSCOPY**

**(1-3-2) (F/S/SU).** This course will instruct students on the theory and practice of one- and two-dimensional NMR spectroscopy. Emphasis will be placed on using the NMR spectrometer to solve a variety of chemical and biological problems. PREREQ: CHEM 310 or PERM/INST.

CHEM 561 INTRODUCTION TO MOLECULAR MODELING AND COMPUTATIONAL CHEMISTRY (1-3-2)(F/S/SU). Overview of modern computational chemistry. Use of computational chemistry tools and their application to problems of chemical and biological interest. PREREQ: CHEM 321 or PERM/INST.

#### CMGT - CONSTRUCTION MANAGEMENT

**CMGT 417G PROJECT SCHEDULING (2-2-3)(F/S).** The use of Gantt charts, S-curves, Critical Path Method (CPM) using both Arrow Diagraming and Precedence Diagraming Methods (ADM and PDM), computerized scheduling, P.E.R.T. charts, resource leveling and time cost trade offs used as planning, scheduling, and management techniques. PREREQ: CMGT 374 or PERM/INST.

**CMGT 570 LAND DEVELOPMENT (3-0-3) (F/S).** An overview of the land development process, including planning, design, construction, and sale of various types of real estate. Key concepts in successful development, feasibility studies, site selection and improvement, government policy and regulation, project planning and master planning, design of public infrastructure, and construction of site improvements.

#### **Additional Graduate Courses**

#### **GENDER - GENDER STUDIES**

#### **GENDER 580 SELECTED TOPICS IN GENDER STUDIES**

(3-0-3) (F/S). Graduate-level studies of a particular topic relating to the field of gender studies.

#### **NURS - NURSING**

NURS 502 FOUNDATION OF KNOWLEDGE AND THEORY FOR ADVANCED NURSING (3-0-3) (F/S). Critique, evaluate, and utilize conceptual and theoretical models in advanced nursing practice. Emphasis on linking theories with nursing. PREREQ: Admission to Graduate Program in Nursing.

NURS 504 (MHLTHSCI 504) HEALTH CARE ECONOMICS, FINANCING AND DELIVERY (3-0-3) (F/S). Differentiates health care economics, financing and payment systems as context for fiscal management and budgeting; examines health care delivery from organizational and operational perspectives, all of which are applied in writing proposals. May be taken for NURS or MHLTHSCI credit, but not both. PREREQ: Admission to Graduate Program in Nursing or Master of Health Science Program.

**NURS 508 ADVANCED RESEARCH AND SCHOLARLY INQUIRY FOR NURSING (2-0-2) (F/S).** Design research methods for utilization in advanced nursing roles. PREREQ: NURS 502.
PREREQ or COREQ: MHLTHSCI 552.

## NURS 509 ADVANCED RESEARCH AND SCHOLARLY INQUIRY FOR NURSING LABORATORY (0-3-1) (F/S).

Application of research methods for utilization in advanced nursing roles. PREREQ: NURS 502. PREREQ or COREQ: MHLTHSCI 552, NURS 508.

#### NURS 512 (MHLTHSCI 512) EDUCATIONAL LEADERSHIP

**(2-0-2)(F/S).** Integrates and synthesizes leadership, educational and other theories and frameworks using simulated and/or real experiences to develop strategies in presentational leadership for advanced nursing. May be taken for NURS or MHLTHSCI credit, but not both. PREREQ: Admission to Graduate Program in Nursing or Master of Health Science Program.

## NURS 520 PROFESSIONAL ROLE DEVELOPMENT FOR ADVANCED NURSING IN POPULATION HEALTH I (1-0-1)

**(F/S).** Introduction to advanced nursing roles, an overview of career opportunities and interactions with social, cultural, political, economic and other forces. PREREQ: Admission to Graduate Program in Nursing.

#### NURS 522 CONCEPTS OF POPULATION HEALTH (3-0-3)

**(F/S).** Examines the philosophy and framework for health promotion and disease prevention, health care delivery, effecting policy, and advanced nursing roles with diverse populations. PREREQ: Admission to Graduate Program in Nursing.

#### NURS 524 POPULATION HEALTH ASSESSMENT AND

**PLANNING (2-0-2) (F/S).** Integrates assessment and planning with theoretical frameworks for health promotion and disease prevention with a specific population. PREREQ: NURS 502; NURS 520; NURS 522. COREO NURS 525.

NURS 525 POPULATION HEALTH ASSESSMENT AND PLANNING LABORATORY (0-6-2) (F/S). Application of assessment and planning with theoretical frameworks for health promotion and disease prevention with a specific population.

PREREQ: NURS 502; NURS 520; NURS 522. PREREQ or COREQ: NURS 524.

NURS 526 POPULATION HEALTH INTERVENTION AND EVALUATION (2-0-2) (F/S). Integrates theoretical frameworks with evaluation of evidence-based interventions and outcomes for health promotion and disease prevention with a specific population. PREREQ: NURS 524. COREQ NURS 527.

**NURS 527 POPULATION HEALTH INTERVENTION AND EVALUATION LABORATORY (0-6-2) (F/S).** Applies theoretical frameworks with evaluation of evidence-based interventions and outcomes for health promotion and disease prevention with a specific population. PREREQ: NURS 525. PREREQ or COREQ: NURS 526.

## NURS 528 PROFESSIONAL ROLE DEVELOPMENT FOR ADVANCED NURSING IN POPULATION HEALTH II

(1-0-1)(F/S). Culminating seminar that integrates the new functions and activities of the advanced nursing role into professional practice. PREREO: NURS 527.

#### PHYS - PHYSICS

#### PHYS 507 BIOPHYSICAL INSTRUMENTATION AND

**TECHNIQUES (3-0-3) (F).** Principles and applications of the wide variety of physical techniques used to study living systems. These methods include optical and electron microscopy (SEM, TEM), X-ray crystallography, neutron scattering, scanning probe microscopy, magnetic resonance spectroscopy (NMR, EPR) and imaging (MRI), fluorescent spectroscopy, surface plasmon resonance, microwave absorption, laser light scattering, and optical tweezers, among others. PREREQ: PHYS 307 or PHYS 309 or PERM/INST.

#### PHYS 512 INTRODUCTORY QUANTUM MECHANICS

**(3-0-3) (F/S).** Introduction to fundamentals of quantum mechanics, including Schroedinger equation, energy levels, angular momentum, electron spin, perturbations, and scattering. Applications, such as tunneling, orbitals, magnetic resonance, and nanoscale effects. PREREQ: PHYS 309.

**PHYS 515 SOLID STATE PHYSICS (3-0-3) (F/S).** Quantum physics applied to understanding the properties of materials, including semiconductors, metals, superconductors, and magnetic systems. PREREQ: PHYS 309.

#### PHYS 523 PHYSICAL METHODS OF MATERIALS

**CHARACTERIZATION** (3-0-3) (S). Physical principles and practical methods used in determining the structural, electronic optical, and magnetic properties of materials. Course topics will include optical, electron, and scanning microscopies, diffraction, surface analysis, optical spectroscopy, electrical transport, and magnetometry. Individual projects will focus on the application of an analytical technique to solve a specific problem. PREREQ: PHYS 309 or PERM/INST.

**PHYS 530 OPTICS (3-0-3).** Geometrical and physical optics, including lenses, fiber optics, Fourier optics, polarization, interference, diffraction, lasers, and holography. PREREQ: PHYS 212, MATH 333. COREQ: PHYS 534.

**PHYS 532 THERMAL PHYSICS (3-0-3)(S).** Discussion of temperature, work, specific heat, and entropy. The laws of thermodynamics are discussed and applied to physical problems. Ideal gases, statistics, Gibbs free energy, and cryogenics. Work on heat

transfer of lattice vibrations and phonons will be required. PREREQ: Graduate standing or PERM/INST.

PHYS 534 OPTICS LABORATORY (0-3-1). Laboratory to be taken concurrently with PHYS 530. Experiments in optics, including optical systems, thick lenses, interference, diffraction, Fourier optics, image processing, and holography. COREQ: PHYS 530.

PHYS 537 RADIATION BIOPHYSICS (3-0-3) (F/S). Physical properties and biological effects of different kinds of radiation: action of radiation on various cellular constituents: target theory, genetic effects, repair of radiation damage, physics of radiology and radiotherapy, isotopic tracers. PREREQ: PHYS 307 or PHYS 507 or PERM/INST.

#### PHYS 557 CELLULAR AND MOLECULAR BIOPHYSICS

(3-0-3)(F/S). The physics of cellular structure and function; membrane theories, diffusion and active transport, bioelectric phenomena; intracellular motion, thermodynamics. Macromolecular structure: energetics, intramolecular and intermolecular forces, protein folding, information storage, structure and physics of DNA and RNA. PREREQ: PHYS 307 or PHYS 507 or PERM/INST.

PHYS 572 ELECTROMAGNETISM (3-0-3)(S). Electromagnetic theory derived from Maxwell's equations. Applications to electromagnetic fields in materials, including dielectrics, magnetization, wave propagation through materials, stress tensors, and radiation. PREREQ: PHYS 381 or EE 390.

PHYS 598 PHYSICS SEMINAR (1-0-1)(S). Individual reports on selected topics. The level of the reports must reflect the additional work expected beyond that required for the undergraduate seminar. PREREQ: PERM/INST.

#### PHYSCI - PHYSICAL SCIENCE

#### PHYSCI 501 BASIC PHYSICAL SCIENCE FOR SCIENCE

**TEACHERS (3-0-3).** Selected concepts of matter and energy that are widely applicable toward understanding our physical environment. A one-semester course for non-science majors.

#### PSYC - PSYCHOLOGY

#### PSYC 331G THE PSYCHOLOGY OF HEALTH (3-0-3) (F/S).

Principles that have emerged from the experimental analysis of behavior will be examined. The principles include, but are not limited to, operant and classical conditioning. The course will deal with applications of these principles to the understanding and change of phobias, obesity, smoking, alcoholism, aberrant sexual behavior, and similar problems. PREREQ: PSYC 101.

#### PSYC 405G ADVANCED STATISTICAL METHODS (3-0-3)(S).

Advanced topics in univariate statistics (for example, repeated measures designs) and multivariate techniques such as discriminant analysis, factor analysis, and principal component analysis. PREREQ: PSYC 321 or equivalent or PERM/INST.

#### PSYC 421G PSYCHOLOGICAL MEASUREMENT (3-0-3)(F).

Theory and nature of psychological measurement together with a survey of types of psychological tests currently used. PREREQ:

PSYC 438G COMMUNITY PSYCHOLOGY (3-0-3) (F,S). Focuses on human and social problems in a systemic context. Primary prevention and community empowerment strategies employed for individual, community, and social benefit. A course in research

methods or statistics is recommended but not required. PREREQ: PSYC 101.

#### SOC - SOCIOLOGY

systems.

SOC 500 ADVANCED SOCIAL STATISTICS (3-0-3)(S). The methods of nonparametric statistics in the analysis of sociological data are examined in depth with application to research. PREREQ: SOC 101 and SOC 310 or equivalents as determined by consultation with department chair.

#### SOC 502 QUALITATIVE SOCIAL RESEARCH METHODS

(3-0-3)(F). An intensive course in interpretive social science, covering the practice of fieldwork ethnography, the use of computers in qualitative research, techniques of qualitative data analysis, and the writing of qualitative research reports. PREREQ: SOC 101 and Graduate standing.

SOC 501 THE SOCIOLOGY OF EDUCATION (3-0-3)(F/S). A sociological analysis of the American school system, its problems and the social forces that shape the schools in contemporary society.

## SOC 510 CONFLICT AND CHANGE IN SOCIO-CULTURAL

**SYSTEMS (3-0-3) (F/S).** Intensive examination of social and cultural change as related to technological evolution, value changes and the resultant conflict in society.

SOC 511 THE SOCIOLOGY OF AGE GROUP STRATIFICATION (3-0-3)(F/S). Examination of the sociological effect of age as a major dimension of social organization and stratification in American society and Western civilization. The course will consider the effects of changing patterns of longevity, resultant changes in age distribution of the population as these factors affect social, economic, and political

SOC 512 SOCIAL DEMOGRAPHY (3-0-3) (F/S). Techniques and methods for analyzing population growth, trends, and movement as reflected in actuarial data, birth-death rate; mobility, fertility and fecundity as these affect the societal patterns, especially planning for human service programs.

SOC 535 DRUGS IN SOCIETAL CONTEXT (3-0-3)(F/S). This class applies the sociological perspective on social problems to drug use. It examines how different social groups use drugs, attempt to control and prohibit the use of drugs, and the societal effects of using and controlling the use of drugs.

#### SOC 571 FEMINIST SOCIOLOGICAL THEORY (3-0-3)(F/S).

An examination of the major types of feminist theory in Sociology or theory directly useful to sociologists in search of understanding and explaining gender relations. The student will encounter new perspectives in Sociology that arise from the exchange of new ideas, new data, exciting possibilities for social change, and the emergence of new theoretical models to understand gender relations. PREREQ: Graduate standing.

SOC 595 READING AND CONFERENCE (1-2 credits). Directed reading on selected materials in human services administration and discussion of these materials as arranged and approved through major advisor.

## Boise State University Graduate Faculty Full-Time Official Faculty as of March 2006

NOTE: The date in parentheses is the year of first appointment.

A	Bell, Kenneth(1997)
Ahmed-Zaid, Said(1996)	Associate Professor, Kinesiology; Ph.D., Virginia Polytechnic Institute and
Associate Professor, Electrical Engineering; Ph.D., University of Illinois at	State College
	Belthoff, James
Urbana-Champaign Allan Pobin	Chair and Graduate Program Coordinator and Professor, Biology; Ph.D., Clemson University
Allen, Robin(1997)	Benner, Shawn(2004)
Professor, Social Work; Ph.D., University of Illinois-Urbana-Champaign	Assistant Professor, Geosciences; Ph.D., University of Waterloo
Alm, Leslie	Berg, Lynn R(1984)
Chair, Public Policy and Administration; Director of Graduate Studies, and	Professor, Music; D.M.A., University of Wisconsin, Madison
Professor, Political Science; Ph.D., Colorado State University	Bigelow, John D(1982)
Andersen, Timothy	Chair and Professor, Management; Ph.D., Case Western Reserve
Assistant Professor, Computer Science; Ph.D., Brigham Young University	University (100F)
Anderson, Holly L(1989)	Birdsall, Bobbie A
Professor, Curriculum, Instruction and Foundational Studies; Ph.D., Utah	Associate Professor and School Counseling Program Coordinator, Counselor Education, Ph.D., Oregon State University
State University	Bixby, Michael B(1981)
Anderson, Jeffrey M(2005)	Professor, Management; J.D., University of Michigan
Director, Clinical Education and Associate Professor, Respiratory Care;	Blain, Michael (1982)
M.A., Boise State University	Chair and Professor, Sociology; Ph.D., University of Colorado
Anooshian, Linda James(1988)	Blakeslee, Laurie
Professor, Psychology; Ph.D., University of California, Riverside	Assistant Professor, Art; M.F.A., University of Arizona
Anson, Robert(1990)	Blankenship, Michael
Professor, Networking, Operations, and Information Systems; Ph.D.,	Dean, College of Social Sciences and Public Affairs and Professor, Criminal Justice Administration; Ph.D., Sam Houston State University
Indiana University	Bostaph, Lisa Growette(2004)
Armstrong, James(1992)	Professor, Criminal Justice Administration; Ph.D., University of Cincinnati
	Boucher, Teresa(1997)
Professor, Literacy; Ph.D., University of Illinois  Atlakeon, Philip. (1995)	Chair and Associate Professor, Modern Languages and Literatures, Ph.D.,
Atlakson, Philip	Princeton University
Professor, Theatre Arts; M.A., State University of New York, Binghamton	Bowers, Susan(2005)
В	Assistant Professor, Nursing; Ed.D., University of South Dakota, Vermillion
Bacon, Stephanie	Bradford, John
Associate Professor, Art; M.F.A., Brooklyn College	Director of CGISS and Research Professor, Geosciences; Ph.D., Rice
Bahnson, Paul R. (1999)	University Brady, Lisa Marie(2004)
Chair and Professor, Accountancy; Ph.D., University of Utah	Assistant Professor, History; M.Ed., Montana State University, Billings
Bahruth, Robert(1988)	Bratt, J. Wallis(1970)
Professor, Bilingual Education; Ph.D., University of Texas, Austin	Associate Professor, Music; M.M., University of Utah
Baker, Edward (Ted)(2002)	Brendefur, Jonathan(2000)
Assistant Professor, Community and Environmental Health; Ph.D., Temple University	Associate Professor, Curriculum, Instruction and Foundational Studies;
Baker, R. Jacob(2000)	Ph.D., University of Wisconsin, Madison
Chair, Graduate Program Coordinator and Professor, Electrical	Brill, Stephen H(1998)
Engineering; Ph.D., University of Nevada	Associate Professor, Mathematics; Ph.D., University of Vermont Brown, Marcellus(1989)
Baker, Richard P(1973)	Associate Professor, Music; M.M., University of Michigan
Professor, Sociology; Ph.D., Washington State University	Browning, William B(1996)
Baldassarre, Joseph A(1975)	Associate Professor, Modern Languages and Literatures, D.M.L.,
Professor, Music; D.M.A., Case Western Reserve University	Middlebury College
Baldwin, John B(1971) Professor, Music; Ph.D., Michigan State University	Brudenell, Ingrid(1991)
Ball, Jeremy(2004)	Professor, Nursing; Ph.D., Oregon Health Sciences University
Professor, Criminal Justice Administration; Ph.D., University of Nebraska-	Buchanan, Mark A(1996)
Omaha	Professor, Management; LL.M., University of Illinois at Urbana-Champaign
Ballenger, Bruce(1995)	Budde, James(1997) Associate Professor, Art; M.F.A., California State University, Fullerton
Chair and Associate Professor, English; Ph.D., University of New	Buffenbarger, James(1991)
Hampshire (1007)	Associate Professor, Computer Science; Ph.D., University of California-
Baltzell, Michael	Davis
Associate Professor, Theatre Arts; M.F.A., Idaho State University Bammel, Brad P(1988)	Buhler, Peter(1977)
Associate Professor, Chemistry; Ph.D., University of New Orleans	Chair and Professor, History; Ph.D., University of California, San Diego
Barbour, Barton(2001)	Bullock, Douglas(1995)
Assistant Professor, History; Ph.D., University of New Mexico	Associate Professor, Mathematics and Computer Science; Ph.D., University of Iowa
Barney, Lloyd Dwayne(1986)	Burkhart, Ross(2004)
Professor, Marketing and Finance; Ph.D., Texas A & M	Chair and Associate Professor, Political Science; Ph.D., University of Iowa
Barrash, Warren(1995)	Butt, Darryl
Research Professor, Geosciences Department; Ph.D., University of Idaho	Graduate Program Coordinator and Professor, Materials Science &
Bartoszynski, Tomek	Engineering; Ph.D., Pennsylvania State University
Professor, Mathematics; Ph.D., Warsaw University, Poland Battalio, John T(1995)	
Associate Professor, English; Ph.D., Texas A & M University	C
Baughn, C. Christopher(1998)	Campbell, Ann (2004)
Professor, Management; Ph.D., Wayne State University	Assistant Professor, English; Ph.D., Emory University
Bechard, Marc Joseph(1983)	Campbell, Kristy A(2005) Assistant Professor, Electrical and Computer Engineering; Ph.D.,
Professor, Biology; Ph.D., Washington State University	University of California, Davis
Belfy, Jeanne Marie	Charlier, Henry A(2000)
Graduate Program Coordinator and Professor, Music; Ph.D., University of	Associate Professor, Chemistry; Ph.D., Medical College of Wisconsin

Chenoweth, Timothy(2004)	
Assistant Professor, Network, Operations, and Information Systems; Ph.D.,	Feris, Kevin
Washington State University	Assistant Professor, Biology; Ph.D., University of Montana Fischer, Michael A(2002)
Christensen, Steve(1987)	Assistant Professor, Music; D.M.A., University of North Texas
Director, Office of College and School Partnerships and Field Experiences and Associate Professor, Educational Technology; Ph.D., University of	Fox, Francis(1999)
Idaho	Associate Professor, Art; M.F.A., University of Wyoming
Chyung, Seung Youn (Yonnie)(1997)	Francis, John (2002)
Assistant Professor, Instructional and Performance Technology; Ed.D.,	Assistant Professor, Art; M.F.A., University of Wyoming Frankle, Alan(1984)
Texas Tech University	Professor, Marketing and Finance; Ph.D., University of Arizona
Clark, Cynthia(1997)	Franklin, Cheryl A
Associate Professor, Nursing; M.S., Colorado State University Coll, Kenneth M(1998)	Assistant Professor, Curriculum, Instruction, and Foundational Studies;
Chair, Professor and Addictions Studies Coordinator, Counselor	Ph.D., University of Virginia
Education; Ph.D., Oregon State University	Frary, Megan
Cornell, Kenneth A. (2006)	Assistant Professor, Materials Science and Engineering, Ph.D., Massachusetts Institute of Technology
Assistant Professor, Chemistry; Ph.D., Oregon Health and Sciences	Fredericksen, Patricia J(1999)
University Cook, Devan(1997)	Associate Professor, Political Science; Ph.D., Washington State University
Associate Professor, English; Ph.D., Florida State University	Freemuth, John C(1986)
Cook, James(1992)	Professor, Political Science; Ph.D., Colorado State University
Chair and Professor, Music; D.M.A., University of Southern California	Fry, Phillip C(1987) Professor, Networking, Operations, and Information Systems; Ph.D.,
Corless-Smith, Martin(2000)	Louisiana State University
Assistant Professor, English; Ph.D., University of Utah	Fujiwara, Tomoko(2004)
Cotrell, Gretchen(1991) Associate Professor, Social Work; Ph.D., University of California, Berkeley	Assistant Professor, Chemistry; Ph.D., Kyoto Institute of Technology, Japan
Cowan, Mark(2005)	G
Assistant Professor, Accountancy; J.D., University of Connecticut	· ·
Cox, David(1992)	Gallup, V Lyman(1977) Associate Professor, Networking, Operations, and Information Systems;
Associate Professor, Instructional & Performance Technology; Ph.D.,	Ph.D., University of Oregon
University of Minnesota	Gardner, John F(2000)
Craner, G. Dawn(1973) Associate Professor, Communication; M.A., Purdue University	Chair and Professor, Mechanical Engineering; Ph.D., Ohio State University
	Garza, Maria Alicia(1997)
D	Associate Professor, Modern Languages and Literatures, Ph.D., University of Arizona
Davis, Shoni(2005)	Gattiker, Thomas(2005)
Assistant Professor, Nursing; D.N.Sc., University of California, Los Angeles	Assistant Professor, Networking, Operations, and Information Systems;
Dawson, Paul(1993)	Ph.D., University of Georgia
Professor, Mechanical Engineering; Ph.D., Washington State University Dayley, Jon Philip(1982)	Gehrke, Pamela(1998)
Professor, English; Ph.D., University of California, Berkeley	Associate Professor, Nursing; M.S., University of Portland
DeBeliso, Mark(2000)	Giacomazzi, Andrew
Associate Professor, Kinesiology; Ph.D., Oregon State University	Washington State University
Donaldson, Paul R	Gibson, Terry-Ann Spitzer(1981)
Professor, Geosciences; Ph.D., Colorado School of Mines Downey, Margaret(1993)	Associate Professor, Kinesiology; Ph.D., University of Idaho
Associate Professor, Nursing; M.S.N., Idaho State University	Gill, Jill K
Dube, Renu(2002)	Assistant Professor, History; Ph.D., University of Pennsylvania, Philadelphia
Assistant Professor, Communication; Ph.D., University of Pittsburgh	Girvan, James(2000)
Dubert, LeeAnn(1992)	Dean, and Professor, College of Health Sciences; Ph.D., University of
Interim Chair and Associate Professor, Literacy; Ph.D., University of Wisconsin, Madison	Oregon
Dufty, Alfred M(1988)	Glen, Roy(1982)
Associate Dean of the Graduate College and Professor, Biology; Ph.D.,	Associate Professor, Management; Ph.D., Case Western Reserve University
State University of New York, Binghamton	Gough, Newell "Sandy"(1989)
Durham, Leslie	Professor, Management; Ph.D., University of Utah
Associate Professor, Theatre Arts; Ph.D., University of Kansas  Dykstra, Dewey I, Jr(1981)	Grantham, Stephen B(1982)
Professor, Physics; Ph.D., University of Texas Austin	Associate Professor, Mathematics; Manager, Enrollment Information
	Systems; Ph.D., University of Colorado
E	Gregory, Anne E(2002) Assistant Professor, Literacy; Ph.D., Purdue University
Eggert, Rudolph(1996)	Green, Gary I(1988)
Graduate Program Coordinator and Professor, Mechanical Engineering;	Professor, Networking, Operations, and Information Systems; Ph.D.,
Ph.D., State University of New York, Buffalo Elison-Bowers, Patt(1986)	University of Washington
Administrative Director, Paralegal Studies Program: Associate Professor,	Gribb, Molly M(2000)
Community and Environmental Health; Ph.D., University of Idaho	Associate Professor, Civil Engineering; Ph.D., University of Wisconsin, Milwaukee
Engebretsen, Sandra LeGrande(2004)	Griffin, John(1983)
Associate Professor, Nursing; Ph.D., University of Utah	Chair and Associate Professor, Computer Science; Ph.D., Washington
English, Thomas J	State University
Professor, Accountancy; Ph.D., Arizona State University	Guarino, Joseph C(2000)
F	Professor, Mechanical Engineering; Ph.D., University of Idaho.
Feldman, Alex(1988)	Н
Graduate Program Coordinator and Associate Professor, Computer	Hager, Karen D(2005)
Science and Associate Professor, Mathematics; Ph.D., University of Wisconsin Madison	Assistant Professor, Special Education; Ph.D., Utah State University
Ferguson, James R(1996)	Hale, Aileen
Associate Professor, Mechanical Engineering; Ph.D., Washington State	Assistant Professor, Bilingual Education; Ed.D., University of San Francisco
University	Francisco

Hamilton, Robert W	(2000)	Jones, Errol D	(1982)
Chair and Associate Professor, Civil Engineering, Ph.D., University		Professor, History; Ph.D., Texas Christian University	.(1002)
Maine		Jones, Laura	(2005)
Hampikian, Gregory	(2004)	Assistant Professor, Kinesiology; Ph.D., University of South Carolin	a,
Associate Professor, Biology; Ph.D., University of Connecticut Hampikian, Janet	(2004)	Columbia Jorcyk, Cheryl	(1998)
Associate Dean and Professor, Materials Science and Engineering		Associate Professor, Biology; Ph.D., Johns Hopkins University	(1000)
University of Connecticut	,,		
Hanna, Charles B	(1996)	K	
Associate Professor, Physics; Ph.D., Stanford University	(1001)	Kaiser, Uwe	(2001)
Hansen, Marla	(1991)	Assistant Professor, Mathematics; Ph.D., University of Siegen Kania-Bartoszynska, Joanna	(1003)
Hansen, Matthew	(2005)	Professor, Mathematics; Ph.D., University of California, Berkley	.(1333).
Assistant Professor, English; Ph.D., University of Nebraska	(=+++)	Kelley, Lorrie Lynn	.(1991)
Harbison, Warren	(1977)	CT/MRI Program Director and Associate Professor, Radiologic Science	
Professor, Philosophy; Ph.D., Syracuse University	(1000)	M.S., Boise State University	(0001
Harkness, Daniel Professor, Social Work; Ph.D., University of Kansas	(1993)	Kelly, Philip P.	
Harris, Beatrice A	(2005)	Chair and Associate Professor; Curriculum, Instruction and Founda Studies; Ph.D., Michigan State University	alionai
Assistant Professor, Early Childhood Studies; Ph.D., University of	(=+++)	Kenny, G Otis	.(1976
Nebraska, Lincoln		Associate Professor, Mathematics; Ph.D., University of Kansas	
Harris, Chad	(1995)	Kerr, Charles R	(1969)
Associate Professor, Kinesiology; Ph.D., Oregon State University	(2000)	Professor, Mathematics; Ph.D., University of British Columbia	(2004)
Harvey, Keith	(2000)	Keys, KathleenAssistant Professor, Art; Ph.D., The Ohio State University	(2004)
Tennessee, Knoxville		Khanal, MandarKhanal, Mandar	(2000)
Hausrath, Alan R	(1977)	Associate Professor, Civil Engineering; Ph.D., University of Californ	
Chair and Professor, Mathematics; Ph.D., Brown University		Irvine	
Haws, David R		Kim, Byung-II.	(2006)
Associate Professor, Civil Engineering; Ph.D., Brigham Young Univ Heikkinen, Michael		Associate Professor, Physics; Ph.D., Seoul National University	(1076)
Professor, Curriculum, Instruction and Foundational Studies; Ph.D.		Kinney, Richard Professor, Public Policy and Administration; Political Science; Ph.D.	
State University		University of Notre Dame	··,
Hemmens, Craig	(1996)	Kinzel, Margaret N	(2000)
Chair and Associate Professor, Criminal Justice Administration an		Assistant Professor, Mathematics, Ph.D., Pennsylvania State Univer	
Academic Director, Legal Assistant Program; J.D., North Carolina	Central	Klaustch, Richard	
University; Ph.D., Sam Houston State University Henderson, Heike	(1997)	Chair and Associate Professor, Theatre Arts; Ph.D., Wayne State Ur Klein, Joanne	
Associate Professor, Modern Languages and Literatures; Ph.D., Un		Assistant Professor, History; Ph.D., Rice University	(2001)
of California-Davis		Knoll, Michael	.(1997)
Hereford, Mary	(2003)	Research Professor, Geosciences, Ph.D., University of British Colur	
Associate Professor, Nursing; Ph.D., University of Idaho, Moscow	(2000)	Knowlton, William B	
Hernon, Cynthia		Graduate Program Coordinator and Associate Professor, Materials and Engineering; Ph.D., University of California, Berkeley	Scienc
Hill, Christopher L.		Ko, KyungdukKoniwersity of California, Berkeley	(2004)
Assistant Professor, Anthropology; Ph.D., Southern Methodist Uni		Assistant Professor, Mathematics; Ph.D., Texas A&M University	(====,
Hoeger, Werner W K		Koeppen, David R	(1996)
Director, Human Performance Laboratory; Professor, Kinesiology	; Ed.D.,	Professor, Accountancy: Ph.D., University of Wisconsin-Madison	(1005)
Brigham Young University Holmes, Janet	(1999)	Koetsier, Peter Associate Professor, Biology, Ph.D., Idaho State University	(1995)
Director of Creative Writing and Associate Professor, English; M.F.		Krumwiede, Kip	(2003)
Warren Wilson College	,	Assistant Professor, Accountancy; Ph.D., University of Tennessee	(2000)
Holmes, M. Randall		Krueger, Norris	(1999)
Associate Professor, Mathematics; Ph.D., State University of New	York at	Assistant Professor, Management; Ph.D., Ohio State University	
Binghamton Honts, Charles R	(1995)	L	
Professor, Psychology; Ph.D., University of Utah	(1000)	La Cava, Gerald	(1982)
Hoste, Ann	(1990)	Professor, Networking, Operations, and Information Systems; Ph.D	
Professor, Theatre Arts; M.F.A., University of Texas at Austin		University of Kansas	,
Hourcade, Jack Joseph		Lamar, Linda Kline	(2000)
Professor, Special Education; Ph.D., University of Missouri, Colum House, Terrie		Assistant Professor, Music; D.A., University of Memphis	(1009)
Assistant Professor, Counselor Education; Ph.D., Oregon State Un		Landrum, R. Eric	
Husting, Virginia		Lathen, William	
Assistant Professor, Sociology; Ph.D., University of Illinois, Urbana	a-	Dean, College of Business and Economics; Professor, Accountance	
Champaign.		Ph.D., Arizona State University	
J		Lee, Jaechoul	(2003)
Jain, Amit	(1996)	Assistant Professor, Mathematics; Ph.D., University of Georgia LeMaster, Clifford	(1000)
Associate Professor, Computer Science; Ph.D., University of Centr		Chair and Professor, Chemistry; Ph.D., University of California, Day	
Florida		Lichtenstein, Peter M	
Jirak, James	(1994)	Professor, Economics; Ph.D., University of Colorado	
Associate Professor, Music; D.A., University of Colorado	(0001)	Liley, Denise Goodrich	.(1997)
Johnson, Richard Associate Professor, Educational Technology; Ph.D., Kansas State		Associate Professor, Social Work; Ph.D., University of Utah	(1000)
University		Lincoln, Douglas J Professor, Marketing and Finance; Ph.D., Virginia Polytechnic Insti	(1980) tute
Jones, Daryl E	(1986)	and State University	····
Director, Interdisciplinary Studies Graduate Program; Ph.D., Mich		Lindsey, Melinda	
State University		Chair and Professor, Special Education: Ph.D., University of Oregon	n

Lojek, Helen(1979)	McLuskie, C Ed Jr(1981)
Associate Dean, College of Arts and Sciences and Professor, English;	Professor, Communication; Ph.D., University of Iowa
Ph.D., University of Denver	McNamara, James P(1997)
Long, Elaine M(1975)	Graduate Program Coordinator, Geology and Associate Professor,
Professor, Health Studies; Ph.D., University of Idaho	Geosciences; M.S., Syracuse University
Long, James A(1974)	McNeil, Larry(1999)
Associate Professor, Biology; Ph.D., Iowa State University	Associate Professor, Art; M.F.A., University of New Mexico
Loo, Sin Ming(2004)	Mead, Jodi L(2000)
Assistant Professor, Electrical and Computer Engineering; Ph.D.,	Professor, Mathematics; Ph.D., Arizona State University
University of Alabama in Huntsville	Mercer, Gary D(1975)
Loucks, Christine(1989)	Professor, Chemistry; Ph.D., Cornell University
Professor, Economics; Ph.D., Washington State University	Michaels, Paul(1993)
Lubamersky, Lynn	Graduate Program Coordinator Geophysics; Associate Professor,
Assistant Professor, History; Ph.D., Indiana University	Geosciences, Ph.D., University of Utah
Lucas, Shelley Marie(2001)	Miller, Margaret(1994)
Assistant Professor, Kinesiology; Ph.D., University of Iowa	Professor, Counselor Education; Ph.D., University of Idaho
Lutze, Peter C(1990)	Miller, Nicholas(1993)
Associate Professor, Communication; Ph.D., University of Wisconsin	Director of Graduate Studies and Associate Professor, History; Ph.D.,
Lyle, Mitchell(1995)	University of Indiana
Research Professor, Geosciences; Ph.D., Oregon State University	Miller, Rickie(1992)
Lyons, Lamont S(1977)	Associate Professor, Curriculum, Instruction and Foundational Studies;
Professor, Curriculum, Instruction and Foundational Studies; Ed.D.,	Ph.D., New Mexico State University
University of Massachusetts	Mills, Janet Lee(1989)
A.A.	Professor, Public Policy and Administration; Communication; Ph.D.,
M	University of Kansas
MacDonald, Jason B(2000)	Minch, Robert P(1986)
Assistant Professor, Marketing and Finance; Ph.D., University of Texas-Pan	Professor, Networking, Operations and Information Systems; Ph.D., Texas
American	Tech University
Macy, Rosemary(2005)	Mirsky, Rebecca(2006)
Assistant Professor, Nursing; M.S., Idaho State University	Associate Professor, Civil Engineering; Ph.D., University of Tennessee
Maguire, James H(1970)	Mitroi, Tudor(2004)
Professor, English; Ph.D., Indiana University	Assistant Professor, Art; M.F.A., University of North Texas
Maher, Matthew(1989)	Miyoshi, Kimiko(2003)
Associate Professor, Marketing and Finance; Ph.D., University of Illinois	Assistant Professor, Art; M.F.A., University of New Mexico
Markel, Michael(1990)	Moll, Amy J(2000)
Director of Technical Communication and Professor, English; Ph.D.,	Chair, Materials Science and Engineering; Associate Professor,
Pennsylvania State University	Mechanical Engineering; Ph.D., University of California, Berkeley
Marker, Anthony(2005)	Molumby, Nicole(2005)
Assistant Professor, Instructional & Performance Technology; Ph.D.,	Assistant Professor, Music; D.M.A., The Ohio State University
Indiana University, Bloomington	Moncrief, Gary F(1976)
Marsh, Natalie Nelson(2005)	Professor, Political Science; Ph.D., University of Kentucky
Assistant Professor, Communication; Ph.D., University of Colorado	Moore, Justin(2001)
Marsh, Robert L(1974)	Assistant Professor, Mathematics; Ph.D., University of Toronto
Associate Professor, Criminal Justice Administration; Ph.D., Sam Houston	Moore, Rick Clifton(1994)
State University	Chair and Associate Professor, Communication; Ph.D., University of
Martin, Carol A(1972)	Oregon
Professor, English; Ph.D., Catholic University of America	Moorhead-Rosenberg, Florence J(1993)
Martin, Leslie(2003)	Associate Professor, Modern Languages and Literatures; Ph.D., University
Assistant Professor, Sociology; Ph.D., Emory University, Atlanta	of California, Davis
Martin, Susan D(2004)	Mori, Carrie L(2003)
Assistant Professor, Literacy; Ph.D., University of Washington	Interim Chair, Graduate Program Coordinator and Assistant Professor,
Mason, Susan G(2004)	Early Childhood Studies; Ph.D., University of Idaho
Graduate Certificate Director and Assistant Professor, Political Science;	Morris, Daniel N(1986)
Ph.D., University of Missouri	Assistant Professor, Communication; Ph.D., University of Missouri
Mathie, David(1992)	Most, Marshall(1987)
Professor, Music; D.M.A., University of Georgia	Assistant Professor, Communication; M.A., Boise State University
Mattison, Michael(2003)	Mueller, David G(2001)
Assistant Professor, English; Ph.D., University of Massachusetts Amherst	Graduate Program Coordinator and Assistant Professor, Criminal Justice
Maxson, Emerson(1968)	Administration; Ph.D., Washington State University
Associate Professor, Networking, Operations, and Information Systems,	Mullner, Peter(2004)
Ph.D., Texas Tech University	Associate Professor, Materials Science and Engineering; Ph.D., Swiss
Maynard, Ritchard(1990)	Federal Institute of Technology
Assistant Professor, Music; M.A., University of Iowa	Munger, James C(1988)
McCain, Gary(1979)	Associate Vice-President, Academic Planning and Professor, Biology;
Chair and Professor, Marketing; Ph.D., University of Oregon	Ph.D., University of Arizona
McCarl, Robert S III	Munger, Roger
Associate Professor, Anthropology, Ph.D., Memorial University of	
Newfoundland McCharpey, John W. (1995)	Murgel, George A(1996) Graduate Program Coordinator and Associate Professor, Civil Engineering;
McChesney, John W	Ph.D., Cornell University
Associate Professor, Kinesiology, Ph.D., University of Oregon	i ii.D., Comen omversity
McClain, Lisa	N
Director, Women's Studies and Assistant Professor, History; Ph.D.,	
University of Texas  McClestov, Pichard  (1076)	Nagasundaram, Murli
McCloskey, Richard	Associate Professor, Networking, Operations, and Information Systems;
Professor, Biology; Ph.D., Iowa State University  McCorkle, Suzzana (1978)	Ph.D., University of Georgia
McCorkle, Suzanne(1978) Director, Conflict Management Services and Professor, Communication;	Napier, Nancy K(1986) Director of International Business Consortium and Programs, College
Ph.D., University of Colorado  McDonald Theodore W (2001)	of Business and Economics; Professor, Management; Ph.D., Ohio State
McDonald, Theodore W(2001) Graduate Program Coordinator, Health Sciences and Assistant Professor,	University Neri, Janice L(2006)
Graduate i rogram coordinator, ricatti delences and Assistant riblessor,	
Psychology; Ph.D., University of Wisconsin-Milwaukee	Associate Professor, Art; Ph.D., University of California-Irvine

Neupert, Kent	(2004) estern
Ontario Newman, Marcy J. Knopf	(2001)
Assistant Professor, English, Ph.D., Miami University Nicholson, James A	(1986)
Director, Counseling and Testing Center; Counseling Psychologist; Professor, Counseling; Ph.D., University of Missouri, Columbia Northrup, Clyde J	(1998)
Chair and Associate Professor, Geosciences; Ph.D., Massachusetts Institute of Technology	(1000)
Novak, E. Shawn	(1996)
Associate Professor, Accountancy, Fil.D., University of Houston  Associate Professor, Biology; Ph.D., Washington State University	.(1993)
0	
O'Connor, Jacqueline	(2001)
Assistant Professor, English; Ph.D., University of California at Davis Odahl, Charles M	.(1975)
Professor, History; Ph.D., University of California, San Diego Olsen-Smith, Steven	(2000)
Assistant Professor, English; Ph.D., University of Delaware Orr, Martin	
Associate Professor, Sociology; Ph.D., University of Oregon	
Osguthorpe, Richard	
Ph.D., University of Michigan Otterness, Nancy	
Associate Professor, Nursing; M.S.N., Idaho State University	
Oxford, Julia Thom Associate Professor, Biology; Ph.D., Washington State University, Pt	(2000) ullman
P	
Palmer, Rosemary	(1998)
Associate Professor, Literacy; Ph.D., University of Wyoming Parkinson, Del R	(1985)
Professor, Music; D.M., Indiana University Parks, Donald J	.(1973)
Professor, Mechanical Engineering; Ph.D., University of Minnesota Parrett, William H	
Professor, Curriculum, Instruction and Foundational Studies; Ph.D. Indiana University	,
Patrick, Steven	
Payne, Michelle M Associate Professor, English; Ph.D., University of New Hampshire	.(1997)
Payne, Richard D	.(1970)
Professor, Economics; Ph.D., University of Southern California Peele, Thomas	
Associate Director of Writing Program and Assistant Professor, Eng Ph.D., University of South Florida Peloquin, Jeffrey	
Assistant Professor, Chemistry; Ph.D., Arizona State University	
Pelton, John R	.(1981)
Penry, Tara	(2000)
Peralta Nash, Claudia	
Education; Ph.D., University of Colorado, Boulder Peters, Tanya	(2005)
Assistant Professor, Literacy; Ph.D., Texas Tech University Petlichkoff, Linda M	
Professor, Kinesiology; Ph.D., University of Illinois	
Pfeiffer, Ronald Professor, Kinesiology; Ed.D., Brigham Young University	.(1979)
Pierce, Jennifer	(2005)
Plew, Mark G  Chair and Professor, Anthropology; Ph.D., Indiana University,	
Bloomington Pollard, Constance	.(1993).
Professor, Educational Technology; Ph.D., University of Nebraska, I	Lincoln
Pritchard, Mary	
Punnoose, Alex Assistant Professor, Physics; Ph.D., Aligarah Muslim University of In	

Purdy, Craig AAssociate Professor, Music; M.M., New England Conservatory	.(1987)
Q	
Qu, LemingAssistant Professor, Mathematics; Ph.D., Purdue University  R	(2002)
Rafla, Nader	(1996) Case
Ransdell, Lynda B	(2005)
Ray, Nina Marie	(1986)
Raymond, Gregory A  Honors Program Director and Professor, Political Science; Ph.D., University of South Carolina	. (1974)
Reavy, Kathleen	
Reeder, Heidi M	(2000)
Reimann, Richard J Chair and Professor, Physics; Ph.D., University of Washington	
Reischl, Uwe	
Reynolds, R Larry	.(1979)
Roark, Anthony P	(2005)
Robbins, Bruce	(1990)
Robertson, Ian C	by B.C.,
Rogien, Lawrence	.(1993) dies;
Rohn, Troy  Assistant Professor, Biology; Ph.D., University of Washington	(2000)
Rohrig, Kathleen L Ayers	(1983) versity
of Idaho Routh, Partha	(2003)
Graduate Program Coordinator, Geophysics, and Assistant Profess Geosciences; Ph.D., University of British Columbia Rushing-Raynes, Laura	or,
Associate Professor, Music; D.M.A., University of Arizona Russell, Dale D.	
Professor, Chemistry; Ph.D., University of Arizona, Tucson Ryder, Mary Ellen	. ,
Associate Professor, English; Ph.D., University of California, San Di	
Sobiek Michalla	(2002)
Sabick, Michelle Assistant Professor, Mechanical Engineering; Ph.D., University of Io Samball, Michael	owa
Associate Professor, Music; D.M.A., North Texas State University Sanderson, Irene (Rena)	
Associate Professor, English; Ph.D., University of Colorado, Boulde Sarin, Shikhar	(2002)
Austin Saunders, David Associate Professor, Music; D.M.A., State University of New York at	
Brook Schackel, Sandra K	.(1989)
Professor, History; Ph.D., University of New Mexico Scheepers, Marion	(1988)
Professor, Mathematics; Ph.D., University of Kansas Schimpf, Martin E	(1990)
Dean, College of Arts and Sciences and Professor, Chemistry; Ph.I University of Utah Schooley-Pettis, Diane	.(1989)
Associate Dean, College of Business and Economics and Professor Marketing and Finance; Ph.D., University of Colorado, Boulder Schrader, Cheryl B	
Dean and Professor, College of Engineering; Ph.D., University of No Dame	

Schrader, Vivian	(2005)
Schmitz, Mark	
Technology Schoedinger, Andrew	
Chair and Professor, Philosophy; Ph.D., Brown University Sego, Trina	
Associate Professor, Marketing and Finance; Ph.D., University of To Austin	exas at
Seibert, Pennie S	(1990)
Sener, Joseph	
Serpe, Marcelo	
Shadle, Susan	.(1997)
Shallat, Todd A	(1985)
Shannon, Patrick	
University of Oregon	
Shimon, Jane	orado
Shevy, Mark	n
Shuck, Gail	
Shurtleff-Young, CherylGraduate Program Coordinator and Professor, Art; M.A., University	
Oregon Simon, Louis P	(1998)
Assistant Professor, English; Ph.D., Loyola University Singletary, Ted J	
Graduate Program Coordinator and Professor, Curriculum, Instruct Foundational Studies; Ph.D., University of Illinois, Urbana-Champa	ign
Smith, Elisa Barney	(1999)
Rensselaer Polytechnic Institute Smith, James F	.(1992)
Professor, Biology; Ph.D., University of Wisconsin, Madison Smith, Kirk	.(1993)
Associate Dean for Graduate Studies and Executive Education, and Professor, Marketing and Finance; Ph.D., University of Houston	
Smith, Mary Jarratt	
Smith, Scott F	and
Computer Engineering; Ph.D., University of Idaho; Ph.D., State Uni of New York, Albany.	versity
Smith, William S	.(1973)
Smulovitz, Anika	(2003)
Snow-Gerono, Jennifer L	
Ph.D., Pennsylvania State University, University Park Snyder, Walter S	
Professor, Geosciences; Ph.D., Stanford University Spear, Caile E	
Associate Professor, Kinesiology; Ph.D., University of Arkansas Springer, Pamela	
Associate Dean, Health Sciences; Chair and Associate Professor, N Ph.D., Idaho State University	
Staley, Scott	.(1989)
Steiner, Stanley	
Stephenson, Dale  Director of Environmental Health and Assistant Professor, Health S	
Ph.D., Colorado State University	
Stepich, Donald A.  Chair, Graduate Program Coordinator and Associate Professor,  Institutional and Reformance Technology, Ph. D. Burdus University	
Instructional and Performance Technology; Ph.D., Purdue Universi Stewart, Roger.	
Professor, Literacy; Ph.D., Purdue University Stoffels, Sharon	(1998)
Associate Professor, Nursing; M.S.N., California State University, Dominguez Hills	

Stohr, Mary Professor, Criminal Justice Administration; Ph.D., Washington	(1003)
	State
University Sutherland, LeonieAssistant Professor, Nursing; M.S., Azusa Pacific University	(2004)
T	
Tabor, Sharon W	(1998) nformation
Taye, John A Professor, Art; M.F.A., Otis Art Institute	
Taylor, Patricia A	(1975) State
University Taylor, Ronald S Professor, Art; M.F.A., Utah State University	(1975)
Tennyson, Stephen A	(1995) rsitv
Tinker, Juliette	(2004)
Toevs, Sarah E	nmental
Totten, Annette	(2005)
Traynowicz, Laurel	a
Trusky, Tom Professor, English; M.A., Northwestern University	
Turner, Lee Ann	
Professor, Economics; Ph.D., University of Washington	(1300)
U	
Uehling, Karen S	vis
Uh, Gang-Ryung	(2002) niversity
V	
van Wijk, Kasper Associate Professor, Geophysics; Ph.D., Colorado School of N	lines
Vaughn, Ross E Associate Dean, College of Education and Professor, Kinesiok Washington State University	(1072)
	ogy; Ph.D.,
washington state offiversity	ogy; Ph.D.,
W Walen, SharonGraduate Program Coordinator and Professor, Mathematics; P Washington State University	(1996) Ph.D.,
Walen, Sharon	ogy; Ph.D.,(1996) Ph.D.,(1984)
Walen, Sharon	ogy; Ph.D., (1996) Ph.D., (1984) een State (1996)
Walen, Sharon	ogy; Ph.D., (1996) Ph.D., (1984) een State (1996) (1999)
Walen, Sharon Graduate Program Coordinator and Professor, Mathematics; P Washington State University Walsh, Anthony. Professor, Criminal Justice Administration; Ph.D., Bowling Gre University Wanek, James E. Professor, Management, Ph.D., University of Minnesota Ward, Keith Assistant Professor, Management; Ph.D., Ohio State University Warner, Don Assistant Professor, Chemistry; Ph.D., University of Michigan	ogy; Ph.D., (1996) Ph.D., (1984) een State (1996) (1999)
Walen, Sharon	ogy; Ph.D., (1996) (1996) (1996) (1996) (1999) (2002) (1989) (1989) (1989)
Walen, Sharon Graduate Program Coordinator and Professor, Mathematics; P Washington State University Walsh, Anthony Professor, Criminal Justice Administration; Ph.D., Bowling Gre University Wanek, James E Professor, Management, Ph.D., University of Minnesota Ward, Keith Assistant Professor, Management; Ph.D., Ohio State University Warner, Don Assistant Professor, Chemistry; Ph.D., University of Michigan Weatherby, James B Director, Center for Public Policy and Associate Professor, Pul and Administration; Political Science; Ph.D., University of Idal White, Craig Professor, Geosciences; Ph.D., University of Oregon	ogy; Ph.D., (1996) Ph.D., (1984) een State (1996) (1999) (2002) (1989) blic Policy (1980)
Walen, Sharon	ogy; Ph.D., (1996) (2002) (2002) (1989) (2002) (1989) (1980) (1988) (1988)
Walen, Sharon Graduate Program Coordinator and Professor, Mathematics; P Washington State University Walsh, Anthony Professor, Criminal Justice Administration; Ph.D., Bowling Gre University Wanek, James E Professor, Management, Ph.D., University of Minnesota Ward, Keith Assistant Professor, Management; Ph.D., Ohio State University Warner, Don Assistant Professor, Chemistry; Ph.D., University of Michigan Weatherby, James B Director, Center for Public Policy and Associate Professor, Pul and Administration; Political Science; Ph.D., University of Idal White, Craig Professor, Geosciences; Ph.D., University of Oregon White, Harry Chair and Professor, Marketing and Finance; Ph.D., Texas A & University White, Merlin Associate Professor, Biology; Ph.D., University of Kansas	ogy; Ph.D., (1996) (2002) (2002) (1989) (2002) (1989) (1980) (1980) (1988) (1988)
Walen, Sharon Graduate Program Coordinator and Professor, Mathematics; P Washington State University Walsh, Anthony Professor, Criminal Justice Administration; Ph.D., Bowling Gre University Wanek, James E Professor, Management, Ph.D., University of Minnesota Ward, Keith Assistant Professor, Management; Ph.D., Ohio State University Warner, Don Assistant Professor, Chemistry; Ph.D., University of Michigan Weatherby, James B Director, Center for Public Policy and Associate Professor, Pul and Administration; Political Science; Ph.D., University of Idal White, Craig Professor, Geosciences; Ph.D., University of Oregon White, Harry Chair and Professor, Marketing and Finance; Ph.D., Texas A & University White, Merlin	ogy; Ph.D., (1996) Ph.D., (1984) Ph.D., (1996) Ph.D., (1996) (1999) (2002) (2002) (1989) (1980) (1988) M (2006)
Walen, Sharon	ogy; Ph.D., (1996) (2002) (2002) (1989) (2002) (1989) (1980) (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988)
Walen, Sharon	ogy; Ph.D., (1996) Ph.D., (1984) Ph.D., (1984) Ph.D., (1996) (1999) (2002) (2002) (1989) Ph.D., (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988) (1988)

Willerton, David Russell	Wood, I Ass
Willison, Scott	Wu, Huo Ass
Wingett, Denise G(2003)	Yeh, Jyh
Assistant Professor, Biology; Ph.D., Washington State University	Ass
Winiecki, Donald J(1996) Associate Professor, Instructional & Performance Technology; Ph.D. Central Queensland University; Ed.D., Texas Tech University	Young, l Gall Stat
Witt, Stephanie L(1989)	Yu, Gon
Associate Vice President for Academic Affairs and Professor, Political	Ass
Science; Public Policy and Administration; Ph.D., Washington State	Uni
University	
Wojtkowski, W. Gregory(1982)	
Professor, Networking, Operations, and Information Systems, Ph.D., Case Western Reserve University	Zaerr, L Pro
Wojtkowski, Wita(1983)	Ziker, Jo
Professor, Networking, Operations, and Information Systems, Ph.D., Case	Ass
Western Reserve University	Barl
Wollheim, Peter(1989)	Zirinsky
Associate Professor, Communication; Ph.D., McGill University	Prof
Wood, Jennifer(2006)	Zubik-K
Associate Professor, Art; M.F.A.,	Ass

Wood, L. Shelton
Υ
Yeh, Jyh-haw
Z
Zaerr, Linda Marie
Zirinsky, Michael P

## Adjunct Graduate Faculty Part-Time Faculty, Faculty from Other Universities, Personnel from Affiliated Agencies and Emeriti as of March 2006

NOTE: The date in parentheses is the year of first graduate appointment.

A	
Aksamit, Pat, Ph.D., Health Science	)
Albright, Laura, M.H.S., Health Science	
Allaire, Bobbie M., M.S., Instructional Technology(1994)	)
Andersen, Rudy, D.D.S., Health Sciences (Emeritus)(2003)	)
В	
Baehr, Paul, M.D., Kinesiology(2002	
Ball, Christopher L., Ph.D., Biology(2006)	)
Bart, Jonathan, Ph.D., Biology(1997)	
Basom, Marnie, M.P.H., Health Sciences(2002)	
Beecham, John J., Ph.D., Biology(1986)	)
Belcheir, Marcia J., Ph.D., Instructional Technology(1996)	
Bentley, Elton D., Ph.D., Geosciences (Emeritus)(1981	
Bieter, John, Ph.D., History(2005)	)
Bildstein, Keith Louis, Ph.D., Biology	
Blacklock, Karen, Ed.D., Education	
Bond, Laura, M.S., Biology	
Boyer, Dale, Ph.D., English (Emeritus)	
Brawer, Judith M, J.D., Health Sciences	
Brethower, Dale M., Ph.D., Instructional Technology	
Brewer, Kenneth, ABD/Ph.D., Biology	
Brown, Karen, Ph.D., Art	
Bryant, Amy, Ph.D., Biology	
Burnham, William, Ph.D., Biology	
Burns, Richard V., B.A., Public Policy and Administration	
C	,
Cade, Tom, Ph.D., Biology (Emeritus)(1989	)
Cadwallader, Kara, M.D., Health Sciences(2006)	)
Carlisle, Jay D., Ph.D., Biology(2006)	
Chadwick, Daniel G., J.D., Public Policy and Administration (1996)	
Christensen, Fred, M.B.A., C.P.A., C.G.F.M., Accountancy	
Clement, William P., Ph.D., Geosciences	
Clemo, Thomas M., Ph.D., Geosciences	
Cobbs, Hartzell J., D.Religion, Health Sciences(2005)	
Colby, Conrad, Ph.D., Health Sciences (Emeritus)(1970	
Coberly, Donald, Ph.D., Special Education(2005)	)

Corbin, Robert, M.A., Sociology	(1977) (1996) (2004)
Dare, Matthew, Ph.D., Biology	(2004) (1999) (2002) (2004) (1996) (2005) (1987) (2003)
E Eldridge, David, Ph.D., Biology Emerson, Mark, M.Div., ABD/Ph.D Earnst, Susan, Ph.D., Biology Eastmond, Daniel V., Ph.D., Instructional Technology Eisele, Theodore A., B.S., Instructional Technology Ensley, Mary L., M.A., Counselor Education Erickson, Robert, Instructional Technology Ertmer, Peggy, Ph.D., Instructional Technology Evans, Sandra, M.A.Ed., Health Sciences	(2001) (1997) (1996) (1995) (1996) (1998)
F Falk, Gary L., M.D., Health Sciences Farnsworth, Judy, Ph.D., Health Sciences Farris, Ann, Ed.D., Education. Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fillmore, Colleen, Ph.D., Health Sciences Fischer, Michael, D.M.A., Music Fisher, Sara Mae, M.P.A., Dispute Resolution. Fitterer, Jill, M.F.A., Art	(2004) (2005) (1998) (1994) (2006) (2002) (2005)

## Boise State University Adjunct Graduate Faculty and Emeriti

Partier Aufren, MP.H. Health Sciences				
Elements   Carrell   Education   Elements   Carrell   Education   Elements	Fletcher, Andrea, M.P.H., Health Sciences	(2002)	Kochert, Michael, M.S., Biology	(1987)
Frederick, Judy Barker, M.A., Hould Sciences   (205)   Lambert Carroll, Ed.D., Entanction (Emeta)   (205)   Lange-rick Map   (201)   English (Emeta)   (201)   Lange-rick Map   (201)   Lange-rick	Floerchinger-Franks, Ginger, D.P.H., Health Sciences	(2005)	· · · · · · · · · · · · · · · · · · ·	
Freedom   New Series   PLL   Contractive Discussion   (200)			Lambert Carroll Ed D. Education (Emerita)	(1976)
Process   Proc				
Follow   Composition   Compo				
Rivings (Nites M. M.P.A., 7			LaRiviere, Sara, Ed.D., Health Studies (Emerita)	(1989)
Furness, Smart Routing, M.E.J. Courselor Education (1987) Furness, Timority J., M.E.J., Courselor Education (1987) Furness, Timority J., M.E.J., Courselor Education (1987) Gamblel, Herve Albert, Ph.D. Biology (2006) Gast, Marlenc, Ph.D. Biology (2006) Genevors, Budt, Ph.D. Interactional Perhoology (1980) Genevors, Budt, Ph.D. Education (2006) Genevors, Budt, Ph.D. Education (2007) Genevors, Budt, Ph.D. Education (2007) Genevors, Budt, Ph.D. Geoceteness (2007) Georges, Ph.D. Geoceteness (2007) Georges				
Furness Timothy J. M.Ed. Counselor Education				
Carried   Herry Carried   M.S. (Secretioness   2001)				
Garble   Herve Albert   Pro D., Biology   Capital   Ca	•			
Cambust, Herve Abert, P.L.J., Biology   (2005)	_			
Construction   Cons				
Copyright   Ph.D.   Education   Carlo   Capter				
Genows, Hugh, Ph.D., Education   (2001)   Luke, Rabert A., Ph.D., Physics, Chronitis)   (2077)   Genore, Lunda, M.A., Health Sciences   (2002)   Luke, Rabert A., Ph.D., Physics, Chronitis   (2005)   Luke, Rabert A., Ph.D., Geosciences   (2006)   Luke, Rabert A., Ph.D., Geosciences   (2006)   Luke, Rabert A., Ph.D., Biology   (1988)	Gayeski, Diane, Ph.D., Instructional Technology	( 1999 )		
Ceorgeson, Wonne L. M.A., Fonglish. (2005)   Spis, Americkin M. Cheart Sciences (2002)   Spis, Americkin M. Cheart Sciences (2003)   Spis, Americkin M. Cheart Sciences (2004)   Spis, Americkin M. Cheart Sciences (2005)   Spis, Americkin M. Spis, Ame				
Gerbor, Lindis, M.A., Health Sciences   (2002)				
Gillerma, Nirginia, Ph.D., Geosciences.   (1994)			Lyle, Annette M. Olivarez, Ph.D., Geosciences	(2005)
Girvan, Georgia, M.H.E., Health Sciences   (2005)   Ma. Yongsheng, Ph.D., Biology   (1985)   (2005)				
Godchaux, Martha Miller, Ph.D., Goosciences.   (2004)   Marti, Jr. Carl D., Ph.D., Biology   (1887)   (2003)   Martin, Maryahm, M.A., Education   (2004)   (2005)			Ma, Yongsheng, Ph.D., Biology	(1998)
Comez. Luis Eduardo, L.M., Modern Languages. (2005)   Martini, MaryAnn, M.A., Education (2000)   Greeperg, Alvin, Ph.D., English (2005)   Greeperg, Alvin, Ph.D., English (2005)   Greeperg, Alvin, Ph.D., English (2005)   Marzuluf, John M., Ph.D., Bislotog (1981)   Greeporg, Bayard O, Ph.D., Dispute Resolution (2005)   Marzuluf, John M., Ph.D., Bislotog (1981)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1987)   McChare, Kenneth R., D.D., Public Policy and Administration (1989)   McChare, Kenneth R., D.D., Public Policy and Administration (1989)   McChare, Kenneth R., D.D., Public Policy and Administration (1989)   McChare, Kenneth R., D.D., Public Policy and Administration (1989)   McChare, Kenneth R., D.D., Public Policy and Administration (1989)   McChare, Kenneth R., D.D., Public Policy and Administration (1989)   McChare, Kenneth R., Publ., Public Policy and Administration (1989)   McChare, Kenneth R., Publ., McChare, McChare, McChare, McChare, McChare, McChare, Mc				
Carg. Caple, M.H.S., Health Sciences   (2005)   Marsh, Keviñ R., Ph.D., History   (2002)   Greenspan, Valeda, Ph.D., Health Sciences   (2005)   Marzulfa, John M., Ph.D., Biology   (1994)   Greenspan, Valeda, Ph.D., Health Sciences   (2004)   Greenspan, Valeda, Ph.D., Health Sciences   (2004)   Guerra, Ingrid J., Ph.D., Instructional Rechnology   (2004)   McCurran, Fatricia, Ph.D., Health Sciences   (2007)   McCurran, Fatricia, Ph.D., Health Sciences   (2007)   McCurran, Fatricia, Ph.D., Health Sciences   (2007)   McCurran, Fatricia, Ph.D., Health Sciences   (2008)   McCurran, Fatricia, Ph.D., Health Sciences   (2008)   McCurran, Fatricia, Ph.D., Health Sciences   (2008)   Miller, Alison, M.A., Health Science   (2009)   Miller, Alison, M.A., Health Science   (2009)   Miller, Deventy M.A., History   (2008)   Miller, Powerly M.A., History   (2008)   Miller, Deventy M.A., History   (2009)   Miller, Deventy M.A., Health Science   (1995)   Mondri, Septen, Ph.D., Biology   (2002)   Mondri, Septe				
Greenpeg, Alvin, Ph.D. English   (2005)   Marzluff, John M., Ph.D. Riology   (1991)   Greespop, Bayard O., Ph.D., Dispute Resolution   (2004)   McCure, Kenneth R., J.D., Public Policy and Administration   (1997)   (2005)   McCure, Remeth R., J.D., Public Policy and Administration   (2004)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2005)   McCure, Kenneth R., J.D., Public Policy and Administration   (2002)   McCure, Kenneth R., J.D., Public Policy and Administration   (2002)   McCure, Kenneth R., J.D., Cosciences   (2004)   McCure, McCure				
Greerspan, Valerla, Ph. D., Health Sciences (2005) Mazaika, Rosemary, M.S., Biology (1994) Gerra, Ingrid J., Ph.D., Instructional Technology (2005) McGavran, Patricia, Ph.D., Health Sciences (2007) McGavran, Patricia, Ph.D., Health Sciences (2008) McGavran, Ph.D., Biology (1988) McGavran, Ph.D., Biology (1989) McGavran, Ph.D.,				
Gregory, Bayard O., Ph.D., Dispute Resolution   (2007)				
Guerra, Ingrid J., Ph.D., Instructional Technology				
McNeel, Sevent C, Ph.D., History (2005)   Hadjokas, Nicholas, Ph.D., Biology (1986)   Hadjokas, Nicholas, Ph.D., Biology (1986)   Hald, Christine, M.D., Health Science (2000)   Hahm, Christine, M.D., Health Science (2000)   Halmabelon, Den H.G., Instructional Technology (2003)   Harris, Charles, Ph.D., Biology (1987)   Hambelon, Ben H.G., Instructional Technology (2003)   Hambelon, Den H.G., Instructional Technology (2003)   Hambelon, Den H.G., Instructional Technology (2004)   Harris, Charles, Ph.D., Biology (2002)   Hawkins, Nina, M.L.S., Education (2001)   Heathert, Margavet, M.S., Leath Science (2007)   Heathert,				
Hadiokas Nicholas Ph.D. Biology   (1998)   Miller, Alison, M.A., Health Science   (2000)   Miller, Burney, M.A., History   (1998)   Miller, Burney, M.A., History   (1995)   Moeller, John R. Ph.D., Health Sciences   (2001)   Hambelon, Bern Med. Instructional Technology   (2002)   Monfort, Stephen, Ph.D., Biology   (2002)   Moore, Heber G., Ph.D., Instructional Technology   (2001)   Mawkins, Nina, M.L.S., Education   (1992)   Moore, Heber G., Ph.D., Instructional Technology   (2001)   Newny, Timorby, Ph.D., Instructional Technology   (1997)   Newny, Timorby, Ph.D., Instructional Technology   (1997)   Newny, Timorby, Ph.D., Instructional Technology   (1994)   Noore, M.B.A., Attractional Technology   (1994)   Noore, M.B.A., Education   (1994)   Noore, M.B.A., Education   (1994)   Noore, M.B.A., Education   (1994)   Noore, M.B.A., Educational Studies   (2001)   Noore, M.B.A., Educational Studies   (		(2000)		
Hahn, Christine, M.D., Health Science. (1988)   Miller, Beverly, M.A., History. (1986)   Hambelton, Ben Med., Instructional Technology. (2003)   Hambelton, Ben Med., Instructional Technology. (1987)   Handles, P.D., Health Science. (2004)   Hardegree, Stuart, Ph.D., Biology. (2002)   Harden, St., Ph.D., Biology. (2002)   Harden, St., Ph.D., Biology. (2003)   Harden, St., Ph.D., Biology. (2003)   Harden, St., Ph.D., Biology. (2003)   Harden, St., Ph.D., Biology. (2004)   Hollen, St., Ph.D., Biology. (2004)   Hollen,	н			
Hale_Judith Ann, Ph.D., Instructional Technology	Hadjokas, Nicholas, Ph.D., Biology	(1998)		
Hambelon, Ben M.Ed., Instructional Technology	Hahn, Christine, M.D., Health Science	(1998)		
Hannah Elizabeth, D.W. Health Sciences   (2002)   Hardisgree, Suarr, Ph.D. Biology   (2002)   Hardisgree, Suarr, Ph.D. Biology   (2003)   Hardis, Nina, M.L.S. Education   (1992)   Heathcock, Alan, M.F.A. English   (2004)   Hemphill-Haley, Mark Allen, Ph.D., Geosciences   (1995)   Helphill-Haley, Mark Allen, Ph.D., Geosciences   (1995)   Hill, Jak, M.S., Health Science   (1997)   Hill, Jak, M.S., Health Science   (1997)   Holfman, Rebecca, Theatre Arts   (1997)   Holfman, Rebecca, Theatre Arts   (1997)   Hollenbaugh, Renneth M.P.D., Geosciences (Emeritus)   (1998)   Holmes, Robbina, M.Ed., Education   (1992)   Hughis, Nikái J., Ph.D., Kinesiology   (2006)   Hughes, Nikái J., Ph.D., Sciologo   (2004)   Hughes, Nikái J., Ph.D., Biologo   (2004)   Hughes, Nikái J., Ph.D., Biologo   (2004)   Hughes, Nikái J., Ph.D., Biologo   (2004)   Hughesh				
Hardegree, Stuart, Ph.D., Biology				
Harris, Charles, Ph.D. Biology				
Hatten, Seven A, M.S., Mechanical Engineering. (2005)   Hawkins Nina, M.L.S., Education. (1992)   Heathcock, Alan, M.F.A., English. (2001)   Heathcock, Alan, M.F.A., English. (2001)   Hemphill-Haley, Mark Allen, Ph. D., Geosciences (2001)   Hembest, Mangaret, M.S., Health Science. (1998)   Newhy, Timothy, Ph.D., Instructional Technology. (1970)   Newman, Nicholas, M.A., Art. (2004)   Newhy, Timothy, Ph.D., Instructional Technology. (1970)   Newman, Nicholas, M.A., Art. (2004)   Noder, Phyllis, M.S., Education. (1989)   Newhy, Timothy, Ph.D., Instructional Technology. (1989)   Noder, Phyllis, M.S., Counselor Education. (1994)   Noder, Phyllis, M.S., Counselor Education. (1995)   Noder, Phyllis, M.S., Counselor Education. (1994)   Noder, Phyllis, M.S., Counselor Education. (1995)   Noder, Phyllis, Phyllis, M.S., Counselor Education. (1995)   Noder, Phyllis, M.S., Leath Science. (1994)   Noder, Phyllis, M.S., Counselor Education. (1995)   Noder, Phyllis, Phyllis, M.S., Counselor Education. (1995)   Paris, Number, Phyllis, Phyllis, Phyllis, Phy				
Hawkins, Nina, M.L.S., Education				
Heathcock Alan, M.F.A., English   (2001)				
HemphilHarlady, Margaret, M.S., Health Science		. ,	NI.	
Hill   Jula, M.S., Health Science   (1997)   Newby, Timothy, Ph.D., Instructional Technology   (1997)   Newban, Nicholas, M.A., Art   (2004)   (1997)   (1	Hemphill-Haley, Mark Allen, Ph.D., Geosciences	(2001)	- •	
Hoff, Asthleen Jody, M.B.A., Education.   (2001)   Newman, Nicholas, M.A., Art   (2004)   Noffman, Rebecca, Theatre Arts   (1997)   Hollenbaugh, Kenneth M. Ph.D., Geosciences (Emeritus)   (1998)   Hollenbaugh, Kenneth M. Ph.D., Geosciences (Emeritus)   (1998)   Hollens, Robina, M.Ed., Education.   (1994)   (1994)   Hollens, Nikid J., Ph.D., Kinesiology   (2005)   Hughes, Nikid J., Ph.D., Kinesiology   (2006)   (2006)   Hutchison, Fred, M.S., Health Sciences   (2004)   Hutchison, Fred, M.S., Health Sciences   (2004)   Hutchison, Fred, M.S., Health Sciences   (2004)   (2005)   Hutchison, Fred, M.S., Health Sciences   (2004)   Hutchison, Fred, M.S., Leave, M.S.	Henbest, Margaret, M.S., Health Science	(1998)		
Hoffman, Rebecca, Theatre Arts				
Hollenbaugh, Kenneth M., Ph.D., Geosciences (Emeritus)   (1968)     Holmes, Robina, M.Ed., Education   (1994)     Holmes, Robina, M.Ed., Education   (1994)     Horton, Robert J., M.S., Instructional Technology   (2005)     Hughes, Nikki J., Ph.D., Kinesiology   (2006)     Hughin, Linda M., Ph.D., Instructional Technology   (2004)     Hutchison, Fred, M.S., Health Sciences   (2004)     Hutchison, Fred, M.S., Health Sciences   (2004)     I				
Holmes, Robina, M.Ed., Education				. ,
Horton, Robert J., M.S., Instructional Technology (2006)   Using pass, Nikiki J., Ph.D., Kinesiology (2006)   Using J., Linda M., Ph.D., Instructional Technology (2004)   Using J., Linda M., Ph.D., Health Sciences (2004)   Using J., Linda M., Ph.D., Health Science (1997)   Using J., Linda M., Ph.D., C & I Foundational Studies (2001)   Using J., Linda M., Ph.D., Linda J., Linda J., Linda M., Ph.D., Health Science (1997)   Using J., Linda M., Ph.D., Linda J., Linda J.				(1001)
Hughes, Nikki J., Ph.D., Kinesiology			0	
Huglin, Linda M., Ph.D., Instructional Technology (2004)   Olsen, Mary, M.A., Early Childhood (2005)   Hutchison, Fred, M.S., Health Sciences (2004)   Olsen, Thomas H., Ed.D., C. & I Foundational Studies (2001)   Olson, Richard D., Ph.D., Biology (1997)   Olson, Richard Ph.D., Health Science (1997)   Olson, Richard Ph.D., Health Science (2004)   Saacs, Christine, Ph.D., Criminal Justice Administration (2006)   Othberg, Kurt L., Ph.D., Geosciences. (1996)   Ourada, Patricia K., Ph.D., History (Emeritus) (1973)   P			Oberbeck, Verne, Ph.D., Geosciences	(1994)
Olson, Richard D., Ph.D., Biology				
Olson, Richard, Ph.D., Health Science (1997)	Hutchison, Fred, M.S., Health Sciences	(2004)		
Ilett, Frank Jr., M.B.A., Accountancy	I			
Saacs, Christine, Ph.D., Criminal Justice Administration	I	(1000)		
Ikonan, Liisa, Ph.D., Sociology				
Jaeger, Michael, Ed.D., Education				
Jaeger, Michael, Ed.D., Education		(1336)	* * * * * * * * * * * * * * * * * * * *	(1010)
Jaeger, Norma D., M.S., Criminal Justice Administration   (2004)   Park, Susan, J.D., Management.   (1999)   Jarocki, William L., M.P.A., Public Policy and Administration   (1998)   Pearson, Thel, Ph.D., Education (Emeritus)   (1981)   Jenkins, Susan, Ph.D., Education   (2001)   Perry, Terrell, Ed.D., Instructional Technology   (2003)   Peterson, Dave, M.A., History   (2002)   Johnson, David A., M.S.W., Health Sciences   (2004)   Peterson, Dave, M.A., History   (2002)   Johnson, Patricia L., Ph.D., Instructional Technology   (2004)   Peterson, Polly, Ph.D., Counselor Education   (2001)   Johnson, Patricia L., Ph.D., Instructional Technology   (2004)   Peterson, Polly, Ph.D., Counselor Education   (2001)   Johnson, Patricia L., Ph.D., Mathematics (Emeritus)   (2006)   Phelps, Ruth, Ph.D., Education   (2001)   Juola, Robert, Ph.D., Mathematics (Emeritus)   (2004)   Phelps, Ruth, Ph.D., Education   (2004)   Phillips, Jack J., Ph.D., Instructional Technology   (2004)   Phillips, Patricia P., Ph.D., Instructional Technology   (2004)   Phillips, Patricia P., Ph.D., Instructional Technology   (2004)   Pitman, Jeffrey, M.S., Kinesiology   (2004)   Pitman, Jeffrey, M.S., Kinesiology   (2004)   Powell, Linda, M.S., Health Science   (2000)   Powell, Linda, M.S., Health Science   (2000)   Powell, Linda, M.S., Health Science   (2000)   Pullen, Rebecca, Ph.D., Biology   (1994)   Pullen, Rebecca, Ph.D., Biology   (1994)   Pullen, Rebecca, Ph.D., Biology   (1994)   Pullen, Rebecca, Ph.D., Biology   (2005)   Remington, Richard R. Ill, M.S., Health Sciences   (2004)   Remington, Richard R. Ill, M.S., Health Science	J		P	
Jaeger, Norma D., M.S., Criminal Justice Administration   (2004)   Park, Susan, J.D., Management.   (1999)   Jarocki, William L., M.P.A., Public Policy and Administration   (1998)   Pearson, Thel, Ph.D., Education (Emeritus)   (1998)   Pearson, Thel, Ph.D., Education (Emeritus)   (2003)   Petry, Terrell, Ed.D., Instructional Technology   (2003)   Peterson, Dave, M.A., History   (2002)   Peterson, Dave, M.A., History   (2002)   Peterson, Dave, M.A., History   (2002)   Peterson, Polly, Ph.D., Counselor Education   (2001)   Peterson, Polly, Ph.D., Counselor Education   (2001)   Peterson, Polly, Ph.D., Counselor Education   (1994)   Peterson, Polly, Ph.D., Counselor Education   (2001)   Peterson, Polly, Ph.D., Counselor Education   (1994)   Peterson, Polly, Ph.D., Counselor Education   (2001)   Peterson, Polly, Ph.D., Education   (2004)   Peterson, Polly, Ph.D., Instructional Technology   (2004)   Peterson, Polly, Ph.D., Instructional Technology   (2004)   Peterson, Polly, Ph.D., Instructional Technology   (2004)   Peterson, Ph.D., Education   (2004)   Peterson, Ph.D., Education   (2006)   Peterson, Ph.D., Education   (2006)   Powell, Linda, M.S., Health Science   (2000)   Powell, Linda, M.S., Health Science   (2000)   Powell, Linda, M.S., Health Science   (2000)   Powell, Ph.D., Biology   (2006)   Powell, Ph.D., Biology	Jaeger. Michael, Ed.D., Education	(2001)	Paris, Anthony, J., Ph.D., Mechanical Engineering	(2001)
Darocki, William L., M.P.A., Public Policy and Administration   (1998)   Pearson, Thel, Ph.D., Education (Emeritus).   (1981)     Jenkins, Susan, Ph.D., Education   (2001)   Perry, Terrell, Ed.D., Instructional Technology.   (2003)     Johnson, Chris, M.P.H., Health Sciences.   (2003)   Peterson, Dave, M.A., History.   (2002)     Johnson, David A., M.S.W., Health Sciences.   (2004)   Peterson, Dave, M.A., History.   (2002)     Johnson, Patricia L., Ph.D., Instructional Technology.   (2004)   Peterson, Neil, M.S.S., Geosciences.   (2001)     Jones, Wilma L., Ed.D., Education.   (2006)   Peterson, Polly, Ph.D., Counselor Education.   (2001)     Juola, Robert, Ph.D., Mathematics (Emeritus).   (2004)   Phillips, Pack J., Ph.D., Instructional Technology.   (2004)     K				. ,
Johnson, Chris, M.P.H., Health Sciences   (2003)   Peterson, Dave, M.A., History   (2002)	Jarocki, William L., M.P.A., Public Policy and Administration	(1998)		
Johnson, David A., M.S.W., Health Sciences				
Johnson, Patricia L., Ph.D., Instructional Technology   (2004)   Jones, Wilma L., Ed.D., Education   (2006)   Phelps, Ruth, Ph.D., Education   (1994)   Phelps, Ruth, Ph.D., Education   (1994)   Phelps, Ruth, Ph.D., Instructional Technology   (2004)   Phillips, Jack J., Ph.D., Instructional Technology   (2004)   Phillips, Patricia P., Ph.D., Education   (1996)   Powell, Linda, M.S., Health Science   (2006)   Powe				
Jones, Wilma L., Ed.D., Education   (2006)   Phelps, Ruth, Ph.D., Education   (1994)				
Duola, Robert, Ph.D., Mathematics (Emeritus)   (2004)   Phillips, Jack J., Ph.D., Instructional Technology   (2004)   Phillips, Patricia P., Ph.D., Instructional Technology   (2004)   (2004)   Phillips, Patricia P., Ph.D., Instructional Technology   (2004)   (2004)   (2005)   (2006)   (20				
K         Phillips, Patricia P., Ph.D., Instructional Technology         (2004)           Keeble, John, M.F.A., English         (2006)         Plasket, Donna, Ph.D., Education         (1999)           Keller-Peck, Cynthia, Ph.D., Biology         (2002)         Powell, Linda, M.S., Health Science         (2000)           Kerns-Blain, Angeline, M.A., Sociology         (1990)         Prinzing, Dan, Ph.D., Education         (2006)           Kidder, Brenton A., Ed.D., Education         (1999)         Pullen, Rebecca, Ph.D., Biology         (1994)           Kiff, Lloyd Francis, M.A., Biology         (1995)         R         R           Knapp, James M.S.W., Social Work         (1993)         Rachlow, Janet, Ph.D., Biology         (2005)           Knick, Steven T. Ph.D., Biology         (1990)         Ravitskaya, Irena, D.M.A., Music         (2004)           Knowles, Todd Allen, Ed.D., Education         (2001)         Remington, Richard R. III, M.S., Health Sciences         (2003)           Knox, Ellis (Skip) Ph.D., History         (1990)         Reynolds, Timothy, Ph.D., Biology         (1999)				
Keeble, John, M.F.A., English       (2006)       Plasket, Donna, Ph.D., Education       (1996)         Keller-Peck, Cynthia, Ph.D., Biology       (2002)       Powell, Linda, M.S., Health Science       (2000)         Kerns-Blain, Angeline, M.A., Sociology       (1990)       Prinzing, Dan, Ph.D., Education       (2006)         Kidder, Brenton A., Ed.D., Education       (1999)       Pullen, Rebecca, Ph.D., Biology       (1994)         Kiff, Lloyd Francis, M.A., Biology       (1995)       R         Kinter, Cecilia Lynn, Ph.D., Biology       (2006)         Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)		(2001)		
Keller-Peck, Cynthia, Ph.D., Biology       (2002)       Powell, Linda, M.S., Health Science       (2000)         Kerns-Blain, Angeline, M.A., Sociology       (1990)       Prinzing, Dan, Ph.D., Education       (2006)         Kidder, Brenton A., Ed.D., Education       (1999)       Pullen, Rebecca, Ph.D., Biology       (1994)         Kiff, Lloyd Francis, M.A., Biology       (1995)       R         Kinter, Cecilia Lynn, Ph.D., Biology       (2006)         Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)	K		Pitman, Jeffrey, M.S., Kinesiology	(1999)
Keller-Peck, Cynthia, Ph.D., Biology       (2002)       Powell, Linda, M.S., Health Science       (2000)         Kerns-Blain, Angeline, M.A., Sociology       (1990)       Prinzing, Dan, Ph.D., Education       (2006)         Kidder, Brenton A., Ed.D., Education       (1999)       Pullen, Rebecca, Ph.D., Biology       (1994)         Kiff, Lloyd Francis, M.A., Biology       (1995)       R         Kinter, Cecilia Lynn, Ph.D., Biology       (2006)         Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)	Keeble, John, M.F.A., English	(2006)		
Kidder, Brenton A., Ed.D., Education       (1999)       Pullen, Rebecca, Ph.D., Biology       (1994)         Kiff, Lloyd Francis, M.A., Biology       (1995)       R         Kinter, Cecilia Lynn, Ph.D., Biology       (2006)       R         Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)	Keller-Peck, Cynthia, Ph.D., Biology	(2002)		
Kiff, Lloyd Francis, M.A., Biology       (1995)         Kinter, Cecilia Lynn, Ph.D., Biology       (2006)         Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)				
Kinter, Čecilia Lynn, Ph.D., Biology       (2006)         Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)			<u> </u>	(1994)
Knapp, James M.S.W., Social Work       (1993)       Rachlow, Janet, Ph.D., Biology       (2005)         Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)			R	
Knick, Steven T. Ph.D., Biology       (1990)       Ravitskaya, Irena, D.M.A., Music       (2004)         Knowles, Todd Allen, Ed.D., Education       (2001)       Remington, Richard R. III, M.S., Health Sciences       (2003)         Knox, Ellis (Skip) Ph.D., History       (1990)       Reynolds, Timothy, Ph.D., Biology       (1999)				(2005)
Knowles, Todd Allen, Ed.D., Education (2001) Knox, Ellis (Skip) Ph.D., History (1990)  Remington, Richard R. III, M.S., Health Sciences (2003) Reynolds, Timothy, Ph.D., Biology (1999)				
Knox, Ellis (Skip) Ph.D., History				
	Kobe, Nancy, M.Ed., Counselor Education	(1998)	Rieman, Bruce, Ph.D., Biology	(1999)

## Boise State University Adjunct Graduate Faculty and Emeriti

Ripley, David E., M.B.A., Instructional Technology	(1998)	Thomas, Mary Norris, Ph.D., Instructional Technology	(2004)
Robertson, Wilma, M.S., Biology		Thompson, Randy, Ph.D. Health Sciences	(2004)
Rodgers, David W., Ph.D., Geosciences		Toney, Patricia N. MA., Education	(1996)
Roloff, Gary John, Ph.D., Biology		Toweill, Dale, Ph.D., Biology	
Rood, Christine, M.S., Education		Turk, Blossom M., Ed.D., Education	
Rosentreter, Roger, Ph.D., Biology		Tutty, Jeremy, Ph.D., Educational Technology	
Roy, Baishali, Ph.D., Geosciences		Tydeman, William, Ph.D., History	(1004)
Rucker, Jack P., B.A., Economic Education		rydenian, winiam, rm.D., riistory	(1334)
Rush, Mike, Ed.D., Education		V	
Ryan, Randall, Ph.D., Biology		Valderrama, Luis Eduardo Gomez, L.L.M., Modern Languages	(2002)
Ryan, Ted, M.B.A., Health Sciences		Van Maren, Nancy, M.A., M.S.W., Health Sciences	(1000)
ryan, red, w.b.A., rream sciences	(2001)		
S		Virta, Alan, M.L.S., HistoryViskupic, Karen, Ph.D., Geosciences	
Cook Victoria Dk D. Dialogy	(1000)	viskupic, Kareii, Fii.D., Geosciences	(2004)
Saab, Victoria, Ph.D., Biology Safaii, SeAnne, M.S., Health Sciences	(1990)	W	
		••	(1001)
Sallabanks, Rex, Ph.D., Biology		Waag, Charles J., Ph.D., Geosciences (Emeritus)	
Salo, Lucinda F., Ph.D., Biology		Wagner, Catherine, Ph.D., English	
Schamp, Cindy, M.A, Health Sciences.		Ware, Judy, Dispute Resolution	
Schiappa, Tamra, Ph.D., Geosciences		Watson, Richard T., Ph.D., Biology	
Schlee, Conni, Ph.D., Elementary Education		Watts, Barry, Ph.D., Counselor Education	
Schoch, Leslie J., M.A., Health Sciences		Weathers, Lynne Koch, M.A., Education	
Schrader, Vincent E., Ph.D., Educational Technology		Weinberg, Pamela, Ph.D., Health Sciences	(1998)
Schweibert, Penelope, Ph.D.	(1999)	Whelan, William, J.D., Public Policy	
Semanko, Norman M., J.D., Health Sciences	(2004)	Werntz, James H., M.Envir.Mgt., Health Sciences	
Seyfried, Mark, Ph.D. Geosciences		West, Elizabeth, Ph.D., Education	
Shannon, Susan, M.B.A., C.P.A., Accountancy		West, Stephen, M.H.S., Health Sciences	
Shea, Kevin, M.D., Kinesiology		Whitacre, David, Ph.D., Biology	
Silak, Cathy, J.D., Public Policy		White, Courtney Reynolds, M.B.A., Business & Economics	(2003)
Silva, Charlotte, Ph.D., Education		Wilhelm, Peggy Jo, M.S.M., Music	(2003)
Small, Milton, M.A., History	(1990)	Williams, Rick, Ph.D., Biology	(1989)
Smith, Gwendolyn M., Ed.D., Dispute Resolution	(2004)	Wilson, Kevin, M.A., English	(1995)
Smith, Samuel W., Artist cellist, Music		Wilson, Monte, Ph.D., Geosciences (Emeritus)	(1971)
Snelson, Chareen, Ed.D., Educational Technology	(2004)	Wilson, Stephen K., M.P.A., Public Policy and Administration	(2003)
Spear, Terry M., Ph.D., Health Sciences		Wingett, Denise, Ph.D., Biology	(1999)
Spence, Michael J. Ph.D., Biology	(1998)	Wolf, Rebecca, M.F.A., English	(2005)
Spencer, Jamison Ross, D.M.D., Biology	(2006)	Womak, Michael S., M.D., Kinesiology	(2005)
Spinosa, Claude, Ph.D., Geosciences (Emeritus)	(1970)	Wood, Spencer H., Ph.D., Geosciences (Emeritus)	(1977)
Squires, Edward, M.S., Geology		Worthington, Janet Evans, Ph.D., Educational Technology	(2004)
Stamm, Beth, Ph.D., Health Science	(2002)		. ,
Steenhof, Karen, M.S., Biology	(1987)	Υ	
Sterling, Robert, B.S., Health Science	(2002)	Yarrington, Diane, M.H.S.A., Health Sciences	(2003)
Stevens, Dennis L., Ph.D., M.D., Biology	(1998)	Yense, A. Eric, Ph.D., Biology	(2002)
Stevenson, Kurt Brown, M.D., Health Science	(1999)	Youngerman, Stephanie, E.D., Education	
Stokes, Lee, Ph.D., Health Science (Emeritus)		Yopp, Martha, Ed.D., Education	
Stroebel, Helen, R.N., M.P.H., Health Sciences	(2001)	Young, Katherine, Ed.D. Education (Emerita)	
Sutton, Nancy Jo, D.V.M. Biology		Young, Virgil M., Ph.D., Education (Emeritus)	
	( )	Youtz, D. Jeffrey, B. A., Public Policy and Administration	
T			(1000)
Tengelsen, Leslie Ann, Ph.D., D.V.M., Health Sciences	(2002)	Z	
Thiagarajan, Sivasailam, Ph.D., Instructional Technology		Zollweg, James E., M.S., Geosciences	(1995)
, , , ,	(=)	Zomoo, vamoo zi, mio., Geoocicheco	(1000)

## **At-Large Graduate Faculty**

Participants in multi-university programs

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## Index

A	Campus Recreation 15	Credits Required for Financial Aid Eligibility 44
Academic Adjustment	Candidacy, Admission to 27–28	Credits Required for Graduate Degree 30, 33
See Admission to Candidacy	See Admission to Candidacy;	Credit Applied to
Academic Honesty & Dismissal 19	See Individual Course Requirements Capstone Course 31	Graduate Credit 27, 29 Master's Degree 30
Academic Performance 25	Career Center 50	Ph.D. Degree 33
Academic Regulations 25–28	Cashier	Credit Code 16
Accountancy, Department of 103–111	See Payment and Disbursement Office	Credit Limits for
Accountancy, M.S. 103	Catalog Contents, Policy Statement Concerning 2	Directed Research
Accountancy, Taxation, M.S. 104 Accreditation of Programs 13	Catalog Year, Choice of 27	Internships
Adding Classes and Dropping Classes 35	Center for Professional Development 53	Pass/Fail
Additional Graduate Courses 204	Certificate Programs, Graduate 8–10	Transfer
Address Changes 19	Addiction Studies 201	Undergraduate "G" Courses
Adjunct Graduate Faculty 13, 214	Geographical Information Analysis 79 Gerontological Studies 202	Workshops See Aggregate Restriction; See Restrictions
Administrative Withdrawal 19	Health Services Leadership 170	on Certain Courses
Admission Regulations 21	Online Teaching 131	Criminal Justice Administration, Department of
Degree-Seeking Students 21	School Technology Coordination 132	178–180
Handling of Documents 24 International Student 23	Secondary/K-12 Teaching 124	Criminal Justice Administration, M.A. 178
Nondegree-Seeking Students 21	Technical Communication 69	Cross-listed Courses 16
Admission Requirements 21	Technology Integration Specialist 133	Culminating Activity 29, 30
Admission to Candidacy 27–28	Certificate Program Regulations, Graduate 29	Cultural Center 51
See Individual Course Requirements;	CEUs (Continuing Education Units) 53	Curriculum, Instruction and Foundational Studies,
See Program GPA Requirement	Challenge Courses 27 Change of Name or Address 19	Department of 120–128 Doctor of Education in Curriculum and
Admission to Certificate or Degree Program 21	Chemistry Graduate Courses 205	Instruction, Ed.D. 120
Advisor 25, 30	Children's Center 51	Education, Curriculum and Instruction, M.A. 122
Aggregate Restriction 30, 33	Child Care 51	Educational Leadership, M.Ed. 124
Abertsons Library, The 14	Civil Engineering, Department of 146-148	Physical Education Pedagogy Option 123
An Introduction to Boise State University 12–23 Apartments, University 49	Civil Engineering, M.Engr. 147	Secondary/K-12 Teaching, G.C. 124
University Heights 49	Civil Engineering, M.S. 146	<b>D</b>
University Manor 49	Hydrologic Sciences, M.S. 194	D
University Park 49	Civil Engineering, M.Engr. 147	Deadlines
University Square 49	Civil Engineering, M.S. 146 Commencement 28	See Academic Calendar
University Village 49	Committee, Graduate Student Supervisory 25, 30,	Deadlines for Paying Tuition, Fees, and Other
Appeals 20, 40, 47	33	Charges 39
Application Deadlines 21, 22	Communication, Department of 176–178	Defense of Dissertation 34 Project or Thesis 31
Application Fee 22, 40	Communication, M.A. 176	Deferred Payment of Tuition, Fees, and Other
Art, Department of 55–63 Art Education, M.A. 56	Communication, M.A. 176	Charges 39
Visual Arts, M.F.A. 55	Community and Regional Planning, G.C. 185	Degree Programs Offered 8-10
Arts and Sciences, College of 54–95	Complete Withdrawal 36	Directed Research 17
Art Education, M.A. 56	Completion of Graduate Certificate 28	Disabilities Services Office 51
Assessment 17	Completion of Graduate Degree 28 Comprehensive Examination 32, 33, 34	Dismissal from Boise State 19–20
Assistantships 43	Computation of the Grade Point Average 38	Dispute Resolution Graduate Courses 188
At-Large Graduate Faculty 216	Computer Engineering	Dissertation 17, 28, 33, 34 Distance Education Classes 52
Athletics and Recreation 15 Attendance in Class	See Electrical and Computer Engineering,	Doctor of Education in Curriculum and Instruction
See Faculty-Initiated Withdrawal	Ph.D.	120
Audit Courses 35	Computer Resources 15	Doctor of Philosophy in Electrical and Computer
	Computer Science, Department of 149–151	Engineering 152
В	Computer Science, M.S. 149 Computer Science, M.S. 149	Doctor of Philosophy in Geophysics 73
Bilingual Education, Department of 113-115	Concurrent Enrollment for High School Students	Doctor of Philosophy in Geosciences 75
Bilingual Education, M.Ed. 113	53	Doctor of Philosophy Programs Regulations 33
English as a Second Language, M.Ed. 114	Confidentiality and Privacy 18	Dropping and Adding Classes 35 Dual-Listed Courses 26
Biology, Department of 58-63	Conflict Management, G.C. 188	Dual-Listed Courses 20
Biology, M.A. 59	Continuing Education Units (CEUs) 53	E
Biology, M.S. 60	Coordinator, Graduate Program 13	Early Childhood Studies, Department of 129
Raptor Biology, M.S. 60	Corporate Relations Program 53	Early Childhood Studies, M.A. 129
Boise State University, An Introduction to 12 Boise State West 52	Counseling Services 50	Early Childhood Studies, M.Ed. 129
BSU Canyon County Campus 52	Counselor Education, Department of 115–128	Education, College of 112–144
Business Administration, Executive Master of	Addiction Studies, G.C. 201 Gerontological Studies, G.C. 202	Educational Leadership, M.Ed. 124
101–111	Courses, Repetition of 26	Educational Technology, Department of 130
Business Administration, Master of 96-101	Courses Offered Via the Internet 52	Educational Technology, M.S. 52, 131
Business and Economics, College of 96-111	Course Numbering System 16	Online Teaching, G.C. 131
•	Course Numbers, University-wide 17	School Technology Coordination, G.C. 132
С	Course Terminology 16	Technology Integration Specialist, G.C. 133 Electrical and Computer Engineering, Department
Campus, A Tour of the 13	Credits, Number to Determine Enrollment Status 19	Escarca and computer Engineering, Department

of	Grade-Point Average (GPA)	Idaho Residency Requirements for Fee Purposes
Computer Engineering, M.Engr. 156	How to Calculate 38	41, 42
Computer Engineering, M.S. 155	Individual Course Requirements 26	In-resident Credit Requirement 30, 33, 122
Electrical and Computer Engineering, Ph.D. 152–160	Program GPA Requirement 26 Semester GPA Requirement 25	In-Service Teacher Education Workshop Courses 27, 53
Electrical Engineering, M.Engr. 156	Grades 37	Incompletes 38
Electrical Engineering, M.S. 156	Dissertation 34	Independent Study 17
Engineering, College of 145–167	IP, Usage of 31, 34	See also Aggregate Restriction
English, Department of 63–72	Project 31	Instructional & Performance Technology,
Creative Writing, M.F.A. 63	Thesis 31	Department of 160-164
English, Education, M.A. 66	Graduate Admission and Degree Services 21-24	Instructional & Performance Technology, M.S.
English, M.A. 65	Graduate Assistantships 43	52, 160
English, Rhetoric and Composition, M.A. 67	Graduate Certificate Programs 8-10	Insurance Coverage 51
Technical Communication, M.A. 67	Graduate Credit as a Senior 27	Intensive English Program 53
English Language Support Services 51	See also Aggregate Restriction	Interdisciplinary Programs 194–203
English Program, Intensive 53	for Graduate Credit 27	Addiction Studies 201
Enrollment, Student Numbers 13	for Undergraduate Credit 27	Gerontological Studies 202
Enrollment in Multiple Programs 25, 29	Number of "G" Courses Allowed Toward Degree	Hydrologic Sciences, M.S. 194
Enrollment Requirement at Culmination of Degree	26, 27	Interdisciplinary Studies, M.A. 196
32, 34	Graduate Credit Option for Undergraduate Students	Interdisciplinary Studies, M.S. 196
Enrollment Status, Number of Credits Determine 19	27	Materials Science and Engineering, M.Engr. 199
Enrollment Status, Verification of Your 19 Evening Programs 52	Graduate Degrees Offered 8–10 Graduate Degree Programs 8–10, 54–207	Materials Science and Engineering, M.S. 198
Examination, Final 30, 32, 34	Graduate Degree Program General Requirements	International Programs 50, 53 International Students 22, 23, 46, 51, 53
Extended Studies, Division of 52–53	25–28	International Students 22, 25, 40, 51, 55 Internet courses 52
Extended studies, Division of 32–33	Graduate Faculty 13, 25, 208	Internship 17
F	Graduate Preparation Courses 53	See also Aggregate Restriction
	Graduate Program Coordinator 13	IP Grade, Usage of 31, 34
Faculty, Graduate 13, 25, 208	Graduate Student Supervisory Committee 25, 30,	ii orade, coage or or, or
Faculty-Initiated Withdrawal 36–37	33	K
Faculty List 208–216, 214–216, 216 Failure of Examination 32, 34	GRE, Test Preparation 50	Kinesiology, Department of 135
Fair-Housing Policy 48	Grievance, Right of Appeal 20	Athletic Administration, M.P.E. 139
Federal Loans 44	Guidance of Graduate Students 25	Exercise and Sport Studies, M.S.
Federal PLUS Loans 45		Behavioral Studies 136
Fees 35, 39–41	Н	Biophysical Studies 136
Fee Policy, Academic and 35	Half-time Enrollment Credit Requirement 19	Socio-historical Studies 137
Fee Waiver 43	Handbook of Procedures 32, 34	Knowledge Network and Cable Television 52
Fellowship 43	Health, Wellness and Counseling Services 50	
FERPA 18	Health Insurance Program (SHIP), Student 50	L
Final Examination 30, 32, 33, 34	Health Promotion Services 51	Language Proficiency 30, 33
Financial Aid 43–47	Health Sciences, College of 168-175	Lecture Recital 31
Appeal of Ineligible for 47	Addiction Studies, G.C. 201	Letter Grades 37
Credits Required for Eligibility 44	Environmental Health, M.H.S. 169	Library Resources
Deadline for Applying 43, 44	General Research, M.H.S. 169	The Albertsons Library 14
Disbursement of Funds 46	Gerontological Studies, G.C. 202	Limits for Completion of Degree, Time 28
Repayment After Withdrawal 46	Health Policy, M.H.S. 170	Literacy, Department of 140
Satisfactory Academic Progress 47	Health Promotion, M.H.S. 170	Education, Reading, M.A. 140
Fine Arts, Visual Arts 55	Health Services Leadership, G.C. 170	Loans 44, 46
Foreign Language Requirement 30, 33	Health Services Leadership, M.H.S. 170	
G	Health Services 50	M
	History, Department of 181	Master's Programs Regulations 30-32
"G" Undergraduate Courses 26, 27	Historical Research, M.A.H.R. 182	Master in Management Information Systems 108
See also Aggregate Restriction	History, M.A. 181 History of the University 12	Master of Applied Historical Research 182
for Graduate Credit 27	Honesty, Academic 19	Master of Arts in
for Undergraduate Credit 27	Housing, Student 48–49	Art Education 56
Number Allowed Toward Degree 26, 27	Apartment, Applying to Rent an 49	Biology 59
GEM Scholarship 46	Cost Information 48	Communication 176
Gender Studies Graduate Courses 206	Housing Preferences 48	Criminal Justice Administration 178
General Academic Regulations 25–28	Residence Halls, University 48	Education
Geosciences, Department of 73–84 Earth Science, M.S. 76	Residence Hall Housing, How to Apply for 49	Curriculum and Instruction 122
	Residential Colleges 49	Physical Education Pedagogy Option 123
Geographical Information Analysis, G.C. 79 Geology, M.S. 77	Rules and Regulations 48	Early Childhood Studies 129
Geophysics, M.S. 78	University Apartments 49	Reading 140
Geophysics, M.S. 78 Geophysics, Ph.D. 73	How to Apply for Residence Hall Housing 49	Special Education 143
Geosciences, Ph.D. 75	Hydrologic Sciences, M.S. 194	English 65
Hydrologic Sciences, M.S. 194		English Education 66
GMAT Test Preparation 50	I	Rhetoric and Composition 67
Gowen Field, BSU at 52	Idaho Educational Public Television 52	History 181 Interdisciplinary Studies 196
· · · · · · · · · · · · · · · · · · ·		mieruiscipiinary siuules 130

Tachnical Communication 67	Machanical Engineering Department of 165 167	<b>D</b>
Technical Communication 67  Master of Business Administration 96	Mechanical Engineering, Department of 165–167 Mechanical Engineering, M.Engr. 166	R
Executive Master of Business Administration 101	Mechanical Engineering, M.S. 165	Raptor Biology, M.S. 60
Master of Education in	Medical Services 50	Reading, M.A. in Education 140
Bilingual Education 113	MHAFB program 52	Readings and Conference 17
Early Childhood Studies 129	Mission of the University 12	Records, Transcript 18
Educational Leadership 124	Mountain Home Air Force Base, BSU at 52	Recreation, Campus 15
English as a Second Language 114	Music, Department of 90-95	Refund Policy 40
Special Education 144	Music Education, M.M. 91	Registrar's Office 38 Registration 35–38
Master of Engineering in	Pedagogy, M.M. 92	Dissertation 34
Civil Engineering 147	Performance, M.M. 92	Open 35
Computer Engineering 156	M	Project 31
Electrical Engineering 156	N	Thesis 31
Materials Science and Engineering 199	Name Changes 19	Registration Cancellation 35
Mechanical Engineering 166	Networking, Operations, and Information Systems,	Regulations
Master of Fine Arts in	Department of 106-111	Academic 25–28
Creative Writing 63 Visual Arts 55	Management Information Systems, M.S. 108	Admission 21–24
Master of Health Science	Management Information Systems, Master in 108	Certificate 29
Environmental Health 169	Nondegree-Seeking Students 21, 22	Doctor of Philosophy 33-34
General Research 169	Nursing Graduate Courses 206	Master's 30-32
Health Policy 170	0	Renaissance Institute 53
Health Promotion 170		Repetition of Courses 26
Health Services Leadership 170	Online Programs 52	Requisites 16
Master of Music	Online Teaching, G.C. 131	Research Assistantships 43
Music Education 91	Oral Examination for Dissertation 33	Residence Halls Chaffee Hall 48
Pedagogy 92	Project or Thesis 32	Driscoll Hall 48
Performance 92	Other Campus Centers 52 Other Student Services 51	John B. Barnes Towers 48
Master of Physical Education	Other Student Services 31	Keiser Hall 48
Athletic Administration 139	P	Morrison Hall 48
Master of Public Administration	Post time a Foundation and Condit Demoissing and 10	Taylor Hall 48
Environmental and Natural Resource Policy and	Part-time Enrollment Credit Requirement 19	University Square Suites 48
Administration 184 General Public Administration 184	Pass/Fail Courses See Aggregate Restriction	Residency Requirements 42–43
State and Local Government Policy and	Credit Limit 16	Doctor of Education 122
Administration 185	Paying Tuition, Fees, and Other Charges, Deadlines	Master's 30
Master of Science in	for 39	Ph.D. 33
Accountancy 103	Payment and Disbursement Office 39, 41	Restrictions on Certain Courses 30, 33
Accountancy, Taxation 104	Performance Recital 31	Rights and Responsibilities, Your 18
Biology 60	Permanent Record 18	See Program Time Lines
Civil Engineering 146	Physical Education 139	Right of Appeal 20
Computer Engineering 155	Physical Science Graduate Course 207	\$
Computer Science 149	Physics Graduate Courses 206	
Earth Science 76	Plagiarism 19	School Technology Coordination C.C. 122
Educational Technology 131	PLUS Loans 45 Policy Statement Concerning Catalog Contents 2	School Technology Coordination, G.C. 132 Second Master's Degree 32
Electrical Engineering 156		Selected Topics 17
Exercise and Sport Studies 136 Behavioral Studies 136	Practicum 17, 31 Preliminary Examination	Semester Code 16
Biophysical Studies 137	See Assessment	Seminar 17
Socio-historical Studies 137	Preparation and Submission of Theses, Projects,	Senior Citizen Rate 40
Geology 77	and Dissertations 28	Senior Permit
Geophysics 78	Prerequisite Codes 16	See Graduate Credit Option for
Hydrologic Sciences 194	Privacy 18	Undergraduate Students
Instructional & Performance Technology 160	Professional Development, Center for 53	Short-Term Loans 46
Interdisciplinary Studies 196	Professional Education Program 53	Social Sciences and Public Affairs, College of
Management Information Systems 108	Programs and Courses, Summary of 8–14	176–193
Materials Science and Engineering 198	Program Coordinator, Graduate 13	Conflict Management, G.C. 188
Mathematics 85	Program Time Lines 28	Social Work, School of 189
Mathematics Education 86	Project 17, 28, 31	Gerontological Studies 202 Social Work, 2-Year, M.S.W. 190
Mechanical Engineering 165	Psychology Graduate Courses 207 Public Policy and Administration, Department of	Social Work, Advanced Standing, M.S.W. 191
Raptor Biology 60 Master of Science in Hydrologic Sciences 194	183	Sociology Graduate Courses 207
Master of Social Work 189	Community and Regional Planning, G.C. 185	Special Education, Department of 143–144
Materials Science and Engineering, Department	Master of Public Administration 183	Special Education, M.A. 143
of 164	Environmental and Natural Resource Policy	Special Education, M.Ed. 144
Materials Science and Engineering, M.Engr. 199	and Administration 184	Special Topics 17
Materials Science and Engineering, M.S. 198	General Public Administration 184	Student
Mathematics, Department of 85–90	State and Local Government Policy and Ad-	Employment 45
Mathematics, M.S. 85	ministration 185	Enrollment 13

Mathematics Education, M.S. 86

Handbook 18

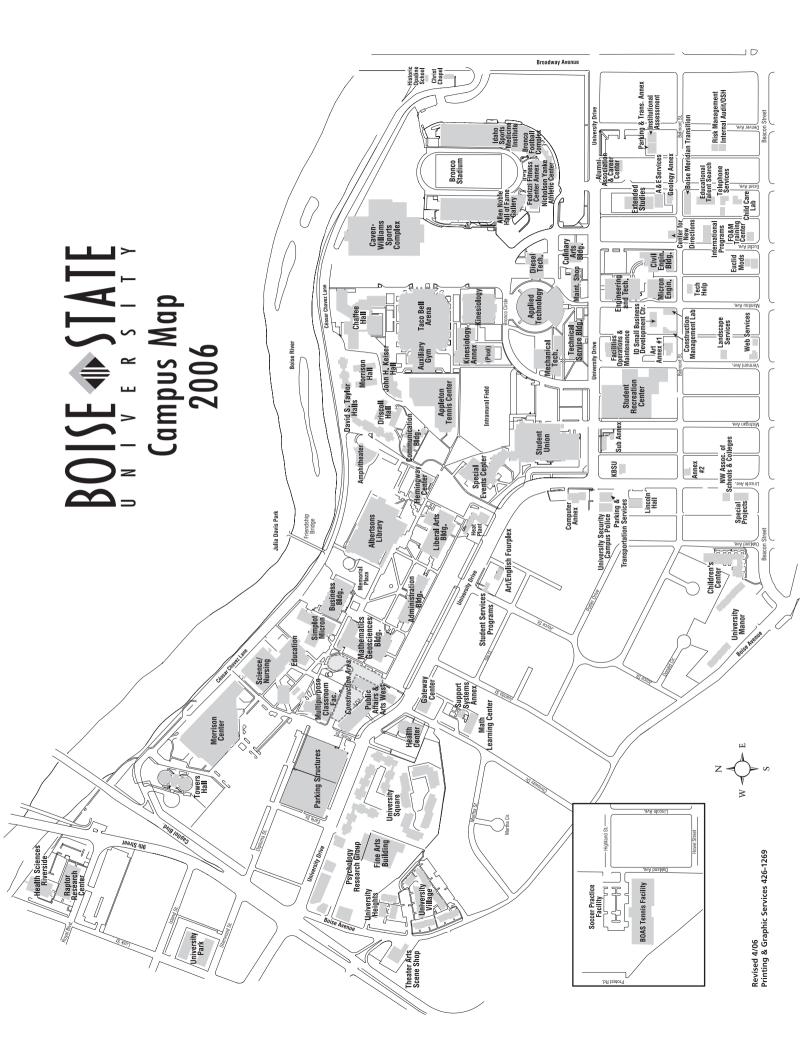
#### Index

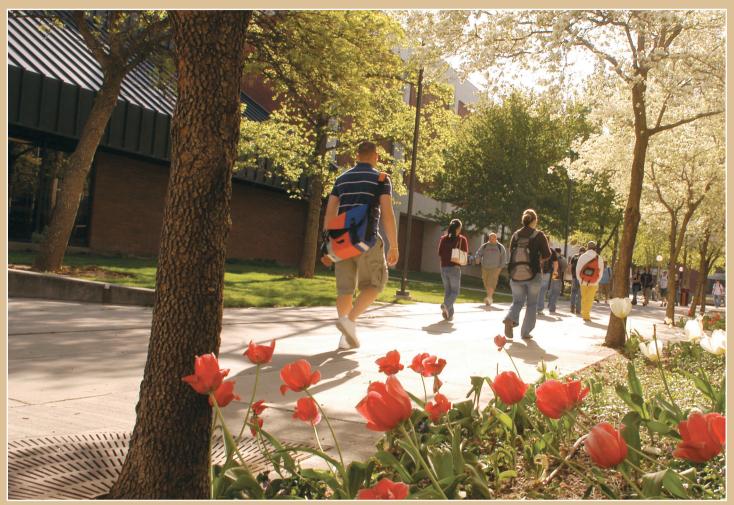
Thesis 17, 28, 31

Health/Medical Services 50 The Albertsons Library 14 V Housing 48-49 The University's History 12 Veterans Services 51 The University's Mission 12 Insurance 50 Visual Arts, M.F.A. 55 Records 18 Time Limit for Completion of Degree Rights 18 Certificate 29 W Services 50 Master's 30 Waiver, Fee 43 Union 14 Ph.D. 33 Waiver Policy (Insurance) 51 Work-study 45 Time Lines, Program 28 Weekend University 52 Student Activities 51 TOEFL 22, 23 Wellness Services 51 Student Address/Name Changes 19 Tour of the Campus, A 13 Student Conduct Program 51 Transcript Records 18 West Campus see Boise State West 52 Withdrawal Student Health Insurance Program (SHIP) 50 Submission of 22, 23 Administrative 20 Student Services, Directory of 50 Transfer Credit 26 Complete 36 Study Abroad 53 See also Aggregate Restriction Faculty-Initiated 36 Summer Programs 52 Tuition and Fees 39-41 Women's Center 51 Supervisory Committee 25, 30, 33 Tuition and Fees, How Boise State University Work-study 45 Supply Chain Management, G.C. 110 Calculates Your 39 Workshop Credits 17 Tutorial Services 50 Writing Center 50 Twin Falls, BSU at 52 Written Comprehensive Examination 32, 33, 34 Taxation 104 Teacher In-Service Courses 27, 53 Υ Teaching Assistantship 43 Undergraduate "G" Courses 26 Your Enrollment Status, Verification of 19 Technical Communication, G.C. 69 See also Aggregate Restriction Your Grade-Point Average (GPA), How to Calculate Technical Communication, M.A. 67 University's Mission, The 12 Technology Integration Specialist, G.C. 133 University-Wide Graduate Courses 17 Your Tuition and Fees, How Boise State University Telecourses (Idaho Public Television) 52 See also Aggregate Restriction Test of English as a Foreign Language (TOEFL) 23 University Children's Center 51 Calculates 39 Test Preparation, GRE, GMAT 50 University Policies and Services 18-53

University Residence Halls 48







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