# 

# graduate

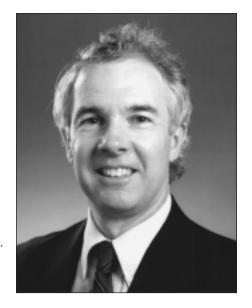




# Welcome from the Graduate Dean

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

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



Boise State is the home of internationally recognized scholars and research activities, award-winning teaching faculty, championship athletic teams, and a student body that is growing in number, diversification, 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 33 master's degree programs with 31 areas of emphasis, plus 2 doctoral programs. It is my pleasure to assist in the administration and delivery of those programs.

If you choose Boise State for pursuit of 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 in which to achieve your goals.

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. If you do not enroll in the semester noted below, you must reapply for admission before attempting to register for a subsequent semester. 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:	all, Spring, Summe	>		()/	>			DO NOT WRITE
2	Degree Objective from list on back. Check only				(Yea	ar)			DO NOT WRITE IN THIS COLUMN
	Full Legal Name	one and en	tor ricio.						ID
٠.	Last Name		First Name				Middle Name		Fee
								_	ree
4.	Student ID (if a previous applicant)							_	Plan
5.	Social Security Number								Astica Dance
6.	Date of Birth:								Action Reason
7.	Permanent Address								Residency
	Address			City		State	Zip Code		School Attended
8.	Mailing Address			City		State	Zip Code		School Attended
9.	E-mail Address								Graduation Date
10	Telephone Number: ()								
	Gender:		_						
	Will you have been a legal resident of the State	of Idaho for t	the 12 m	onthe prior	r to the et	art of the s	amastar cha	cked in #13	P TVes TNo
12.	(Please refer to the Graduate Catalog for defini						eniestei Gie	CRECI III # 1 :	e Lies Livo
	If NO, state of legal residence		_ If NO, c	late contir	nuous resi	idence in I	daho began		
13.	Citizenship If not a US	citizen, ple	ase inclu	de a copy	of your F	Resident A	lien Card.		
14	Ethnic Origin (check one):	n Indian	□Asiar	n 🗆 🗆 🗷 🗀 🗀 Bla	ack 🗆	Hispanic	□White	□don	ot care to respond
	Have you previously applied to Boise State Uni		□Yes	□No		поратно			or care to respond
	Have you previously enrolled at Boise State Un	•		□No	If Yes, \	when?			
17.	Colleges or Universities (including Boise State)	attended. F	ailure to	list all inst	titutions a	ttended is	considered t	fraud and s	subjects applicant to
	cancellation of registration and dismissal from t	he university	y.				Dates Atter	nded—Mon	th/Vear
Nai	me of Institution	City 8	& State				From	ided Mon	То
_									
_									
_									
18.	College or University Degrees held:								
	Type (B.A., B.S., etc.)	College or	Universi	ty		Ma	jor Field		Date Received
_									
-									
_									
	rtify that the statements in this application are tr indable application fee, and have official transcrip			-				-	
o t	he Graduate Admissions Office. Students pursuin	g general gra	aduate st	udy need	to submit	an official	transcript fro	om the inst	itution which granted
	ir highest degree. I understand that any misrepo versity.	resentation (	or omiss	ion of fac	ts will be	cause for	denial of ad	amission o	r dismissal from the
	I Legal Signature of Applicant								
<i>-</i> 1	J g								
							Date		

☐MS in Geophysics

# **DEGREE OBJECTIVES**

DEGREE SEEKING GRADUATE	Master of Health Science
□EdD in Curriculum & Instruction	☐Addiction Studies ☐Environmental Health
□PhD in Geophysics	☐General Research
☐MS in Accountancy	☐Health Policy☐Health Promotion
□Taxation	☐Health Services Leadership
MA in Art, Art Education	
☐MPE in Athletic Administration (ISU)	MA in History (Fall admission only)  _Applied
□MA in Biology	☐ Education
☐MS in Biology	□Research
☐Master of Business Administration	☐MS in Instructional & Performance Technology
□MA in Communication	☐MA in Interdisciplinary Studies
☐MS in Computer Science	☐MS in Interdisciplinary Studies
·	☐MS in Management Information Systems
☐MFA in Creative Writing	☐MS in Materials Science & Engineering
☐MA in Criminal Justice Administration	☐MS in Mathematics Education
☐MS in Earth Science	Master of Music
MA in Education  Curriculum & Instruction	□Education □
Bilingual Education Option	□Pedagogy □Performance
ESL Option	☐Master of Public Administration
<ul><li>□Physical Education Pedagogy</li><li>□Secondary Certification Option</li></ul>	
(Emphasis)	☐MS in Raptor Biology (Fall admission only)
□Early Childhood □Reading	☐MA in School Counseling ☐Addiction Studies (Fall admission only)
Special Education	☐Master of Social Work (Fall admission only)
MS in Education	□MA in Technical Communication
□Educational Technology	☐Master of Fine Arts, Visual Arts
MS in Engineering  Civil Engineering	Unaster of Fine Arts, Visual Arts
Computer Engineering	NON-DEGREE SEEKING GRADUATE
□Electrical Engineering     □Mechanical Engineering	☐General Graduate Study (Non-education courses)
☐MA in English	General Graduate Study (Education courses)
English Education	
☐MS in Exercise and Sport Studies	Revised 5/2003
☐MS in Geology	



# Graduate Catalog

2003-2004



### POLICY STATEMENT CONCERNING CATALOG CONTENTS

The purpose of the Boise State Catalog is to provide current 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 matriculated 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 enroll in the class and a competent faculty member is available to teach the course.

Welcome from the Graduate Dean	.Inside front cover
Graduate Application Form	.Inside front cover
Policy Statement	
Boise State University Calendar - 2002-2003	4
An Introduction to Boise State University	
Administrative Information	
How to Use this Catalog	
Graduate Degrees and Programs Offered	
Graduate Program Coordinators	
University and Graduate Policies a	
General Policies	
Graduate Admission Policies and Procedures.	20
Graduate Degree Program Requirements	24
Registration Policies, Procedures, and Grades.	27
Tuition and Fees	
Financial Aid for Graduate Students	35
Student Housing	39
Directory of Student Services	
Extended Studies	
Graduate Programs	
Accountancy	46
Taxation	
Art	
Art Education	49
Visual Art	49
Biology	
Business Administration	
Communication	
Computer Science	
Criminal Justice	
Earth Science	08
Doctor, Curriculum and Instruction	71
Master of Arts or Science	
Curriculum and Instruction	
Bilingual/ESL Option	
Physical Education Pedagogy Option	
Secondary Certification Option	
Early Childhood	79
Reading	
Special Education	
Educational Technology	
Engineering	
Civil Engineering	
Computer Engineering	
Electrical Engineering	
English	
Education	
Exercise and Sport Studies	
Physical Education in Athletic Administration.	
Fine Arts, Creative Writing	100



Fine Arts, Visual Arts	102
Geology	
Geophysics, Doctor of Philosophy	
Master of Science	
Health Science	
Environmental Health	
General Research	
Health Policy	
Health Promotion	
Health Services Leadership	115
Addiction Studies	115
History	119
Applied	121
Education	121
Research	122
Instructional & Performance Technology	123
Interdisciplinary Studies	127
Management Information Systems	129
Materials Science & Engineering	131
Mathematics Education	133
Music	136
Music Education	136
Performance	137
Pedagogy	137
Public Administration	140
General Public Administration	141
Environmental and Natural Resources Administration	141
State and Local Government Policy and Administration.	
Raptor Biology	144
School Counseling	148
Addiction Studies	149
Social Work	
Technical Communication	156
Advanced Certificate	158
Additional Graduate Courses	160
Graduate Faculty	
Adjunct Graduate Faculty	
Index	
Campus MapInside back of	

# **Summer Session 2003**

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

	To Registration information, see the Summer Senetate or Classes
March 31, Monday	Registration for continuing students begins for summer/fall 2003 (by appointment).
April 1, Tuesday	Recommended last date to mail 2002-03 "Free Application for Federal Student Aid" (FAFSA) for consideration for financial aid for
	summer 2003.
	Registration for new and returning students begins for summer 2003 (by appointment).
May 15, Thursday	Fee 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 by this date.
	Classes begin for first 3-week and first 8-week sessions.
May 20, Tuesday	Last day to drop a first 3-week session class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop a first 8-week session class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop first 3-week session classes.
	Last day to submit the BSU summer financial aid application. The 2002-03 FAFSA must be completed by April 1Fee-payment deadline for 10-week, second 3-week, first 5-week, and second 8-week sessions. Unpaid accounts will be
June 5, Thursday	assessed a \$50 penalty. Students who do not plan to attend must cancel/drop by this date.
June & Sunday	First 3-week session ends.
	Classes begin for 10-week, second 3-week, first 5-week, and second 8-week sessions.
	Last day to drop a second 3-week session class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop the second by week session classes.
	Last day to drop a first 5-week session class without a "W" appearing on the transcript and to receive a refund.
	Last day to file application for graduation for degrees and certificates for August graduation.
	Last day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate
<i>-,,</i>	degrees to be awarded in August.
June 13, Friday	Last day to drop a second 8-week session class without a "W" appearing on the transcript and to receive a refund.
June 16, Monday	Last day to drop second 3-week session classes.
June 17, Tuesday	Last day to drop a 10-week session class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop first 5-week session classes.
June 26, Thursday	Fee 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 by this date.
	Second 3-week session ends.
	Classes begin for third 3-week session.
	Last day to drop second 8-week session classes.
	Last day for final oral dissertation, thesis, or project defense for August graduationLast day to drop a third 3-week session class without a "W" appearing on the transcript and to receive a refund.
	Independence Day Holiday (no classes - University offices closed).
	Last day to add internship, directed research, or practicum.
	Last day to drop 10-week session classes.
	Last day to drop third 3-week session classes.
	Fee-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 by this date.
July 13, Sunday	First 5-week and first 8-week sessions end.
	Last day to submit final signed copies (2) of dissertation, thesis, or project to Graduate Dean's Office for August
	graduation.
July 14, Monday	Člasses begin for second 5-week session.
	Last day to drop a second 5-week session class without a "W" appearing on the transcript and to receive a refund.
July 17, Thursday	Fee-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 by this date.
	Third 3-week session ends.
	Classes begin for fourth 3-week session.
	Last day to drop a fourth 3-week session class without a "W" appearing on the transcript and to receive a refund.
	Last day to add any summer classes to be considered for federal Pell Grant eligibility.
	Last day to drop second 5-week session classes.
	Last day to drop fourth 3-week session classes. Second 8-week session ends.
	Fourth 3-week session ends.
	Ten-week and second 5-week sessions end.
riagust 11, bulluay	Tell week and second o week sessions circ.
	Fall Semester 2003
	For Registration Information, see the Fall Schedule of Classes
	i di regionandi inidimandi, see me fun scheune di ciusses

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

• • • • • • • • • • • • • • • • • • • •
ebruary 15, SaturdayFree 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 2003 semester should transmit the FAFSA, including any required signature pages, by February 15, 2003. 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.
ebruary 15, SaturdayScholarship 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 2003-04 year. Last day for the BSU Supplemental Scholarship Application to be received in
the Financial Aid Office to be considered for special 2003-04 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, SaturdayFree Application for Federal Student Aid (FAFSA) priority filing deadline for continuing students. Deadline for submitting Supplemental
Scholarship Application. Students attending BSU spring semester 2003 and who plan to continue attendance during the 2003-04
academic year should transmit the FAFSA or renewal FAFSA, including any required signature pages, by March 15, 2003. Students who
meet this deadline will receive priority consideration for certain scholarship, grant, loan, and work-study programs.
March 31, MondayRegistration for continuing students begins for summer/fall 2003 (by appointment).
une 1, SundayPriority deadline for international student application materials to be received for fall semester consideration.
une 23-26, Mon-ThursAdvising and Registration Program for new, readmitted, and transfer undergraduate students (by appointment).

June 30-July 2 & July 14-17	Advising and Registration Program for new, readmitted, and transfer undergraduate students (by appointment).
July 16, Wednesday	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.
July 16, 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.
August 11-12, Mon-Tues	Advising and Registration Program for new, readmitted, and transfer undergraduate students (by appointment).
	Advising and Registration Program for nondegree-seeking undergraduate students (by appointment).
August 18, Monday	Faculty orientation/meetings.
August 21, Thursday	Fee-payment deadline for registered students. Unpaid accounts will be assessed a \$50 penalty. Students who do not
	plan to attend must cancel/drop by this date.
August 22, Friday	Residence Halls open (Noon).
August 25, Monday	Classes begin. Academic advising available throughout the semester.
August 27, Wednesday	Last day to drop a first 4-week or first 5-week class without a "W" appearing on the transcript and to receive a refund.
August 29, Friday	Weekend University classes begin.
August 29, 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 application for graduation for degrees and certificates for December graduation.
	Last day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate
	degrees to be awarded in December.
August 29, Friday	Last day to drop a first 8-week class without a "W" appearing on the transcript and to receive a refund.
August 30, Saturday	Instructor permission required to register or add classes.
	Labor Day Holiday (no classes - University offices closed).
	Last day to drop a first 10-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop first 4-week classes.
	Last day to register; add classes; add dissertation, thesis, or project credit; add directed research; change from credit
	to audit or audit to credit; or drop a class without a "W" appearing on the transcript and to receive a refund. Pell
	Grant eligibility determined by number of credits registered on this date.
September 8, Monday	Last day to waive student health insurance.
	Last day to drop first 5-week classes.
September 16, Tuesday	Last day to drop first 8-week classes.
September 19, Friday	First 4-week classes end.
September 22, Monday	Second 4-week classes begin.
September 22, Monday	Last day to drop first 10-week classes.
September 24, Wednesday	Last day to drop a second 4-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to file application with department for final master's or doctoral written exam.
September 26, Friday	First 5-week classes end.
	Second 5-week and second 10-week classes begin.
	Last day to drop a second 5-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop second 4-week classes.
	Last day to drop classes or completely withdraw.
October 3, Friday	Last day to add practicum/internship or challenge course.
	Last day to drop a second 10-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop second 5-week classes.
	Columbus Day (classes in session).
	First 8-week and second 4-week classes end.
	Final day for written comprehensive exam for graduate degrees for December graduation.
	Third 4-week and second 8-week classes begin.
	Last day to drop a third 4-week class without a "W" appearing on the transcript and to receive a refund.
	Last day for final oral dissertation, thesis, or project defense for December graduation.
	Last day to drop a second 8-week class without a "W" appearing on the transcript and to receive a refund.
October 24, Friday	Last day to drop second 10-week classes.
October 29, Wednesday	Last day to drop third 4-week classes.
	Second 5-week and first 10-week classes end.
	Third 5-week classes begin.
	Last day to drop a third 5-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop second 8-week classes.
	Veterans Day (classes in session).
	Last day to drop third 5-week classes.
	Third 4-week classes end.
November 14, Friday	Last day to submit final signed copies (2) of dissertation, thesis, or project to Graduate Dean's Office for December
N	graduation.
	Fourth 4-week classes begin.
	Last day to drop a fourth 4-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop fourth 4-week classes.
	Thanksgiving Holiday (no classes - University offices closed November 27-30).
	Third 5-week and second 10-week classes end.
	Second 8-week and fourth 4-week classes end.
	Classroom instruction ends.
	Weekend University classes end.
	Final semester examinations (exam schedule listed in Fall Schedule of Classes and on BroncoWeb).
Mon-Thurs	Residence Halls close (Noon).
December 19, Friday  December 19, Friday	
	Commoncoment
	Commencement. Grade reports due to Registrar's Office by Noon.

# Spring Semester 2004 For Registration Information, see the Spring Schedule of Classes

	For Registration Information, see the Spring Schedule of Classes
October 15. Wednesday	Priority deadline for international student application materials to be received for spring semester consideration.
	Registration for continuing students begins for spring semester (by appointment).
	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.
December 4. 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 in time to admit students
	to degree programs.
December 8 - January 5	Advising and Registration Program for new, readmitted, and transfer undergraduate students (by appointment).
January 5, Monday	
	Fee-payment deadline for registered students. Unpaid accounts will be assessed a \$50 penalty. Students who do not
· · · · · · · · · · · · · · · · · · ·	plan to attend must cancel/drop by this date.
January 10. Saturday	Residence Halls open (Noon).
	Classes begin. Academic advising available throughout the semester.
January 14. Wednesday	Last day to drop a first 4-week or first 5-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to file application for graduation for degrees and certificates for May graduation.
	Last day to submit "Application for Admission to Candidacy" form to the Graduate Admissions Office for graduate
	degrees to be awarded in May.
January 16. Friday	Weekend University classes begin.
	Last day for faculty initiated drops for nonattendance during the first week of the semester to be turned in to the Registrar's Office.
January 16. Friday	Last day to drop a first 8-week class without a "W" appearing on the transcript and to receive a refund.
January 17. Saturday	Instructor permission required to register or add classes.
	Dr. Martin Luther King, Jr./Idaĥo Human Rights Day Holiday (no classes - University offices closed).
	Last day to drop a first 10-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop first 4-week classes.
	Last day to register; add classes; add dissertation, thesis, or project credit; add directed research; change from credit
	to audit or audit to credit; or drop a class without a "W" appearing on the transcript and to receive a refund. Pell
	Grant eligibility determined by number of credits registered on this date.
January 26, Monday	Last day to waive student health insurance.
	Last day to drop first 5-week classes.
	Last day to drop first 8-week classes.
February 6, Friday	First 4-week classes end.
	Second 4-week classes begin.
	Last day to drop first 10-week classes.
February 11, Wednesday	Last day to drop a second 4-week class without a "W" appearing on the transcript and to receive a refund.
February 13, Friday	Last day to file application with department for final master's or doctoral written exam.
February 13, Friday	
	President's Day Holiday (no classes - University offices closed).
	Second 5-week and second 10-week classes begin.
	Last day to drop a second 5-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop second 4-week classes.
	Last day to drop classes or completely withdraw.
February 20, Friday	Last day to add practicum/internship or challenge course.
	Last day to drop a second 10-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop second 5-week classes.
	First 8-week and second 4-week classes end.
	Second 8-week and third 4-week classes begin.
	Last day to drop a third 4-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop a second 8-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop second 10-week classes.
	Last day to drop third 4-week classes.
	Second 5-week and first 10-week classes end.
March 20, Saturday March 22-28, Mon-Sun	Last day for written comprehensive exam for graduate degrees for May graduation.
*	1 0
	Third 5-week classes begin.
	Last day to drop a third 5-week class without a "W" appearing on the transcript and to receive a refundLast day for final oral dissertation, thesis, or project defense for May graduation.
	Last day to drop second 8-week classes. Last day to submit final signed copies (2) of dissertation, thesis, or project to Graduate Dean's Office for May
April 9, Friday	graduation.
April 9 Friday	Last day to drop third 5-week classes.
April 9, Friday	
	Fourth 4-week classes end. Fourth 4-week classes begin.
	rouruf 4-week classes begin. Last day to drop a fourth 4-week class without a "W" appearing on the transcript and to receive a refund.
	Last day to drop a fourth 4-week classes. Last day to drop fourth 4-week classes.
	Second 10-week and third 5-week classes end.
	Second 10-week and fiird 3-week classes end.
	Classroom instruction ends.
	Weekend University classes end.
	Residence Halls close (Noon).
May 15, Saturday	
	Grade reports due to Registrar's Office by Noon.

# **Boise**

Boise—Idaho's state capital and center of business—is the largest metropolitan center 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. 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. Bogus Basin ski resort is just 16 miles from the Boise State University campus, and world-famous Sun Valley is less than three hours away.

The Boise Greenbelt, a 19-mile network of city parks and riverside paths, runs through the campus. Three city parks are within walking distance of Boise State, 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 activities—fishing, hiking, skiing, river rafting, golf, tennis, camping—are available only a short distance from campus.

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

# The University's Mission

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, 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 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 education, technology, and the health professions and the physical and biological sciences related to the health professions, while maintaining basic strengths in the sciences and liberal arts.

# The University's History

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 fouryear 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 now has 33 master's programs with 31 areas of emphasis and two doctoral programs, the Doctor of Education in Curriculum and Instruction (1994) and the Doctor of Philosophy in Geophysics (2000). Graduate student enrollment continues to increase steadily and currently more than 2,300 students are enrolled through the Graduate College.

During its 71-year history, Boise State University has operated under the leadership of five 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)

# **Accreditation**

The university is a fully accredited member of the Northwest Association of Schools and of 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 on Social Work Education
- · Idaho State Board of Nursing
- International Association of Counseling Services
- Joint Review Committee on Education in Radiologic Technology
- · 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

# **Students**

Each semester, Boise State University enrolls more than 17,500 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 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 faculty assist business, industry, educational institutions, government

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 600 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, student housing, and the registrar. **The Counseling Center** is located in the **Education Building**, while the **Student Health Center**, the **Gateway Center** for academic support and student orientation are located across University Drive from the main campus. The **Boise State University Career Center** and **Alumni Office** are located across University Drive at the east end of the main campus.

The **Business Building** features computer labs and three electronic classrooms furnished with the latest in teleconferencing equipment. In addition, the **Micron** 

Engineering Center, Civil Engineering, and
Engineering 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. The
new Multi-Purpose Classroom Building opened in Fall
1997 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 Amphitheatre**—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 Instructional Technology Center**, Boise State University 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 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 **Outdoor Rental Center**, 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 140 recognized student organizations.

**The Pavilion** is Idaho's largest multi-purpose arena. When not filled with fans of Bronco basketball, gymnastics, or volleyball, The Pavilion 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 Library and its collections support the curricular and research efforts of the university. The Library's holdings exceed 2 million items, including:

- 504,000 monograph volumes
- 79,000 bound periodicals
- 4,513 current periodicals, newspapers, and other serials
- 116,000 maps
- 94,400 government publications
- 1,429,000 microform pieces

Through the Albertsons Library website (http://library.boisestate.edu), you can gain access to Catalyst and a host of other resources, including full text articles from 8,700 journals.

You may use **Catalyst**, the Library's computerized catalog, to quickly identify material which the Library owns. Catalyst 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 interfaced 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, Canadian Federal, and Idaho State publications. The **Kenneth M. Hollenbaugh Map Collection** not only covers a wide array of subjects, but also, is very detailed in its coverage of Idaho.

The **Reference Area** is the information hub of the Library where staff are available to provide indexes in print and electronic formats, handbooks, encyclopedias, dictionaries, and other types of reference materials. The reference area also provides both 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 Senators Len B. Jordan, 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.

# **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 which allows access to the campus network or the Internet.

Boise State provides e-mail accounts for all students. An application for this service may be obtained from the **Office of Information Technology**, Business Building, Room 116. 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 graduate student at Boise State University, you will have the opportunity to increase your computer skills—in fact, you will be expected to do so. For more information about the computer skills required in your discipline, please consult your graduate program coordinator.

# **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 physical 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 cross country and track and field, gymnastics, men's and women's golf, men's and women's tennis, and women's soccer. The university competes in the PAC-10 in wrestling and the Western Gymnastics Conference in women's gymnastics.

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 at the Athletic Department, the reserve book room in the library, and the Associated Students of Boise State University Office in the Student Union Building. The report provides participation rates, financial support, and other information on men's and women's intercollegiate athletic programs.

# **Campus Recreation**

Boise State has entered a new era in campus recreation. Under the Division of Student Affairs a new Student Recreation Facility opened in August of 2002. This 86,000 sq. ft., state-of-the-art fitness and recreation facility provides university students, faculty, staff and alumni with a modern and convenient way to participate in physical activity. Whether you want personalized training, competitive sports, club activities, group exercise, or outdoor recreation, you will find a huge variety of opportunities to climb, dunk, splash, spin, and spike life's stresses away.

The **fitness** program offers group exercise classes, cardio equipment, a running track, selectorized equipment, free-weight equipment, and aquatics classes.

**Club and Intramural sports** include basketball, badminton, flag football, softball, soccer, volleyball, lacrosse, ice hockey, and tennis. You may checkout equipment and make use of the basketball, badminton, racquetball, and volleyball courts.

**Outdoor recreation** includes rock-climbing, cross-country skiing, wilderness first aid, kayaking, or you may visit the outdoor reference library to plan your own trip.

Other services and amenities include Kid Fit (babysitting), sauna, fitness assessments, personal training, massage, and nutritional counseling.

Remember... activity is good for the mind, body, and soul. For more information, come visit the facility at 1515 University Drive, call at 208-426-1131, or check the website at www.boisestate.edu/recreation.



# **Information Resources**

**Mailing Address,** Boise State University, 1910 University Drive, Boise, Idaho 83725

General Information, 208 426-1011

Toll-free nationwide, 800-824-7017

URL, http://www.boisestate.edu

Albertsons Library, 208 426-1204

Boise State University Bookstore, 208 426-2665

Student Union Building

**Career Center,** 208 426-1747

1173 University Drive

**Counseling Center,** 208 426-1601/1661

Education Building, Room 605

**Extended Studies**, 208 426-1709

1015 Grant Avenue

Financial Aid, 208 426-1664

Administration Building, Room 113

GRE, GMAT Testing Center, 208 321-7462

Pro-Metric, 5123 N. Glenwood, Garden City, ID 83714

GRE, GMAT Test Prep Classes, 208 426-3492

Extended Studies, 1015 Grant Avenue

Health and Wellness Center, 208 426-3986

2103 University Drive

International Student Admissions, 208 426-1757

Administration Building, Room 107

New Student Information Center, 208 426-1820

Student Union Building, Northeast Entrance

Payment and Disbursement Center, 208 426-1212/4148

Administration Building, Room 211

**Registrar,** 208 426-4249

Administration Building, Room 102-110

**Student Housing,** 208 426-3986

Chaffee Hall

Student Special Services, 208 426-1583/1679

Administration Building, Room 114

Student Union Information Desk. 208 426-4636

1700 University Drive

# Idaho State Board of Education

Members.

Blake G. Hall, Idaho Falls, President

Paul C. Agidius, Moscow

James Hammond, Post Falls

Roderic W. Lewis, Boise

Karen McGee, Pocatello

Laird Stone, Twin Falls

Milford Terrell, Boise

State Superintendent of Public Instruction,

Marilyn Howard, Boise

Executive Director, Office of the State Board of Education,

Gregory G. Fitch, Boise

Chief Academic Officer,

Randy Thompson, Boise

# Boise State University Graduate College

### **Graduate Dean's Office**

John R. (Jack) Pelton, Dean Math/Geosciences Building, Room 140 Telephone 208 426-3647/4203 FAX 208 426-2789 http://www.boisestate.edu/gradcoll

### **Graduate Admissions Office**

Jim Allen, Manager Math/Geosciences Building, Room 141 Telephone 208 426-3903/4204/1074 FAX 208 426-2789 http://www.boisestate.edu/gradcoll

# Boise State University Administration

Robert Kustra, President 208 426-1491

Daryl E. Jones, Provost and Vice President for Academic Affairs 208 426-1202

Stephanie Witt, Associate Vice President for Academic Affairs 208 426-4421

Harry E. Neel, Jr., Vice President for Finance and Administration and Bursar 208 426-1200

Richard Smith, Vice President for Institutional Advancement 208 426-4278

John Owens, Vice President for Research 208 426-5732 Peg Blake, Vice President for Student Affairs 208 426-1418 Larry Barnhardt, Dean, College of Applied Technology 208 426-2238

Phillip M. Eastman, Dean, College of Arts and Sciences 208 426-1414

William Lathen, Dean, College of Business and Economics 208 426-1125

Joyce Garrett, Dean, College of Education 208 426-1134 Cheryl Schrader, Dean, College of Engineering 208 426-1153 John R. Pelton, Dean, Graduate College 208 426-3647 James Girvan, Dean, College of Health Sciences 208 426-4116 Michael Blankenship, Dean, College of Social Sciences and Public Affairs 208 426-3776

Michael Stockstill, Dean, Division of Extended Studies 208 426-3706

# How to Use this Catalog

# Introduction

This catalog describes Boise State University's student policies, services, graduate degree programs, admission requirements, graduation requirements, and other topics of interest to graduate students. Additional information may be found in the brochures, newsletters, flyers, and other materials produced by departments offering graduate programs; to request such information, contact the department chair or the coordinator of the graduate program that interests you.

In addition, you will find much useful information in the *Boise State University Student Handbook*, which contains:

- · Directory of campus offices
- · Academic calendar
- Complete descriptions of services for students
- Information about campus organizations and recreation
- Student policies and procedures

You should consult, as well, the *Boise State University Schedule* of Classes, which contains:

- · Courses offered for the current semester
- Academic calendar and final examination schedule
- · Fee schedules and refund policies
- Instructions relating to academic advising, registration procedures, and academic regulations

Changes made to this catalog since publication will be reflected in the on-line catalog found at http://www.boisestate.edu/gradcoll.

# **System for Numbering Courses**

Courses offered at the 500-level and 600-level carry graduate credit. Although a senior may seek approval to enroll in a 500-level course (see page 22), 600-level courses are open to graduate students only. Graduate students may also earn graduate credit in courses numbered at the 300-level or 400-level if such courses are designated with a "G", as in *E-401G*, *Advanced Nonfiction Writing*. Any student enrolled for graduate credit in a G-designated course is required to complete additional work, beyond that required of students taking the course for undergraduate credit.

**NOTE:** No more than one-third of the credits used to fulfill the requirements for a master's degree program may be in G-designated courses. Your department has the right to further limit the number of G-designated courses to any degree program offered within the department.

Following the number and title of a course is the course code, consisting of three numbers set inside parenthesis, with each number separated from the others with hyphen, as in (3-0-3). The course code specifies how many:

- · classroom hours the course requires each week
- laboratory hours, studio hours, field hours, or other special hours the course requires each week

credits a student earns after successfully completing the course

The following list shows some typical variations of the basic course code:

(3-0-3)

A course requiring three classroom hours (3), with no lab, studio, or other special hours (0), carrying three credits (3).

(3-4-5)

A course requiring three classroom hours and four laboratory or studio hours, carrying five credits.

(0-4-0)

Laboratory hours, with no classroom hours or credits (usually linked to another course that requires the laboratory).

(0-2-1)

No classroom hours, but instead two hours per week of studio art or perhaps a fitness activity, carrying one credit.

In addition to the classroom hours, lab hours, and credits, the course code may also specify the academic period in which the course is offered. The following list illustrates these conventions:

- (F) Offered only during fall semester.
- (S) Offered only during spring semester.
- (F,S) Offered during both fall semester and spring semester.
- (F/S) Sometimes offered only during fall semester, or only during spring semester, or during both fall and spring.
- (F,SU) Offered only during fall semester and summer session.
- (S,SU) Offered only during spring semester and summer session.

If none of these indicators appears alongside the code, then the course is offered during fall semester, spring semester, and summer session.

Entries in this catalog may consist of two course numbers with a hyphen in between; the hyphen signifies that the first course is a prerequisite to the second. However, if a comma appears between the two course numbers, then either course may be taken independently of the other.

Other authorized abbreviations are:

PREREQ: Prerequisite: You must take Course A before

you may take Course B.

COREQ: Corequisite: You must take Course A and

Course B concurrently.

PERM/INST: You must have the instructor's permission to

take the course.

PERM/CHAIR: You must have the department chair's

permission to take the course (or the permission of the chair's representative).

# University Wide Course Numbers

The following numbers are the same for all graduate programs and may be offered for variable credit. Your supervising professor or committee will determine which credits may apply to your graduate program.

**580-589 SELECTED TOPICS** 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 same area.

**590 PRACTICUM/INTERNSHIP** To earn graduate credit you must have a 3.0 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** Execution of a substantial exercise that demonstrates the ability to successfully and independently carry out an applied 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.

**592 COLLOQUIUM** An informal meeting to discuss research, creative works or presentations on specialized topics within a broad field of study. Each meeting is usually led by a different presenter.

**593 THESIS** Independent research activity that includes the clear statement of a hypothesis or proposition, a comprehensive review of the relevant literature, the collection and analysis of data and scholarly evidence, critical examination of the hypothesis or proposition in light of the data and evidence, and the production of a document that describes the study and its results in clear and effective English and conforms to the standards of the Graduate College. Graded Pass/Fail.

**594 CONFERENCE OR WORKSHOP** Graded A through F or Pass/Fail. Workshop credits may not transfer.

**595 READINGS AND CONFERENCE** 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 DIRECTED RESEARCH** Graduate programs may include directed research credits at the discretion of your supervising

professor or graduate committee. Master's students may earn a maximum of 9 credit hours with no more than 6 in a given semester or session, while doctoral students may earn a maximum of 12 credit hours.

Note: Completion of an *Application for Directed Research* is required prior to the deadline specified in the semester schedule.

**597 SPECIAL TOPICS (Required Modifier)** 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** 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.

**600 ASSESSMENT (Optional modifier)** Examination or other assessment activity required by a master's or doctoral graduate program. The optional modifier is used to indicate the type of activity (preliminary examination, comprehensive examination).

693 DISSERTATION The doctoral dissertation should reveal the student's ability to analyze, interpret, and synthesize research data; demonstrate thorough knowledge of the literature relating to the project and acknowledge prior scholarship on which the dissertation is built; describe the methods and procedures used; present results in a sequential and logical manner; display the student's ability to discuss fully and articulately the meaning of the results; and produce an academically sound and defensible scholarly product written in credible literary form. The dissertation topic must be approved in advance by the student's committee. The committee will also provide guidance and direction to the student during the course of the research activity and the writing of the dissertation. Prior work not approved or supervised by the committee is not acceptable for a doctoral dissertation. The dissertation must be the independent work of the individual author and must be a significant contribution to the body of knowledge of the field. The dissertation, or one or more substantial parts of it, often rewritten, is expected to be published. Graded Pass/Fail.

**696 DIRECTED RESEARCH** Research by a doctoral student conducted under the direction of a member of the graduate faculty. Credits earned through Directed Research can be applied toward a doctoral degree program with the approval of the student's supervisory committee and subject to a maximum of 12 credits.

Note: Completion of an *Application for Directed Research* is required prior to the deadline specified in the semester schedule.

**697 SPECIAL TOPICS (Required modifier)** 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.

# Graduate Degrees and Programs Offered at Boise State University

Department	Degree	Graduate Degree Programs	Graduate Program Coordinator
		College of Arts and Sciences	
Art	M.A.	Master of Arts in Art Art Education Visual Art	Cheryl Shurtleff-Young, M.A.
	M.F.A.	Visual Arts	Cheryl Shurtleff-Young, M.A.
Biology	M.A./M.S.	Master of Arts/Science in Biology	James Beltoff, Ph.D.
	M.S.	Master of Science in Raptor Biology	James Beltoff, Ph.D.
English	M.F.A.	Master of Fine Arts in Creative Writing	Janet Holmes, M.F.A.
	M.A.	Master of Arts in English English Education	Carol Martin, Ph.D.
	M.A.	Master of Arts in Technical Communication	Mike Markel, Ph.D.
	Certificate	Technical Communication	Mike Markel, Ph.D.
Geosciences	M.S.	Master of Science in Earth Science	David Wilkins, Ph.D.
	M.S.	Master of Science in Geology	James McNamara, Ph.D.
	Ph.D.	Doctor of Philosophy in Geophysics	Paul Michaels, Ph.D.
	M.S.	Master of Science in Geophysics	Paul Michaels, Ph.D.
	Certificate	Geospatial Information Analysis	David Wilkins, Ph.D.
Mathematics	M.S.	Master of Science in Mathematics Education	Sharon Walen, Ph.D.
Music	M.M.	Master of Music Music Education Performance Pedagogy	Jeanne M. Belfy, Ph.D.
Interdisciplinary Program	M.A./M.S.	Master of Arts/Science in Interdisciplinary Studies	Martin Schimpf, Ph.D.
		College of Business and Economics	
Accountancy	M.S.	Master of Science in Accountancy Taxation	Phillip Fry, Ph.D.
Graduate Studies	M.B.A.	Master of Business Administration	Phillip Fry, Ph.D.
Networking, Operations, and Information Systems	M.S.	Master of Science in Management Information Systems	Phillip Fry, Ph.D.
		College of Education	
Counselor Education	M.A.	Master of Arts in School Counseling	Bobbie Birdsall, Ph.D.
Curriculum, Instruction &	Ed.D.	Doctor of Education in Curriculum and Instruction	Teresa D. Harrison, Ed.D.
Foundational Studies	M.A.	Master of Arts in Education Curriculum and Instruction (Secondary) Physical Education Pedagogy Secondary Certification	Teresa D. Harrison, Ed.D. Kenneth Bell, Ph.D. Teresa D. Harrison, Ed.D.
Educational Technology	M.S.	Master of Science in Education Educational Technology	Carolyn Thorsen, Ph.D.
Elementary Education & Specialized Studies	M.A.	Master of Arts in Education Curriculum and Instruction (Elementary) Bilingual/ESL Early Childhood Reading Special Education	Ted Singletary, Ph.D. Jay Fuhriman, Ed.D. Judy French, Ph.D. Stan Steiner, PhD. Melinda Lindsey, Ph.D.

# Graduate College

Department	Degree	Graduate Degree Programs	Graduate Program Coordinator
Kinesiology	M.S.	Master of Science in Exercise and Sport Studies	Linda Petlichkoff, Ph.D.
	M.P.E.	Master of Physical Education in Athletic Administration	Linda Petlichkoff, 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 Education Master of Science in Mathematics Education Master of Music in Music Education	Cheryl Shurtleff-Young, M.F.A. David Wilkins, Ph.D. Bruce Robbins, Ph.D. Sharon Walen, Ph.D. Jeanne M. Belfy, Ph.D.
	M.A.	College of Education  Master of Arts in School Counseling	Bobbie Birdsall, Ph.D.
	M.S.W.	College of Social Sciences and Public Affairs Master of Social Work	William Whitaker, Ph.D.
		College of Engineering	
Computer Science	M.S.	Master of Science in Computer Science	Alex Feldman, Ph.D.
Civil Engineering	M.S.	Master of Science in Engineering Civil Engineering	Molly Gribb, Ph.D.
Electrical and Computer Engineering	M.S.	Master of Science in Engineering Computer Engineering Electrical Engineering	Jacob Baker, Ph.D.
Mechanical Engineering	M.S.	Master of Science in Engineering Mechanical Engineering	John Gardner, Ph.D.
Instructional & Performance Technology	M.S.	Master of Science in Instructional & Performance Technology	David Cox, Ph.D.
Interdisciplinary Program	M.S.	Master of Science in Materials Science and Engineering	Amy Moll, Ph.D.
		College of Health Sciences	
Health Sciences	M.H.S.	Master of Health Science Environmental Health General Research Health Policy Health Promotion Health Services Leadership Addiction Studies	Sarah Toevs, Ph.D.
	Certificate	Health Services Leadership	Sarah Toevs, Ph.D.
		College of Social Sciences and Public Affairs	
Communication	M.A.	Master of Arts in Communication	Marvin Cox, Ph.D.
Criminal Justice Administration	M.A.	Master of Arts in Criminal Justice Administration	Andrew Giacomozzi, Ph.D.
History	M.A.	Master of Arts in History Applied Education Research	Nicholas Miller, Ph.D.
Public Policy and Administration	M.P.A.	Master of Public Administration General Public Administration Environmental and Natural Resources Administration State and Local Government Policy and Administration	Les Alm, Ph.D.
Social Work	M.S.W.	Master of Social Work	William Whitaker, Ph.D.

# **University and Graduate Policies and Services**

# If you have questions about these policies:

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

# **General Policies**

This chapter defines the general policies governing the following matters:

- · your rights and responsibilities as a student
- · student records
- · enrollment status
- · academic honesty and dismissal
- acceptable academic performance
- · course repeat policy
- administrative withdrawal from Boise State
- · right of appeal

Additional information on these policies is available in the *Boise State University Student Handbook* and the *Boise State University Policy Manual*. The *Boise State University Student Handbook* may be obtained at http://www.boisestate.edu/stuaff/handbook/index.htm, while the *Boise State University Policy Manual* is available for inspection on the WEB at http://diamond.boisestate.edu/~margene/policies/Toc.html.

# Your Rights and Responsibilities

Boise State 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 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:

- fees
- 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**

The Graduate Admissions Office 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. You must make your request either in writing or in person and show your photo ID. 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 policies and procedures governing the information 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, accurate, and true. 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 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's

policy on confidentiality and privacy, as defined by the *Boise State University Policy Manual*.

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
- · your student classification
- your enrollment status (for example, whether you are a full-time student or a part-time student)
- the type of any degree you have earned from Boise State 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 release 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 at the Registrar's Office, Administration Building, Room 110.

In discharging their official duties, Boise State 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 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 Registrar's Office, Administration Building, Room 110. You may do so by completing a *Student Information Update* form and returning the form to the Registrar's Office, 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 Resources, Administration Building, Room 218 and 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. Former students may update their address in person, by telephone, or by sending in a change-of-address card from the post office to the Registrar's Office, Administration Building, Room 110. Currently enrolled students must update address information via BroncoWeb (http://www.boisestate.edu and select BroncoWeb).

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

Every day, Boise State University responds to 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 calculates your enrollment status according to Table 1.

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

Number of Graduate Credits (currently enrolled)	Enrollment Status
9 or more	Full-Time
6-8	Three-Quarter-Time
5	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 and Dismissal**

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

### **General Policies**

- 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

# **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.

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 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 where none of the credits taken by the student are applicable to the GPA calculation.

**Program GPA Requirement.** A student who is admitted to a graduate program is required to list on the Application for Admission to Candidacy 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 Application for Admission to Candidacy if it is graded lower than C or P except that a G-designated course or a transfer course cannot be listed if it is graded lower than B. If the grade for a non-elective course that is specifically required by the program is too low to be listed on the Application for Admission to Candidacy, and if that grade cannot be improved under the course repetition policy, then it is not possible for the student to complete the degree 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 dean of the Graduate College. Certain courses cannot be repeated to improve a grade, including practicum or internship (590), project (591), thesis (593), and dissertation (693). 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 Application for Admission to Candidacy and 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 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 (see page 13) 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 Application for Admission to Candidacy subject to all approvals and limitations of the applicable graduate program and the Graduate College.

# 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:

- falsifying or omitting required information on a graduate admissions application or other university record or document
- 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.



# **Graduate Admission Policies and Procedures**

### If you have questions about these policies:

Contact Graduate Admissions Office Math/Geosciences Building, Room 141 208 426-3903 or 426-4204 FAX 208 426-4061 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

# **Application Deadlines**

You are strongly encouraged to submit all graduate application materials seven to nine months in advance of the date that you plan to enroll, but applications will be accepted anytime before the deadline dates listed below. Deadlines for all applicants seeking admission as degree-seeking students are as follows:

Fall Semester 2003: July 16, 2003 Spring Semester 2004: December 4, 2003 Summer Sessions: One week before classes begin

**Note:** Some programs have an earlier deadline. Please check specific program listing for deadlines.

These deadlines are strictly enforced. Therefore, you must ensure that the Graduate Admissions Office receives all of your application materials before the admission deadline.

If you fail to do so, you may still be admitted to the university although you will not have an opportunity to register during the priority registration period. If you are a degree-seeking student, your admission by the first day of the semester cannot be guaranteed.

**NOTE:** You should apply for some types of financial aid—such as assistantships—when you apply for admission. For further information, see the chair of the department offering the financial aid, or see the coordinator of the graduate program within that department. Most deadlines for applying for financial aid are March 1 or earlier, and are noted in the section entitled "Financial Aid for Graduate Students."

# **General Admission Policies**

To be admitted to the Graduate College, you must hold at least a bachelor's degree from an accredited institution and you must have a cumulative grade-point average of at least 3.0 on a 4.0-point scale for all undergraduate credits, or a 3.0 GPA for the last half of undergraduate course work leading to a baccalaureate degree.

In addition, if you have attended another institution as a graduate degree seeking student but did not complete the degree, you must demonstrate that you departed that institution in good academic standing in order to be eligible for admission to a graduate degree program at Boise State University.

Initially, your admission status will be indicated as Pending Department Review, which means that you have been admitted to the Graduate College but have not yet been admitted to a graduate degree program. You retain this status until you have been accepted into a graduate degree program, and you may be able to take classes while awaiting acceptance. You will not be eligible for federal financial aid while your admission status is Pending Department Review.

When you are admitted to a graduate degree program, your status changes to either Regular or Provisional. Regular status indicates that you have been accepted with full graduate standing. Provisional status establishes a probationary period, during which you must meet stipulated requirements for Regular status. Ordinarily, by the time you have completed 12 credits of approved study, your department will decide whether to admit you with Regular status.

You can obtain further information about admission to the Graduate College from the Graduate Admissions Office, which provides counseling services to applicants. The Graduate Admissions Office staff evaluates all transcripts submitted by applicants and verifies that all requirements for admission have been met. However, please note that admission requirements vary from one graduate program to another; for example, one program may require you to take the Graduate Record Exam (GRE), while another program may require that you submit a portfolio of recent work. To ensure that you've satisfied all admission requirements, consult the catalog description of the graduate program to which you are applying.

**NOTE:** To schedule an appointment to take the GRE or GMAT examination, please contact Pro-Metric Testing at 208-322-3555.

**NOTE:** If you take classes while you have Pending Department Review admission status, you may count toward a graduate degree no more than nine credits earned in those classes. If you are accepted into a graduate degree program, your department will decide which credits, if any, they will accept from work completed during the Pending Department Review period.

**NOTE:** All documents received by Boise State in conjunction with an application for admission become the property of Boise State University. These documents will be duplicated only for use in advising at Boise State. Moreover, the original documents will neither be returned to the applicant nor forwarded to any individual unaffiliated with Boise State or forwarded to any other agency, organization, college, or university.

# 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.

1. Submit an application for admission to the Graduate Admissions Office, along with the \$30.00 application fee (nonrefundable).

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.

# 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 Admissions Office all materials indicated in the checklist below. All admission materials must be received in Graduate Admissions by the posted deadline. (See Academic Calendar.)

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

- Graduate Admission Application.
- One-time, nonrefundable \$30 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

If you are a Boise State graduate student who has not attended for one semester or more (not including summer), you must reapply for admission. Submit the following:

- Graduate Readmit Application.
- One-time, nonrefundable \$30 application fee, if not previously paid.

Also submit any of the following that are needed to complete your file:

- Official\* transcripts from all other colleges attended.
- · Official GRE, GMAT, MAT scores, if required.

 $\textbf{Note:} \ \ \text{Boise State University retains admission materials for five years after your last term of enrollment.}$ 

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

### **Nondegree-Seeking Applicants**

- Graduate Admission Application or Graduate Readmit Application.
- One-time, nonrefundable \$30 application fee, if not previously paid.
- 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 \$30 application fee.
- Official\* proof of four-year degree and transcripts from each educational institution attended beyond high school.\*\*
- Official TOEFL 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 the Boise State University Graduate Admissions Office.
- \*\* If written in a language other than English, these documents must be accompanied by an English translation.
- 2. 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 the Graduate Admissions Office, 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 the Graduate Admissions Office. 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. 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.

1. Submit an application for admission to the Graduate Admissions Office, along with the \$30.00 application fee (nonrefundable).

# **Graduate Admission Policies and Procedures**

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 an official transcript from the institution (excluding Boise State) that granted your bachelor's degree or higher degree. Instruct the institution to send the transcript directly to:

> Graduate Admissions Office 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 United States 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 the deadline specified in the current academic calendar.

- 1. Submit a completed *International Student Graduate Application* to the Boise State University International Admissions Office, Administration Building, Room 107 along with the \$30.00 application fee (nonrefundable).
- 2. Request official transcripts and proof of four-year 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 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 you attended.

3. Take the Test of English as a Foreign Language (TOEFL). 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-based/213 computer-

based testing. 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 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 Admissions Office, Math/Geosciences Building, Room 141, Boise State University 1910 University Drive 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.

- 5. 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.

# Graduate Credit Options for Senior Undergraduate Students

If you are a Boise State senior, you may enroll in a graduate course and have the credits recorded on your transcript as graduate credits. However, you must first secure approval from both the chair of the department offering the course and the Dean of the Graduate College.

Any credits you earn in this fashion may be counted toward an undergraduate degree, or, they may be applied toward a graduate degree at Boise State University, but not both. You determine how the credits are to be used before you enroll in the graduate course. Please note that courses in the M.B.A. program are excluded from this policy.

If you wish to take graduate courses for graduate credit, you must first complete the *Permit for Seniors to Take Graduate Courses*. This form is available in the Registrar's Office, Room 102, Administration Building or online at http://finad.boisestate.edu/busforms.html.

# **Academic Policies**

The following section addresses Boise State University policies and procedures governing:

- · transferring credits
- · challenging required courses
- credit limits for pass/fail courses, workshops, and directed research
- credit limits for graduate credit for undergraduate courses
- · credit limits for practicum/internship

Many other academic policies and procedures are described or defined elsewhere in this catalog, most notably in sections on General Policies, Graduate Degree Program General Requirements, Registration, and Grades.

# **Transfer Credits**

All transfer credits that are applied to a graduate program must be graduate academic credits that have not been applied to a previously obtained graduate degree. Experiential learning and continuing education units (CEU) are not accepted for transfer and application to graduate programs. You can transfer up to nine semester credits taken at other institutions and apply those credits toward a master's degree (Doctor of Education students may transfer up to fifteen credits taken at other institutions). However, the courses must be consistent with the program of study planned by you and your supervisory committee or advisor. In addition, you must have taken the courses at an accredited institution and must have received—in each course—a grade no lower than B.

**Note:** If you are enrolled in a cooperative graduate degree program between Boise State University and Idaho State University or Boise State University and University of Idaho, then the numeric limitations on transfer credits do not apply.

For more information regarding transfer credits, see "Admission to a Graduate Degree Program", page 24.

# **Challenge Courses**

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

# Credit Limits for Pass/Fail Courses, Workshops, Readings and Conference, and Directed Research

You may apply toward a graduate degree no more than six credits earned in pass/fail, workshop, or readings and

conference courses. (Project, Thesis, Dissertation, and Professional Year Teaching Experience credits graded P/F are excluded from this limitation.) Likewise, you may apply toward a master's degree no more than nine credits you have earned by completing directed research. No more than six directed-research credits may be earned in one semester. Finally, your supervisory committee or advisor has the authority to accept some, none, or all of your directed research credits (within the limits specified above). Therefore, we encourage you to discuss directed research credits with your supervisory committee or advisor, to determine if the credits can be applied toward your degree.

**NOTE:** If you are pursuing an M.B.A., you may apply toward your degree no more than three credits earned by completing an internship or directed research.

**NOTE:** If you are pursuing a Master of Arts in School Counseling, you may apply toward your degree no more than ten pass/fail credits.

**NOTE:** If you are pursuing a Master of Social Work degree, you may apply toward your degree no more than eighteen pass/fail credits.

# Credit Limits Applicable to Undergraduate Courses Taken for Graduate Credit

Courses offered at the 500 level and 600 level carry graduate credit. Although a senior may seek approval to enroll in a 500-level course, 600-level courses are open to graduate students only. Graduate students may also earn graduate credit in courses numbered at the 300-level or 400-level if such courses are designated with a "G". Any student enrolled for graduate credit in a G-designated course is required to complete additional work beyond that required of students taking the course for undergraduate credit.

NOTE: No more than one-third of the credits used to fulfill the requirements for a master's degree program may be in G-designated courses. Your department has the right to further limit the application of G-designated courses to any degree program offered within the department.

# **Credit Limits for Practicum/Internship**

To earn graduate credit for Practicum/Internship, you must have a minimum 3.0 cumulative GPA and you may apply no more than 12 credits toward a graduate degree. However, some graduate programs accept only 3 internship credits. Therefore, we encourage you to check with your department for any additional restrictions. Practicum/Internship cannot be repeated to improve a grade. You can obtain a copy of the *Practicum/Internship* form from your department.

# **Graduate Degree Program Requirements**

# If you have questions about these requirements:

Contact Graduate Admissions Office Math/Geosciences Building, Room 141 208 426-3903 or 426-4204 http://www.boisestate.edu/gradcoll e-mail: gradcoll@boisestate.edu

# Graduate Degree Program Requirements

Admission to the Graduate College is the first step toward your graduate degree, but you must also be granted admission to a graduate degree program. Admission requirements vary from one graduate program to another. For more information about the requirements of a particular graduate degree program, consult the catalog description of the program to which you are applying. Concurrent admission to more than one graduate program is not possible.

The sections below define general policies and procedures governing:

- · admission to a graduate degree program
- your supervisory committee
- time limits for completion of degree requirements
- minimum number of credits required for graduate degree
- · residency requirements
- · foreign-language requirements
- applying for candidacy
- thesis and final-project requirements
- final-examination requirements
- · applying for a graduate degree

# Admission to a Graduate Degree Program

Once you have been granted Regular or Provisional status (as described in "General Admission Policies"), you will work with your supervisory committee or advisor to develop your program of study.

To document your study plan, you must complete a *Program Development Form*. The form is available from your supervisory committee, your advisor or the chair of your department. It is your responsibility to ensure that you complete the form in the first academic period (fall semester, spring semester, or summer session) in which you take classes as a Regular or Provisional student. If you are using transfer credits in your graduate program, your supervisory committee or advisor will file your completed form with the Graduate Admissions Office.

**NOTE:** When you complete the *Program Development Form*, list on it any of the following types of classes, if you intend to count toward your degree the credits you have earned in those classes.

non-Boise State courses in which you earned a grade of B
or better that you wish to transfer to Boise State University

- courses in which you "reserved" the credits to be applied to a graduate degree (no more than 9 credit hours)
- courses in which you earned credits you wish to count as residence credits earned through an inter-institutional cooperative program

If you wish to apply such credits to a Boise State University graduate degree, you must claim the credits no later than the **earliest** of the following dates:

- when you file the Program Development Form
- the end of your first semester as a Regular or Provisional student

# **Your Supervisory Committee**

Once you are admitted with Regular status to a graduate program, your department will assign you a supervisory committee, consisting of your advisor and two or more graduate faculty members. Additional ex-officio committee members may be assigned at the discretion of the student and the advisor.

Your supervisory committee or advisor will work with you to establish a program of study, direct your thesis or final project, and administer your final examinations. In some programs, you will be assigned an advisor in lieu of a supervisory committee.

Your advisor and one committee member must have Full or Associate Graduate Faculty status. Your third committee member may have Associate or Adjunct Graduate Faculty status. Ex-officio committee members are not required to have graduate faculty status. (A list of official graduate faculty is available on page 162.)

If you are admitted with Provisional status, you will be assigned a temporary advisor, who will help you to create a tentative program of study. In addition, your advisor will assist you in satisfying the requirements of the Provisional admission.

Once you have satisfied the requirements, your department may recommend to the Dean of the Graduate College that the university admit you with Regular status.

# Time Limits for Completion of Degree Requirements

You have a total of seven calendar years within which to complete all requirements for your graduate degree. All course work (including any transfer credits), field work, practicum, internships, thesis or dissertation defense, comprehensive exams, and other activity required for your degree must be completed within the seven years leading up to and including the date you receive a graduate degree.

If you wish to include a course in your degree program taken before admission with Regular or Provisional status, you must have approval of your advisor. The advisor will complete a *Request for Academic Adjustment* form requesting that the course be allowed within the seven year time limit to meet the requirements of the degree.

The *Request for Extension of Time* form, along with the letter of request from the student, is submitted to the Graduate College

# **Graduate Degree Program Requirements**

by your advisor if you have reached the seven year limit since admission with Regular or Provisional status but need another semester to finish your Dissertation, Thesis, Project, or course work

Choosing a Catalog Year for Degree Requirements: In determining if you are eligible to graduate, the Registrar's Office follows the requirements defined in a single edition of a Boise State University catalog. You may choose to meet the degree requirements stated in any catalog in effect after you have been admitted to a graduate degree program.

# Minimum Number of Credits Required for Graduate Degree

Before awarding you a master's degree, Boise State University requires you to complete at least 30 semester credits of graduate course work approved by your supervisory committee or advisor. Some programs may require more than 30 credits. For the Doctor of Education, a minimum of 66 semester credits beyond the master's is required.

# Second Master's Degree

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

- 1. A candidate must meet all program requirements prescribed by the second master's curriculum.
- Program requirements for the second degree that have already been met in the program for the first degree awarded may be counted toward the second degree at the discretion of the student's graduate committee and the approval of the Graduate Dean.
- 3. A minimum of 21 credits of new course work is required for the second degree.
- 4. The seven-year time limit applies to all courses to be counted toward the second degree.
- A student cannot be admitted to a second master's degree program until all requirements for the first degree have been completed.

# **In-residence Requirements**

To obtain a master's degree, you must complete at least 21 semester credits of approved graduate work from Boise State University. Doctor of Education students are required to be in continuous enrollment and complete a minimum of 25 credits of 600 level courses during the first 15 months of the program, which includes taking 9 credits during the first summer, 5 in the fall, 5 in the spring, and 6 in the second summer. Your department may elect to accept, for in-residence credits, some or all graduate work completed in an inter-institutional cooperative graduate program.

# Foreign Language Requirements

Each department offering a graduate degree program establishes the foreign language requirement for that program. If your department has a foreign language requirement, you will

need to demonstrate a reading knowledge of that foreign language. Ordinarily, you would do so either by translating documents or by taking a standard exam.

# **Applying for Candidacy**

When you apply for candidacy, you use the Application for Admission to Candidacy form to specify the courses and projects comprising your program of study and to indicate the catalog year you are following. You must have no listed credit deficiencies, and you must have already satisfied any foreignlanguage or other provisional requirements stipulated by your department. Applying for candidacy represents an important milestone in your progress toward a graduate degree, not least because the Application for Admission to Candidacy form, upon approval, becomes a binding agreement between you, the university, and your department. In short, applying for candidacy identifies the work you've done so far and defines the work you will do from that point forward. Once approved, the application for candidacy becomes your formal plan for further study. Boise State University discourages students from making any changes to this plan after the application for candidacy has been approved. Such changes require approval from the Dean of the Graduate College, acting on a written recommendation from your supervisory committee or advisor.

Master's level students should apply for candidacy as soon as possible after achieving Regular admission status and completing 18 credits of graduate work in an approved program of study. Your grade-point average for those 18 credits must be at least 3.0 on a 4.0-point scale. On the candidacy form, you must indicate the academic year you are following to meet your degree requirements. If no catalog year is designated, the degree requirements stated in the current catalog will be enforced.

If you are a doctoral student, you may apply for candidacy following the successful completion of a qualifying examination, scheduled by your committee.

You can obtain a copy of the *Application for Admission to Candidacy* form from your department. We encourage you to apply for candidacy as soon as you meet the requirements, but no later than one semester before your expected graduation date. Deadline for submission is approximately:

- the first of June for August graduation
- the end of August for December graduation
- the end of January for May graduation

Exact dates are listed in the academic calendar.

# Project, Thesis, and Dissertation Requirements

Each department offering a graduate degree program determines the program's requirements for a thesis, project, or dissertation. There are, however, some requirements common to all:

 The project, thesis, and dissertation should demonstrate the ability of an individual student to select a specific problem or topic, to assemble pertinent data, to do

# **Graduate Degree Program Requirements**

original research appropriate for the topic, to organize ideas and data acceptably, to synthesize, analyze and interpret results, and to produce a written document in clear and effective English.

- The final draft of the manuscript must be reviewed by your supervisory committee or advisor and by the office of the Dean of the Graduate College.
- Two copies of the work to be retained by the University must be printed on 25% cotton fiber paper. Your department may also require a final copy printed on 25% cotton fiber.
- Your project, thesis, or dissertation must be received and approved by the Dean of the Graduate College at least five weeks before commencement.
- You must be enrolled while completing your final requirements. Please see Enrollment Requirements at Culmination of Degree below.

A manual compiled by the Graduate College staff will assist you in preparing your thesis, project, or dissertation to meet the standards required for submission to the Graduate College. You may obtain a copy of *Standards for Preparation of Dissertations, Theses, and Projects in the Graduate College* in the Boise State University Bookstore.

Matters of form and style including abbreviation, footnotes, notation of references and bibliography should conform to the standards for your discipline. Your advisor or program coordinator will advise you which style manual is appropriate.

# Enrollment Requirement at Culmination of Degree

A student who has met all graduate degree credit requirements except for completion of a directed research, project, thesis, or dissertation, is required to register for at least one credit of 590 Practicum/Internship, 591 Project, 593 Thesis, 595 Readings and Conference, 596 Directed Research, or 693 Dissertation each semester until the work is completed. This applies to semesters or summer sessions in which the student is using Boise State facilities or faculty services while writing the manuscript or preparing for and completing the defense. An exception to the enrollment requirement may be made if the student has completed all requirements for the degree but missed the deadline for submission of the Application for Graduate Degree or the student missed the deadline for submission of final copies of the dissertation, thesis, or project but has them submitted to the Graduate Dean prior to the beginning of the next semester or summer session.

# **Final Examination Requirements**

To take a final examination, you must first be admitted to candidacy (as described above). Departments and academic units that offer graduate degrees have substantial latitude in establishing requirements for final examinations. In some departments, for instance, students may be required to write a thesis, take a final written examination, and take a final oral examination. Another department may only require a thesis

and oral defense, while yet another may require students to complete a portfolio of creative work.

If your department requires neither a thesis nor a final project, you still may have to take one or more final examinations—either written, oral, or both. Your department administers these examinations, according to a schedule that the Graduate College establishes once each summer session and once each semester. Your department will also administer any final examinations it requires in defense of a thesis, project, or dissertation, again according to the schedule established by the Graduate College.

If your department requires a final examination, the Dean of the Graduate College may appoint an additional member to the committee that administers the examination. This additional member may be from outside your department or college.

**NOTE:** A student who fails a final examination defense of thesis, project, or dissertation will be withdrawn from the graduate degree program, unless the chair of the examination committee submits a written recommendation to the Dean of the Graduate College, proposing that the student be allowed to take another examination. With the Dean's approval, the student may retake all or part of the examination. However, at least three months must elapse between the first examination and the second. Any student failing the second examination will be withdrawn from the graduate degree program.

Please note that you must take any required final examination at least five weeks before commencement; the academic calendar lists final examination dates for the current academic year. To apply to take a final examination, contact the chair of your graduate committee.

# Applying for Your Graduate Degree

The last step in completing your graduate degree program is to apply for your graduate degree.

You must apply for your graduate degree before the deadline established for the semester in which you will graduate. Deadlines for fall, spring, and summer are published in the current academic calendar. Applications are available from your department or from the Graduate Admissions Office, Math/Geosciences Building, Room 141; or online at http://finad.boisestate.edu/busforms.html.

To apply for your graduate degree, complete the following steps before the deadline.

- 1. Consult with your supervisory committee or advisor to ensure that you have satisfied all requirements for your graduate degree.
- 2. Pay any outstanding balances you may have with the university (for example, tuition, fees, library fines, or parking tickets).
- 3. Obtain all required signatures from your advisor, graduate program coordinator, and the Graduate Dean.
- Submit the completed Application for Graduate Degree form—along with the \$25.00 diploma fee—to the Graduate Admissions Office, Room 141, Math/Geoscience Building.

# If you have questions about these policies:

Contact the Registrar's Office Administration Building, Room 102

Telephone 208 426-4249

BroncoWeb: http://www.boisestate.edu

# 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 the Graduate Admissions Office 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 cannot register before your appointed time and you must have your user name and password.

# **Registration for Continuing Students**

If you are a continuing, degree-seeking student and were enrolled the semester immediately preceding the semester you wish to enroll, you will have the first opportunity to register. Registration is held in April for the next summer session and fall semester, while registration for spring semester is held in November. For exact dates, consult the current academic calendar or the *Boise State University Schedule of Classes*. You register by appointment, via BroncoWeb, according to a schedule established by the Registrar's Office.

# Registration for New and Readmitted Students

If you are a new or readmitted degree-seeking student and you apply for admission to the university before the published application deadline, you will be notified, by mail, of your registration appointment. Your appointment to register is held in May for the next summer session and fall semester, while registration for spring semester is held in December.

New and readmitted nondegree-seeking students may register after registration begins for new degree-seeking students.

# **Registration Cancellation**

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 take action to cancel your registration. If you decide not to attend classes for which you have

registered, you must cancel your registration by dropping your classes via BroncoWeb at http://www.boisestate.edu and select BroncoWeb. If you do not cancel your registration or pay your fees by the cancellation deadline/fee payment deadline (see Academic Calendar for exact dates), you will remain registered, you will be charged course fees, plus you will be assessed a \$50.00 late fee.

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."

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

During open 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 only until the tenth day of the semester. 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 Web Registration 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 tenth day of the semester. (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** 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.)

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 Directory 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. Applied Technology students must clear with the College of Applied Technology Student Services office, Technical Building, Room 111. Extended Studies students can initiate a complete withdrawal via BroncoWeb or in 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 Student Services. For information on refunds of tuition and fees following a complete withdrawal, see the chapter on "Tuition and Fees."

Important Information Concerning Withdrawals for Students Receiving Financial Aid: Students who withdraw from the University need to be aware of a federal law impacting financial aid eligibility. Complete withdrawals will result in a financial obligation by the student to return the unearned portion of any federal aid disbursed. A student will have earned aid if he or she withdraws prior to completing 60 percent of the semester. The student will have to repay Boise State for the unearned aid which had applied toward tuition and fee charges. A repayment may also be required for unearned aid disbursed directly to the student. If you are considering withdrawing from Boise State, we strongly recommend that you first discuss the financial consequences of this action with the Account Maintenance Office, Administration Building, Room 209, 208 426-2134.

# 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 General Policies.

# **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 3. Letter Grades					
Letter Grade	Meaning	Quality Points per Credit Hour	Used to Calculate GPA?		
A	Distinguished work	4	Yes		
В	Superior work	3	Yes		
С	Average work	2	Yes		
D	Below-average work	1	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)	(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; Student 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 GPA
- · Boise State University GPA

Each of the three types of GPA is calculated with the same formula: total quality points you have earned divided by the total number of credits you have attempted. The quotient of that division is your GPA.

Total Quality Points Earned

- = GPA

GPA Units Attempted

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 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.

- 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.

**Note:** If you receive an incomplete in an **undergraduate** course, you and your instructor will write and sign a contract stipulating the work you must do to receive a grade in the class. The contract time may not exceed one year. If no grade other than incomplete has been assigned one year after the original incomplete, the grade of "F" will automatically be assigned.

You may not remove the incomplete from the transcript by reenrolling in the class during another semester; in fact, you are prohibited from enrolling in the course for as long as you have an incomplete. A grade of incomplete is excluded from GPA calculations until you receive a final grade in the course.



# If you have questions about tuition and fees:

Contact the Payment and Disbursement Center Administration Building, Room 211 Telephone 208 426-1212

### If you have questions about your student account:

Contact the Account Maintenance Center Administration Building, Room 209 208 426-4677

# **Tuition and Fees**

In general, the costs of attending Boise State 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. For instance, Idaho state law stipulates that Idaho residents cannot be charged tuition (the direct cost of instruction); for Idaho residents, then, the principal cost of attending Boise State arises from institutional fees. 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

Students are responsible for knowing and adhering to all fee payment deadlines specified in the current academic calendar.

As of July 1, 2002, printed statements will no longer be mailed to students. Instead, you may access your student account, including amounts and due dates, via BroncoWeb. Failure to make payment by the specified due date will result in an assessment of a \$50.00 penalty fee.

# **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/images/ipay.pdf.

# How Boise State University Calculates Your Tuition and Fees

When you apply for admission to Boise State, you pay a onetime, nonrefundable fee (\$30) for processing your application. To calculate your other tuition and fees, Boise State has established that eight credits or more per semester constitute full-time enrollment and 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	\$3,360.00
Institutional Fees	\$2,334.00	\$2,334.00
Total (for up to 19 credits)	\$2,334.00	\$5,694.00
Overload Fee*	\$162.40	\$162.40
	per credit hour	per credit hour

<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.

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 must enroll for 9 credits or more to be eligible for full financial aid. Please see Table 1 in the section on "General Policies."

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.** 

Table 5. Partial Graduate Fees, Per Semester, (less than 8 credits)		
Part-time Fees	\$199.15 per credit hour	
Summer 2003	\$179.60 per credit hour	
Summer 2004	\$194.25 per credit hour	
Application Processing Fee	\$30 One-time; nonrefundable	
Overload Fee	\$162.40 per credit hour beyond 19 hours; nonrefundable	

### **Tuition and Fees**

Table 6. Fees for Private Music Lessons		
2 Credits	\$140	
4 Credits	\$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 complete 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-and-board 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. Beginning Fall 2003, the State Board of Education will require full time students to submit proof of insurance before an exemption can be granted. A proof of insurance form will be sent to you via Bronco E-mail. **You must submit the form each academic semester after registering.** 

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. For further information, please contact the Residency Coordinator, Admissions Office, Room 101, Administration Building, Telephone: 208 426-1156.

**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.

## Resident/Nonresident 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 Boise State 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 non-resident 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.
- 3. 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

# Qualifying Criteria for Establishing Idaho Residency for Educational Purposes (any one or more of the characteristics described in items 1-9 below qualifies the individual as a resident for fee purposes)

- 1. 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%) of your support from a parent, parents or legal guardians and have continuously resided in the state of Idaho for twelve (12) months next preceding the opening day of the term during which you propose to attend Boise State 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:

 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.

#### **Tuition and Fees**

- b. 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.
- h. 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 Boise State 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.
- 5. 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 Boise State 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 and Marine Corps. Uniformed services such as Coast Guard or National Guard 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.

## If you have questions about assistantships:

Contact the Graduate College Math/Geosciences Building, Room 140 Telephone 208 426-3647

## If you have questions about scholarships and other forms of financial aid:

Contact the Financial Aid Office Administration Building, Room 113 Telephone 208 426-1664 FAX 208 426-1305 http://financialaid.boisestate.edu e-mail: faquest@bsu.boisestate.edu

# 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.

Departments award graduate or research assistantships with a total value of \$6,500 to \$12,000 (including 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 from the Graduate College, MG-140, the department in which you are applying, or on the Internet at http://www.boisestate.edu/gradcoll/04Link.html.

Graduate 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 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. If your application is received by the department after March 1, it may not be considered until the following year.

**NOTE:** Financial aid is available only to degree- or certificate-seeking students who are admitted to the university. 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 Regular, Provisional, or Conditional.

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.

#### Other Financial 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.
- 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 2003-04 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.

## **Financial Aid for Graduate Students**

- 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 email 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 notify you about required documents. 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 submit a signed transcript of your tax return (RTFTP form), which you can request directly from the Internal Revenue Service (IRS).
  - 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).
- 4. Be aware of the following deadlines. March 15 Deadline for continuing 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. If funds remain after distribution, applicants will be considered on a first-come, first-serve basis as long as the funds last. 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). Most federal aid programs require demonstrated financial need, which is determined by

- completing the FAFSA.
- Be admitted to Boise State University as a student seeking a
  graduate degree. 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 Regular, Provisional, or Conditional.
- Enroll for the minimum number of credit hours required by the aid program.
- Maintain Satisfactory Academic Progress standards (see detail on following pages).
- Be a U.S. Citizen, permanent resident, or eligible non-citizen. 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 7, below, shows estimated repayment schedules for Perkins Loans of various amounts.

Table 7. Estimated Repayment Schedule for Federal Perkins Loans (based on 5% interest rate)

	•		•	
Loan Amount	Number of Payments	Amount of Payments	Total Interest	Total Amount
\$ 1,000.00	36	\$ 30.00*	\$ 78.85	\$1,078.85
2,000.00	79	30.00*	347.90	2,347.90
4,000.00	120	42.42	1,090.40	5,090.40
6,000.00	120	63.63	1,635.60	7,635.60
8,000.00	120	84.85	2,182.00	10,182.00
10,000.00	120	106.06	2,727.20	12,727.20
4 17 1	1. 1. 1 1			

\* Final payment will be slightly less.

**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://stuaff.boisestate.edu/financialaid/) 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 taxexempt 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 8, 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 8. Estimated Repayment Schedule for Federal Direct Loans (based on 8% interest rate)

Loan Amount	Number of Payments	Amount of Payments	Total Interest	Total Amount
\$ 2,500.00	60	\$ 50.70*	\$ 541.46	\$ 3,041.46
5,000.00	60	101.39*	1,082.92	6,082.92
10,000.00	120	121.33*	4,449.31	14,559.31
12,500.00	120	151.67*	5,699.14	18,199.14
25,000.00	120	303.33*	11,398.28	36,398.28

\*Final payment will be slightly less. Figures provided by the Student Loan Fund of Idaho.

## Federal College 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. Checks are paid directly to the student, who is responsible for paying outstanding debts. FWS aid is awarded to selected undergraduate and graduate students who show financial need.

## 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.

## Boise State University Work-study Program and Student Employment Program

This Boise State University Work-study Program has limited funds available for undergraduate and graduate students who wish to work to pay a portion of their educational expenses. To be eligible, you must be unable to qualify for federal/state work-study.

All 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

#### Waivers of Nonresident Tuition

The **Gem Scholarship** provides a nonresident tuition waiver to students who are enrolled full time, pursuing a major at Boise State University designated as a "high tech" major. Only new students who are not residents of the state of Idaho are eligible. You also must have a minimum 3.0 cumulative GPA in your undergraduate course work, a combined minimum score of 1000 on the verbal and quantitative sections of the GRE or a minimum score of 500 on the GMAT predictive examinations. The scholarship is renewable for one year if you complete a minimum of 16 graduate credits in the fall and spring semesters and maintain a 3.0 GPA.

To be considered for the waiver, all admissions materials must be submitted by March 31. However, you may be considered after February 1 as long as there are waivers available. To obtain an application, additional deadline information and a list of qualifying degree programs, please visit the Graduate College Website at http://www.boisestate.edu/gradcoll.

## **Scholarships**

Information about scholarships for graduate students can be found on the web at http://financialaid.boisestate.edu/scholarships/.

#### 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

### Financial Aid for Graduate Students

session, consult with the Financial Aid Office as soon as the *BSU Summer Bulletin* is available. 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 mailing award notices to 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 checks 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/cws.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 (second bachelors and master's degree: 45 credits; doctorate: 99 credits).

In addition to the above requirements, you must satisfactorily complete at least 1 credit any term you receive federal or state financial aid.

## Satisfactory Academic Progress Review

The university reviews all financial aid files annually (at the end of spring term). 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 prevent 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.

## Request applications from:

New Student Information Center Student Union, Northeast Entrance Boise State University 1910 University Drive, Boise, ID 83725 Telephone 208 426-1820 FAX 208 426-4253 http://bsuinfo@boisestate.edu

## Return completed applications and security deposits to:

Payment and Disbursement Center Room 211, Administration Building Boise State University 1910 University Drive, Boise, ID 83725 Telephone 208 426-1212

# Student Housing Housing On Campus and Elsewhere

Boise State student housing consists of four residence halls located on campus and five apartment complexes within walking distance from campus. This section of the catalog contains brief descriptions of the student housing available through the Office of Student Housing, located at Chaffee Hall. In addition, this section generally describes some of the policies and procedures of student housing and provides cost information for:

- room and meal plan options for the residence halls
- rental rates of university apartments for married and single students and students with families

Finally, this section notes the assistance Boise State provides to students seeking off-campus housing.

**NOTE:** If you wish to live in university housing while attending Boise State, you must submit at least two applications: one for housing and another for admission to the Graduate College. If you apply for housing, the Office of Student Housing may accept your application for housing, process the application, and accept payment from you for housing. However, none of those actions constitutes acceptance or approval of your application for admission to the Graduate College. Likewise, being accepted for admission into the Graduate College does not mean that your application for housing has been accepted and approved.

## **University Residence Halls**

Altogether, the four on-campus residence halls accommodate more than 880 students. Of those students, most are undergraduate students living in **Chaffee Hall** or **J. B. Barnes Towers**.

**Chaffee Hall** is divided into three separate 3-story units, one of which provides semi-private bathrooms; enclosed corridors connect the units to a common area containing a lounge, office, and recreational facility. Each floor has a small informal

lounge, study room, bathrooms, and laundry facilities. Chaffee Hall, which also houses a computer lab, accommodates 429 residents.

**J.B. Barnes Towers** consists of six residential floors: the first five floors are coed and the top floor is women only. The carpeted and air-conditioned residence hall is equipped with study lounges, laundry facilities, and a computer lab. Four students occupy each room; each room has its own bathroom. This hall accommodates 300 residents.

Coed **Driscoll Hall** and its coed neighbor, **Morrison Hall**, are nearly identical in design: each hall contains 54 single and 13 double rooms, arranged into suites housing 7 to 10 students. Applicants who are 21 years of age or older will be given preference when requesting housing in Morrison Hall. Perhaps because of this preferential policy, Morrison Hall has become the residence hall preferred by graduate students living on campus.

#### **Cost Information**

If the Office of Student Housing accepts your application for housing in one of the residence halls, your contract covers room and board for one academic year, as well as the costs of local telephone service, hookup to cable TV, and state sales tax. Housing prices also include a nonrefundable fee of \$25.00 to cover the expense of programs and special events held in the residence halls. Table 9, below, lists prices for housing in the residence halls, along with the meal options available.

**NOTE:** Students frequently ask about reduced rates for housing without a meal option. Unfortunately, the economics of oncampus housing require Boise State to base its charges on both room **and** board. If you apply for on-campus housing, you must select one of the six meal options shown in Table 9.

Table 9. Residence Hall Prices for 2003-2004				
Meal Options and 2003-2004 Prices		Double Room	Single Room	
Option 1 or 4 Option 2 or 5 Option 3 or 6		\$4513.00 \$4371.00 \$4168.00	\$5126.00 \$4983.00 \$4780.00	
Option 1: 19 meals per week or three meals each weekday and two on Saturday and Sunday.				
<b>Option 2:</b> Any 15 meals of the 19 available.		able.		
Option 3:	Any 10 m	eals of the 19 avail	able.	
Option 4:	<b>Option 4:</b> *135 meals and \$150 per semester of Flex Dollars			
Option 5:	<b>Option 5:</b> *110 meals and \$200 per semester of Flex Dollars			
<b>Option 6:</b> *75 meals and \$235 per semester of Flex Dollars				
Option 5: *110 meals and \$200 per semester of Flex Dollars Option 6: *75 meals and \$235 per semester of Flex				

<sup>\*</sup>The Block Plan gives you the option of eating at Table Rock Cafe and using your Flex Dollars at any of the other Fine Host food centers. You can also use your card to take your friends to eat at Table Rock Cafe.

## **Student Housing**

Please note that Table 9 defines options 1, 2, and 3 in terms of "meals per week." When you pay your bill for housing, you pay for the meals specified in the option you've selected. However, at the end of the year the university cannot give you a refund for any meals you paid for but did not eat. Likewise, the university cannot give you a refund at the end of a week for any meals you didn't eat, nor can you carry over uneaten meals from one week to the next.

**NOTE:** All room and board prices and other charges are subject to change at any time by the State Board of Education, acting as Trustees for Boise State University.

### **Rules and Regulations**

Together, this catalog and its counterpart for undergraduates, the *Boise State University Catalog*, establish many of the rules and regulations governing all students. In addition to the *Catalog*, rules and regulations are defined in the *Boise State University Student Handbook*, the *Residence Hall Contract*, and the *Residence Hall Handbook*. Housing contracts issued by the Office of Student Housing incorporate all of these rules and regulations, by reference.

## **Housing Preferences**

If your application for housing is accepted, Boise State will assign you to a particular room in one of the four residence halls. In doing so, Boise State will make every effort to accommodate the preferences you've indicated on the application. However, priority is given to returning students over new, and to the earliest application out of all applications received (based on the date we receive the application **and** the date we receive the deposit). If you have a roommate preference, the two of you should arrange for your applications to arrive at about the same time, so you'll be about equal in priority. In any event, you should apply for housing as soon as possible so that you can better your chances of receiving the accommodations you prefer. Finally, please note that the preferences indicated on a housing contract are not themselves contractually binding, though they will be honored whenever possible.

**For more information on student housing, contact** the Office of Student Housing, located at Chaffee Hall, Boise State University, 1910 University Drive, Boise, ID 83725-1355; or telephone at 208 426-3986, FAX 208 426-3305. The internet address is: http://housing.boisestate.edu/.

## **University Apartments**

Married and single students may apply to rent apartments in one of the complexes operated by Boise State: University Heights, University Manor, University Village, or University Park. Approximately 200 apartments are available, all within walking distance from the campus.

**University Heights** and **University Manor** consist of onebedroom and two-bedroom apartments, carpeted and equipped with stoves and refrigerators. Coin-operated laundry facilities are located on site, and all utilities except electricity are provided. **University Park** consists of two-bedroom and three-bedroom units, partially carpeted and equipped with stoves, refrigerators, and disposals. Coin-operated laundry facilities are located on site, and all utilities except electricity are provided.

There is also one furnished, 5 bedroom, 2 bathroom graduate apartment for students 21 years of age and older. Each resident has their own private bedroom and shares the kitchen, living room, and bathrooms. All utilities are included in this unit.

**University Village** consists of two-bedroom apartments, carpeted and equipped with stoves, refrigerators, dishwashers, disposals, and also have central heating and cooling systems. Coin-operated laundry facilities are located on site, and all utilities except electricity and gas are provided.

### **Eligibility**

All Boise State apartments are reserved for full-time students, taking eight credits or more. Students without children are allowed to rent apartments if they are not needed by student families. Housing is awarded based on the date your application is received and priority is given to married students or those with children.

#### **Cost Information**

Table 10 contains 2003-2004 monthly rental rates for units in the five apartment complexes operated by Boise State.

Table 10.  Monthly Rental Rates for University	Apartments
Rental Rates Per Month (2003-2004)	Prices):
University Heights One Bedroom Two Bedroom	
University Manor One Bedroom Two Bedroom	
University Park Two Bedroom Unfurnished Three Bedroom Unfurnished Graduate Unit	\$566.00
University Village Two Bedroom	\$575.00

**NOTE:** All rental rates and other charges are subject to change at any time by the State Board of Education, acting as Trustees for Boise State University.

## **Applying to Rent an Apartment**

To apply, request an application form from the Office of Student Housing, Chaffee Hall, Boise State University, Boise, ID 83725-1355. After completing the application, return it to the Payment and Disbursement Center, along with a check or money order for \$125.00. If your application is accepted, Boise State will apply the \$125.00 toward your damage deposit, partially refundable when you move from the apartment.

Boise State will notify you when an apartment is ready. Finally, you must pay a security deposit of \$250.00 (minus the \$125.00 you enclosed with your application).

When you move out of the apartment, Boise State refunds the balance of your damage deposit minus a \$25.00 processing fee. If damage is present, some or all of your deposit may be applied to the cost of repairing the damage.

## **Off-Campus Student Housing**

To assist students in locating off-campus housing, the Office of Student Housing maintains lists of houses and apartments available for rent or lease from private parties. The University does not inspect any of the listed property, and it does not verify the accuracy of the listings. Therefore, we can assume no responsibility for the consequences of using these lists to locate suitable housing; that responsibility lies solely with the student.

In any event, the University recommends that you put in writing any agreement you reach with a landlord or property owner, specifying the obligations and expectations of each party.

## **Fair-Housing Notice**

Boise State University is an equal-opportunity institution and offers its living accommodations 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). As a matter of policy, assignments to university housing facilities are made without reference to race, color, national origin, or handicap. Furthermore, Boise State accepts listings of off-campus, privately-owned accommodations with the understanding that the accommodations are operated in a manner consistent with Boise State policies on fair housing.



#### **Student Services**

## If you have questions about student services, contact:

The Vice President for Student Affairs Administration Building, Room 208 Telephone 208 426-1418 FAX 208 426-3785 http://www.boisestate.edu:80/stusery/

# 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.

## The Writing Center

At the Writing Center, you can receive free one-to-one consultation on your writing, in any subject. The center is open six days a week. Boise State faculty, staff, and students may use the center at the times listed below.

- Monday through Thursday 9:00 a.m. to 6:00 p.m.
- Friday 9:00 a.m. to 4:00 p.m.
- Saturday 10:00 a.m. to 4:00 p.m.

To make the best use of the Writing Center, please make an appointment ahead of time. During busy times in the semester, the appointment chart fills up two to three days in advance. Bring a draft of your paper and, if possible, a copy of the assignment. If you don't have a full draft because you aren't sure how to begin or how to complete it, the Writing Center can still help.

Writing Center, Room 220, Liberal Arts Building, (208) 426-1298

## **Test Preparation**

Assisting students to prepare for graduate school is the focus of two short courses offered by Boise State University Extended Studies. The non-credit courses cover the following examinations:

- Graduate Records Exam (GRE)
- Graduate Management Admissions Test (GMAT)

Extended Studies, 1015 Grant Avenue, 208 426-1709

#### **Career Center**

The Career Center offers career counseling, assistance in identifying and making career choices, and employment assistance (including instruction in writing resumes and cover letters and interview training).

Use BroncoJobs (web-based, job-search system) to schedule on-campus interviews with employers and to access job listings for student employment, internships, and career employment.

Career Center, 1173 University Drive, 208 426-1747 career@boisestate.edu http://career.boisestate.edu

## **Family and Health**

The organizations listed below offer services related to family and health, from counseling and testing to child care and medical treatment.

## **University Children's Center**

Child care is provided for children of University students, faculty, and staff from 7:00 a.m. until 5:30 p.m. Monday through Friday during fall and spring semesters and a ten-week program during summer session. The Center is housed at 1830 Beacon Street, at the corner of Oakland Avenue. Children must be between the ages of six weeks and five years. Rates are based on a sliding scale.

The Center, licensed by the City of Boise and accredited by the National Academy of Early Childhood Education, provides an educational development program for the total child with a staff of Professional Early Childhood Educators. Students from a number of academic and vocational departments carry out field placements and class observations during the academic year.

Children's Center, 1830 Beacon Street, 208 334-4404

#### Student Health Service

At no additional cost beyond the general fee paid at registration, full-time students may visit Student Health Service for outpatient medical care. Student Health Service is equipped to address more than 90% of the average student's health-care needs, and will gladly make referrals when tests or procedures are beyond the scope of the clinic's facilities and staffing. Directly across from Public Affairs/Arts West Building, the clinic is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, whenever classes are in session.

Student Health Services, 2103 University Drive, Boise, ID 83725, 208 426-1459

## **Counseling Services**

The primary purpose of Counseling Services is to help students become more effective in dealing with concerns that influence their pursuit of personal and academic goals. There is no charge to students enrolled for six or more credit hours. Counseling Services offers a wide range of services provided by staff psychologists, counselors, supervised counseling and social work interns, and paraprofessionals. Services range from individual counseling and crisis intervention to workshops and seminars aimed at enhancing the overall learning environment at Boise State University.

In particular, Counseling Services assists students in resolving such matters as: interpersonal conflicts, test anxiety, stress-related problems, depression, marital and pre-marital difficulties, academic and career decision making, and personal social/emotional adjustment problems.

To make an appointment, call between 8 a.m. and 5 p.m., Monday through Friday.

Counseling Services, Room 605, Education Building, 208 426-1601

#### Other Student Services

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

## Office of Disability Services

Located in the Administration Building, the **Office of Disability Services** seeks to expand and develop university accommodations, thereby encouraging students with disabilities to pursue their educational objectives in the most equitable and independent manner possible. Among the services provided are:

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

In addition, a limited amount of equipment is available for temporary use by disabled students, including a TTY, modified computer terminals, and FM hearing systems. Other equipment is available at the Albertsons Library, including a Braille typewriter, Braille dictionary, voice activated readers, and a CCTV.

Office of Disability Services, Room 114, Administration Building 208 426-1583

#### The Cultural Center

Located in the Student Union Annex on the corner of Michigan Avenue and University Drive, the Center serves as a place where students can gather informally to discuss issues relating to cultural diversity and other topics of interest. The Cultural Center provides an opportunity for interaction between the ethnic student organizations, the campus and community and promotes awareness, understanding, and appreciation of diversity. The Center directly supports the goals and programs sponsored by the ethnic student organizations on campus. It provides an atmosphere in which students are able to build relationships on campus, adjust to university life and offers a quiet study area. The Center is there to assist in making your college experience the best it can be.

The Cultural Center, SUB Annex II, 1605 University Drive, 208 426-4317

#### International Students

The International Admissions Office serves prospective international students and admitted students prior to their arrival on campus.

The International Programs Office (IPO) provides services to international students upon arrival on campus including assistance arrival in Boise, orientation, as well as advising with respect to immigration regulations, academic and cultural adjustment, and employment. The IPO also assists the International Student Association in coordinating cultural activities.

**NOTE:** Due to recent changes in INS regulations, new international students MUST attend the International Programs orientation held prior to the beginning of classes. All continuing international students MUST visit the IPO within the first 30 days of classes to update their contact information and for the IPO to verify their presence on campus. Failure to do so may result in legal action and possible deportation.

International Admissions Office, Room 107, Administration Building, 208 426-1757

International Programs Office, 1136 Euclid Avenue, 208 426-3652

http://www.boisestate.edu/international/

#### Women's Center

Established as a "point of entry" where students' concerns can be handled directly or referred to the appropriate university office or community agency, the Women's Center provides support services and resources to enhance the quality of student life and promote academic success. Services include support groups, workshops, mentoring, a resource lending library, and information referrals. In addition, the center develops and promotes educational programming about the contributions, achievements, and concerns of women.

The Women's Center, SUB Annex I, 1605 University Drive, 208 426-4259

#### **Veterans' Services**

Located in the Administration Building, the Office of Veterans' Affairs provides counseling assistance to all of Idaho's Armed Forces veterans, reservists, National Guard members and their dependents. Peer counselors assist student veterans with admission requirements, Veterans Administration Educational benefits, Reserve Educational programs, individual educational goals, and family and personal difficulties. Veteran tutorial and work-study programs are also coordinated through the Office of Veterans' Affairs.

Office of Veterans' Affairs, Room 111, Administration Building, 208 426-3744

## **Extended Studies**

## **Extended Studies**

Dean: Michael Stockstill
Boise State University
Division of Extended Studies
1015 Grant Avenue
Telephone 208 426-1709
FAX 208 426-3467
http://www.boisestate.edu/extendedstudies/

## **Summer Programs**

A full complement of programs, courses, and services are offered through the Division of Extended Studies, including graduate, undergraduate, and non-credit programs in several time blocks during the summer: a 3-week session, two 5-week sessions, two 8-week sessions, and a 10-week session. A variety of special workshops and conferences are also offered each summer. The *Boise State University Summer Class Schedule* is available to students each March. For more information, call 208 426-1709.

## Weekend University

Weekend University classes are offered on campus on Friday evenings, Saturdays, and Sunday afternoons. Courses are taught by Boise State full-time and adjunct faculty. For more information, call 208 426-1709.

## **Evening Programs**

The Division of Extended Studies coordinates the evening program on the Boise State University campus. Every college and most academic departments offer evening sections. Approximately 9,000 students attend Boise State during the evening hours and courses are taught by Boise State full-time and adjunct faculty.

## **Distance Education**

Boise State offers classes through technologically mediated distance education delivery methods. Graduate classes are taught via the following:

- 1. the Internet,
- 2. computer-based multimedia, and
- 3. videoconferencing.

Two full master's degrees and one certificate program 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-of-the-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 Education, 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 <a href="http://edtech.boisestate.edu/online">http://edtech.boisestate.edu/online</a>.

## Professional Education/In-Service Program for Teachers

Meeting the needs of educators in the 10 southwest counties of Idaho, Boise State University's Professional Education Program enables teachers to earn the credits required for recertification and salary advances. The program coordinator works closely with regional school districts, the Idaho State Department of Education, and the Boise State University College of Education to ensure that all course requests meet accreditation guidelines established by the Northwest Association, Commission of Colleges. Most of the classes are conducted off campus, frequently outside of Boise. For more information, call 208 426-3191.

**Note:** Credits earned for professional education/in-service workshops cannot be applied to a graduate degree.

## **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 208 426-1689.

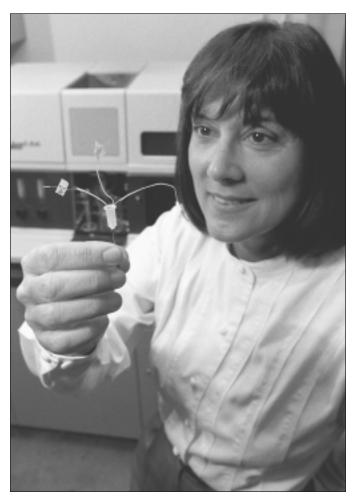
## **Continuing Education Units (CEUs)**

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 208 426-3492.

## **International Programs**

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.

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 distinct advantage over others in the job market.



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

## **Intensive English Program**

Boise State's Intensive English Program offers 20 hours per week of classroom instruction and field experiences. The program is organized into 8-week and 16-week sessions during the fall and spring 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

## **Off-Campus Centers**

At several locations in southwest Idaho, the Division of Extended Studies offers a wide range of academic courses, primarily in the evening. Advising, registration, book sales, and library services are available at most off-campus centers, and most 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

Gowen Field Campus Bldg. #521, Harvard Street Gowen Field, Boise, ID 83709 208 422-3758 or 208 426-3293

Mountain Home Air Force Base 665 Falcon Mountain Home, ID 83648-5115 208 828-6746 or 208 426-3293

Twin Falls Campus College of Southern Idaho Campus Twin Falls, ID 83301 208 736-2161

## **Graduate Programs**

# Master of Science in Accountancy

College of Business and Economics Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135 http://cobe.boisestate.edu/graduate e-mail: ranchust@boisestate.edu

**Program Information:** J. Renee Anchustegui **Graduate Studies Director:** Phillip Fry

**Full Graduate Faculty:** Paul Bahnson, Denise M. English, Thomas J. English, David R. Koeppen, William C. Lathen,

E. Shawn Novak

Adjunct Graduate Faculty: Frank llett Jr.

#### **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.

#### 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.

#### Other

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 1 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 listsery during their first semester of study.

## **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. All other materials should be sent to the Business Graduate Studies Office, B318.

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.
   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.
- 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 University before taking any graduate courses beyond their first semester.

## Master of Science in Accountancy

- 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:
  - 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.

#### Application packet deadlines:

Summer, Fall entry	March 1
Spring entry	October 1

## **Degree Requirements**

ı	Master of Science in Accountancy	
	Course Number and Title	Credits
The MSA deg	ree requires a minimum of 30 hours of	
study.		
Accountance	cy/Taxation Courses	21
Select From:		
ACCT 502	Advanced Tax Topics3	
ACCT 505	Perspectives in Auditing3	
ACCT 510	Advanced Financial Reporting3	
ACCT 512	Financial Reporting Theory3	
ACCT 515	Business Valuation3	
ACCT 516	Financial Statement Analysis3	
ACCT 517	Environmental Accounting and	
	Taxation3	
ACCT 518	International Financial Reporting3	
ACCT 520	Research in Federal Taxation3	
ACCT 525	Partnership Tax Law3	
ACCT 530	Corporate Tax Law I3	
ACCT 533	Corporate Tax Law II3	
ACCT 535	Estate & Gift Taxation3	

-continued

Master of Science in Accountancy (continued)		
ACCT 545	Real Estate Tax Law3	
ACCT 555	Farm & Natural Resource Taxation3	
ACCT 560	Income Taxation of Trusts & Estates3	
ACCT 565	Deferred Compensation Taxation3	
ACCT 570	State Taxation & Procedures3	
ACCT 575	International Taxation3	
ACCT 579	Personal Financial Planning3	
ACCT 590	Practicum/Internship3	
Non-Accountancy Electives		
Electives chosen from non-accountancy graduate		
courses.		
Total		30

Non-Accountancy Electives must be approved by the student's graduate advisor. Foundation 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			
Course Number and Title	Credits		
The MSAT degree requires a minimum of 30 hours.			
Taxation Courses	15-21		
Selections From:			
ACCT 502 Advanced Tax Topics3			
ACCT 515 Business Valuation3			
ACCT 517 Environmental Accounting and			
Taxation3			
ACCT 518 International Financial Reporting3			
ACCT 520 Research in Federal Taxation3			
ACCT 525 Partnership Tax Law3			
ACCT 530 Corporate Tax Law I3			
ACCT 533 Corporate Tax Law II3			
ACCT 535 Estate & Gift Taxation3			
ACCT 545 Real Estate Tax Law3			
ACCT 555 Farm & Natural Resource Taxation3			
ACCT 560 Income Taxation of Trusts & Estates3			
ACCT 565 Deferred Compensation Taxation3			
ACCT 570 State Taxation & Procedures3			
ACCT 575 International Taxation3			
ACCT 579 Personal Financial Planning3			
ACCT 590 Practicum/Internship3			
<b>Accountancy Electives</b>	0-6		
Selections From:			
ACCT 505 Perspectives in Auditing3			
ACCT 510 Advanced Financial Reporting3			
ACCT 512 Financial Reporting Theory3			
ACCT 516 Financial Statement Analysis 3			
Subtotal Taxation and Accountancy Classes	21		

-continued-

## Master of Science in Accountancy

Master of Science in Accountancy (continued)		
Non-Accountancy Electives:	9	
Electives chosen from non-accountancy graduate		
courses.		
Total	30	

Non-Accountancy Electives must be approved by the student's graduate advisor. Foundation 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 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-

#### 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  $\,$ 

#### 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).

## Master of Arts in Art

Department of Art Liberal Arts Building, Room 252 Telephone 208 426-3450 or 426-4070 e-mail: artdept@boisestate.edu http://www.boisestate.edu/art/

Graduate Program Director: Cheryl Shurtleff-Young

**Department Chair:** Richard Young

**Full Graduate Faculty:** Jim Blankenship, Heather Hanlon, Gary Rosine, Cheryl Shurtleff-Young, Brent Smith, John Taye,

Ron Taylor, Richard Young

**Associate Graduate Faculty:** Stephanie Bacon, Laurie Blakeslee, James Budde, Francis Fox, John Francis, Larry McNeil, Lee Ann Turner

### **General Information**

The Master's of Arts in Art degree offers two options designed to meet the needs of specialists in art education OR visual arts. For art educators the M.A. in Art, Art Education focuses on advanced curriculum development, an examination of contemporary issues relating to art and education, and advanced study of art history and studio practices. For studio artists the M.A. in Art, Visual Arts offers a minimum one-year intensive studio experience designed to engage the student in both theory and practice of their chosen discipline.

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

## **Application and Admission Requirements**

To be considered as a graduate student in the M.A. in Art program, applicants must have a minimum GPA of 3.0, be admitted to the Graduate College and submit official transcripts from all institutions previously attended. Applicants must also provide the following to the BSU Art Department, 1910 University Drive, Boise, ID 83725-1510 by February 15:

M.A. in Art, Visual Arts:

- A. A statement of the student's professional objectives and philosophy of art.
- B. Three letters of recommendation.
- C. A minimum of twenty (20) labeled slides of recent art work.
- D. Self-addressed, stamped envelope.

#### M.A. in Art, Art Education:

A. A statement of the student's professional objectives and philosophy of art or art education and how these will be furthered by graduate study.

- B. Recommendations from three art educators or professional persons who are acquainted with the student's academic and artistic qualifications to pursue graduate study.
- C. A minimum of twenty (20) labeled slides of recent art work
- D. An example of academic or professional writing.
- E. Evidence of any public or private teaching experiences (three years minimum).
- F. Evidence of successful completion of basic K-12 art education methods course; both K-8 and 6-12 or their equivalents.
- G. Self-addressed, stamped envelope.

## **Degree Requirements**

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

Master of Arts in Art, Visual Art		
Course Number and Title		
Required Courses:		
Art History courses	6	
ART 593 Thesis	6	
ART 598 Seminar in Art	3	
Electives in studio emphasis	15	
Total	30	

## **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

### Master of Arts in Art

reading and creative exploration will be expected, as well as a final presentation including a written paper. PREREO: Graduate standing.

**AR 531 CARVING (2-4-3) (F/S).** Techniques of hand carving in a variety of materials, including wood and stone, with references to historical and contemporary approaches. May be repeated once for credit. PREREQ: ART 231.

**AR 532 FIGURE SCULPTURE (2-4-3) (F/S).** Fundamentals of classical figure sculpture in wax, clay and other additive media. Gesture, proportion, anatomical structure and the expressive possibilities of the figure. May be repeated once for credit. PREREQ: ART 211 and ART 231.

**ART 534 ASSEMBLED FORM (2-4-3) (F/S).** Assembled sculpture in wood, metal and mixed media. Concepts of three-dimensional assemblage and installation in contemporary sculpture. Variety of technical processes including welding, wood construction and methods for assembling mixed materials. May be repeated once for credit. PREREQ: ART 231.

**ART 539 CAST FORM (2-4-3) (F/S).** Casting processes in sculpture. Mold making and casting techniques with an emphasis on the "lost wax" bronze casting process. May be repeated once for credit. PREREQ: ART 231 and one other 300 level sculpture course.

**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 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. PREREQ: 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
- 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. PREREQ: Graduate status.

**ART 593 THESIS (V-V-6).** The thesis will be a scholarly paper embodying results of original research which are used to substantiate a specific view in the field of the visual arts. 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 thesis presentation. PREREQ: Graduate status.

#### ART 594 WORKSHOP (1-3 credits)

## ART 595 READING AND CONFERENCE (1-2 credits) ART 596 DIRECTED RESEARCH (1-3 credits)

**ART 598 SEMINAR IN ART (3-0-3)(S).** Upon selection of an approved topic by the M.A. graduate advisor and committee, the student will research the subject/medium/process thoroughly, present written report with annotated bibliography and an oral report of the findings utilizing visual material in their presentation to faculty and students as arranged. PREREQ: Graduate standing.

#### Art Courses with a "G" Designation

All 300G and 400G level courses taken for credit must be approved by the student's M.A. graduate advisory committee or graduate advisor. A limit of nine (9) semester hours can be taken at the 300 or 400 "G" level for credit in the MA in Art program. No course numbered below 500 carries graduate credit unless the "G" is affixed.

It is understood that graduate students enrolled in "G" courses will be required to do extra work in order to receive graduate credit for the courses. Only graduate faculty will supervise graduate students in 300 or 400 level courses carrying the "G" designation. The faculty member, in discussion with the student prior to admission into the course, will define the amount, description, and evaluation of the work to be done.

**ART 301G NINETEENTH CENTURY ART HISTORY (3-0-3)(F).** A study of important artists and movements from Neoclassicism through Post-Impressionism. Critical writing will be assigned.

# **ART 302G HISTORY OF TWENTIETH CENTURY MOVEMENT IN ART (3-0-3)(S).** An analysis of important European artistic movements up to World War II, including Fauvism, German Expressionism, Cubism, Futurism, Constructivism, Dada and Surrealism. Critical writings will be assigned.

**ART 305G STUDIO IN VISUAL DESIGN (0-6-3)(F/S).** Advanced exploration of two dimensional or three-dimensional design, continuing with problems in line, form, color, texture and space. Advisable to take ART 105 and 106 prior to ART 305.

**ART 307G STUDIO IN METALSMITHING (0-6-3) (F/S).** Advanced study in methods of jewelry making and metalsmithing with special emphasis on raising, die-forming, sheet forming and mechanical techniques to further develop personal skills in design and craftsmanship. May be repeated for credit. PREREQ: ART 221, 222.

**ART 309G STUDIO IN PRINTMAKING (0-6-3) (F/S).** Introduction to color printing and advanced printmaking in any of the following specialized areas, each of which may be repeated once for credit: intaglio, lithography, serigraphy, and relief printing. PREREQ: ART 209.

**ART 311 G INTERMEDIATE DRAWING (0-6-3) (F,S).** Continuation of concepts introduced in ART 112, with an emphasis on creative and experimental approaches to content, technique and composition. May be repeated for credit. PREREQ: ART 211 or PERM/INST.

#### ART 312G INTERMEDIATE LIFE DRAWING (0-6-3)(F,S).

Structural and classical work from the model, with an increased emphasis on composition and expressive drawing. May be repeated for credit. Model fee. PREREQ: ART211 or PERM/INST.

**ART 315G INTERMEDIATE PAINTING (0-6-3) (F,S).** A study of relevant historical, ideological and aesthetic positions in painting. A personal and creative exploration of diverse styles, methods, structures and ideations. Oil, acrylic or other media. May be repeated once for credit. Admission by portfolio review the semester prior to enrollment. PREREQ: ART 219 or ART 217 or PERM/INSTR.

**ART 317G WATERCOLOR AND RELATED MEDIA (0-6-3) (F,S).** Emphasis on developing individual interests and expressive strengths in painting with watercolor and related media, allowing further exploration of objectives. May be repeated once for credit. Admission by portfolio review the semester prior to enrollment. PREREQ: ART 217 and ART 315 or PERM/INST.

**ART 319G FIGURE AND PORTRAIT PAINTING (0-6-3) (F,S).** Painting the human figure in objective and interpretive modes of expression. Students will paint in realistic and semi-abstract manners. Oil or acrylic media. Model fee. May be repeated once for credit. Admission by portfolio review the prior semester. PREREQ: ART 219 and ART 315 or PERM/INST.

**ART 321G ELEMENTARY SCHOOL ART METHODS (3-1-3).** This course is designed to prepare future elementary education teachers in awareness, skills, theories and practices in K-8 art education. Child growth and development, curriculum selection and planning, classroom management and assessment strategies and basic historical aesthetic learning methods will be addressed. Students will demonstrate technical and artistic skills and mastery with K-8 art materials and will design, teach and assess art lessons. Optional lab hours available. Materials fee. PREREQ: Upper division standing.

ART 322G ELEMENTARY SCHOOL ART METHODS FOR ART EDUCATION MAJORS (3-2-4) (S). Prepares future art education teachers in awareness, skills, theories, and practices in K-8 art education. Child growth and development, curriculum selection and planning, classroom management and assessment strategies, and basic historical and aesthetic learning methods will be addressed. Students will use their technical and artistic skills and mastery with K-8 art materials and will design, teach, and assess art lessons. 30 hours of on-site clinical experience will be arranged. Additional lab hours available. Materials fee. Graduate students will assume supervisory/leadership roles as appropriate. PREREQ: Art education major; upper division standing.

**ART 325G STUDIO IN CERAMICS (0-6-3)(F/S).** Advanced instruction in clay and glaze materials, fabrication methods. May be repeated once for credit. PREREQ: ART 225 or 226.

**ART 335G ART OF THE BRONZE AGE (3-0-3) (F/S) (Alternate Years).** A survey of the art and architecture of the Bronze Age (3000-1100 BC) Mediterranean civilizations including Egypt, Mesopotamia, Minoan, Crete, and Mycenaean Greece. Recommended: ART 201.

**ART 336G GREEK ART (3-0-3) (F/S) (Alternate Years).** A survey of the art and architecture of ancient Greece, from the Iron Age through the Hellenistic Period (1100-33 BC), with emphasis on the artistic achievements of Classical Athens. Recommended: ART 201.

**ART 337G ART OF ANCIENT ITALY (3-0-3)(F/S)(Alternate Years).** A survey of the art and architecture of ancient Italy from the time of the Etruscans through the Roman Republic and Imperial Periods (700 BC-330 AD), with emphasis on the artistic achievements of the Roman Empire. Recommended: ART 201.

**ART 338G MEDIEVAL ART (3-0-3) (F/S) (Alternate Years).** A survey of the art and architecture of the Medieval world (5th-15th centuries AD) including Byzantine Greece and Turkey, the Islamic Near East and Spain, and Europe from the time of the migrations through the Carolingian, Ottonian, Romanesque, and Gothic periods. Recommended: ART 201.

**ART 341G CREATIVE PHOTOGRAPHY (2-4-3) (F/S).** Advanced study of photographic techniques; emphasis on the creative approach to picture taking and printing. Adjustable camera required. Advisable to take ART 251 prior to ART 341.

**ART 344G CREATIVE PHOTOGRAPHY, COLOR PRINTING (2-4-3) (F/S).** Advanced study of photographic techniques; emphasis on the creative approach to picture taking and printing in color. Adjustable camera required. May be repeated for credit. PREREQ: ART 251 or PERM/INST.

**ART 345G STUDIO IN CREATIVE PHOTOGRAPHY (2-4-3) (F/S).** Advanced study emphasizing techniques of color slides. Color theory and composition will be covered in the course as well as the processing of slides and various methods of projections. Various approaches to lighting and laboratory work will be taught. Adjustable camera required. May be repeated for credit. PREREQ: ART 251 or PERM/INST.

**ART 346G PHOTOGRAPHY: ZONE SYSTEM (2-4-3)(F).** This course deals with the important relationship that exists between the negative and the print in photography. This course will provide systematic accounting of the numerous variables of personal equipment, procedures, films, developers, enlarging papers and style. Technique as the clarifier of idea will be stressed. PREREQ: ART 251 or PERM/INST. Offered odd numbered years.

**ART 351G SECONDARY SCHOOL ART METHODS (3-2-4) (F).** For students expecting to teach art education at the junior and senior high school levels. Includes pedagogical, philosophical and methodological issues and guidelines for grades 6-12 instructional design, development and assessment, essential information about materials, safety and aesthetics. An educational portfolio and 30 hours of clinical experience are required in a 6-12 setting.

**ART 352G ART OF CHINA (3-0-3)(F/S)(Alternate Years).** A survey of the art and architecture of China from the earliest times to the end of the Ch'ing Dynasty. Emphasis will be placed on the relationship of Chinese art to native and foreign philosophies and religions. Recommended ART 103.

**ART 354G NORTHERN RENAISSANCE ART (3-0-3) (F/S)** (Alternate Years). An examination of painting, sculpture, architecture, and decorative arts of the Netherlands, France, England, and Germany from 1400-1550 and the role these arts played in the culture that produced them. Recommended: ART 102.

**ART 355G ITALIAN RENAISSANCE ART (F/S) (Alternate Years).** A survey of the key artistic monuments in Renaissance Italy (1200-1600 AD), from the work of Cimabue to that of Caravaggio. Recommended: ART 202.

**ART 356G ART OF INDIA (3-0-3)(F/S)(Alternate Years).** A survey of the art and architecture of India from the earliest times until the end of the Mughal period, emphasizing artistic expression as a reflection of the general culture and religion. Recommended ART 103.

**ART 357G ART OF JAPAN (3-0-3) (F/S) (Alternate Years).** A survey of the traditional arts of Japan from the earliest times until the first influences of Western culture, including painting, sculpture, architecture, calligraphy, prints, and ceramics. Recommended ART 103.

**ART 359G PRE-COLUMBIAN ART (3-0-3)(F/S)(Alternate Years).** A survey of the Middle American art of the Olmecs, Nayarit, Colima, Maya, Teotihuacan, Zapotecs, Toltecs, and Aztecs from ancient times until the arrival of the Spanish in the 16th century.

**ART 361G ILLUSTRATION I (0-6-3) (F).** Survey of historical and contemporary illustration materials, techniques and styles. Focus on Creative Communicative solutions to visual problems. PREREQ: ART 112, ART 105 and ART 106.

### Master of Arts in Art

**ART 362G ILLUSTRATION II (0-6-3) (S).** Continued exploration of illustration as a profession and as an expressive communicative medium. Focus on interpretive problem solving. Individually selected media. PREREQ: ART 361 and PERM/INST.

**ART 365G BAROQUE ART (3-0-3) (F/S) (Alternate Years).** A survey of European visual culture during the last sixteenth and seventeenth centuries. Emphasis will be placed on the relationship of the arts to such concurrent events as the exploration and expansion into the New World, urban growth, the development of nation-states, and religious controversy. Recommended: ART 202.

#### ART 366G EIGHTEENTH CENTURY ART (3-0-3)(F/S)

(Alternate Years). A survey of the art of the Enlightenment from the time of Louis XIV through the Napoleonic Wars. Emphasis will be placed on the relationship between eighteenth century visual culture and developments in science, philosophy, and the changing political and social ideologies of the newly industrial nations of Europe and North America. Recommended: ART 102.

**ART 371G HISTORY OF TWENTIETH CENTURY AMERICAN ART (3-0-3) (F).** Beginning with a short survey of American Art from the Ashcan School through the Thirties with concentration on Abstract Expressionism, Pop, Op and Minimal. Critical writing will be assigned. Advisable to take ART 302 prior to ART 371.

**ART 388G GRAPHIC DESIGN STUDIO III (0-6-3)(F/S).** Focus on advanced studio problems that emphasize visual and conceptual research and development. Problems may require two- or three-dimensional solutions, written as well as visual materials, collaborative work, and design work for clients from the community. May be repeated once for credit. PREREQ: Upper-division standing in Graphic Design.

**ART 409G STUDIO IN PRINTMAKING (0-6-3)(F/S).** Individual problems in any of the following areas; woodcut, lithography, intaglio and serigraphy. May be repeated for credit. PREREQ: ART 309.

**ART 411G ADVANCED DRAWING STUDIO (0-6-3) (F/S).** Individual problems in drawing. Model fee. May be repeated for credit. PREREQ: ART 311 or ART 312 or PERM/INST.

**ART 415G STUDIO IN PAINTING (0-6-3) (F/S).** Individual problems in painting in any media. Students will participate in one-person senior show projects. May be repeated for credit. PREREQ: ART 315.

#### ART 417G STUDIO IN PAINTING-WATERCOLOR (0-6-3) (F,S).

Advanced study in selected watercolor and related media. Emphasis on developing individual interests and expressive strengths. Students will participate in one-person senior show projects. May be repeated once for credit. PREREQ: ART 317 or PERM/INST.

**ART 419G STUDIO IN METALS (0-6-3) (F/S).** Continued study in materials and methods (advanced) of jewelry making and metalsmithing as they apply to the creative artist and teacher. May be repeated for credit. PREREQ: ART 221, 222, 307.

**ART 420G STUDIO IN FIGURE-PORTRAIT PAINTING (0-6-3) (F,S).** Advanced figure painting with emphasis on personal direction. Students will participate in one-person senior show projects. May be repeated for credit. Model fee. PREREQ: ART 319 or PERM/INST.

**ART 425G STUDIO IN CERAMICS (0-6-3) (F/S).** Advanced study, including individual instruction in clay and glaze materials, fabrication

methods, and professional practices. May be repeated twice for credit. PREREQ: ART 325.

**ART 431G STUDIO IN SCULPTURE (0-6-3)(F/S).** Individual problems in sculpture. May be repeated for credit. PREREQ: Two of the following four courses: ART 331, ART 332, ART 334, ART 339.

**ART 441G CREATIVE PHOTOGRAPHY (2-4-3) (F/S).** Individual problems in black and white photography. Advisable to take ART 251 and ART 341. May be repeated for credit.

**ART 444G CREATIVE PHOTOGRAPHY, COLOR PRINTING (2-4-3) (F/S).** Individual problems in color photography. May be repeated for credit. PREREQ: ART 344 or PERM/INST.

## ART 450G ART HISTORY PRACTICUM (1-4 Variable)(F/S).

Directed practical experience in organizing, illustrating, teaching and evaluating student performance in art history classes. Students will receive credit for working as an assistant in selected classes designated by art history faculty each semester. May be repeated as often as desired but only a total of 3 credit hours may be applied toward any art history requirement. PREREQ: PERM/INST (Graded: Pass/Fail).

**ART 451G CONTEMPORARY CONCEPTS IN ART (3-0-3) (F/S)** (Alternate Years). An exploration of contemporary art in the context of current theoretical concepts. The pluralistic nature of art during the postmodern era will be emphasized and recent developments in criticism will be introduced. Critical writings will be assigned. PREREQ: ART 302 or ART 371 or PERM/INST.

**ART 452G METHODS AND THEORY IN ART HISTORY (3-0-3) (F).** A critical analysis of the historiographical, theoretical, and methodological approaches taken by art historians in their consideration and interpretation of visual culture, past and present. PREREQ: 9 credits in art history or graduate status or PERM/INST.

**ART 461G STUDIO IN ILLUSTRATION (0-6-3)(S).** Continued exploration of illustration as a profession and as an expressive communicative medium. Focus on development of an individual visual voice through advanced interpretive problem solving. PREREQ: ART 362 and PERM/INST.

#### ART 462G ADVANCED STUDIO IN ILLUSTRATION II (0-6-3)(F).

Exploration of editorial applications of illustration (for example, book, magazine, visual essay). Focus on the continued development of an individual visual voice through the exploration of sequential imagery. Individually selected media. PREREO: AR 461 and PERM/INST.

**ART 483G NEW MEDIA DESIGN (2-2-3) (F/S).** An introduction to the visual and conceptual design of emerging digital technologies, including multimedia, animation, interface and website design. PREREQ: Upper-division standing in Graphic Design and PERM/INST.

**ART 488G GRAPHIC DESIGN STUDIO (0-6-3)(F/S).** Focus on continuing advanced studio problems that emphasize visual and conceptual research and development. Problems may require two- or three-dimensional solutions, written as well as visual materials, collaborative work, and design work with clients from the community. May be repeated once for credit. PREREQ: Upper-division standing in Graphic Design.

# Master of Arts or Science in Biology

Department of Biology Science/Nursing Building, Room 223 Telephone 208 426-4033 FAX 208 426-4267 http://www.boisestate.edu/biology/ e-mail: jbeltho@boisestate.edu

Graduate Program Coordinator: James Belthoff

**Department Chair:** James Munger

**Full Graduate Faculty:** Marc Bechard, James Belthoff, Russell Centanni, Alfred Dufty, Cheryl Jorcyk, Peter Koetsier, James Long, Richard McCloskey, James Munger, Stephen Novak, Julia Thom Oxford, Ian Robertson, Troy Rohn, Robert Rychert, Marcelo Serpe, James Smith, Marcia Wicklow-Howard

Adjunct Graduate Faculty: Charles Baker (Emeritus),
Jonathan Bart, Kenneth Brewer, William Burnham, Tom Cade
(Emeritus), Dorothy Douglas (Emerita), Susan Earnst,
David Eldridge, Mark Fuller, Nicholas Hadjokas,
Stuart Hardegree, Charles Harris, Cynthia Keller-Peck,
Lloyd Kiff, Steven Knick, Michael Kochert, Daniel Leavell,
Yongsheng Ma, Carl Marti, Jr., Bill Mattox, Rosemary Mazaika,
Richard Olson, Rebecca Pullen, Bruce Rieman, Gary Roloff,
Roger Rosentreter, Randall Ryan, Victoria Saab, Rex Sallabanks,
Nancy Shaw, Michael Spence, Karen Steenhof, Dennis Stevens,
Robert Van Kirk, Richard Watson, David Whitacre,
Rick Williams, Denise Wingett, Eric Yensen

### **General Information**

The Department of Biology offers degree programs leading to either a Master of Arts (M.A.) or a Master of Science (M.S.) degree. 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 on the department, faculty, and potential projects, visit the departmental web site (www.boisestate.edu/biology). To apply:

- 1. 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 \$30 matriculation fee. Please submit the application *PRIOR* to submitting any additional items.
  - Have the Registrar(s) of ALL post-secondary institutions attended send official transcripts to the Graduate Admissions Office.
  - Have Graduate Record Exam scores forwarded to the Graduate Admissions Office.

- Send the following to: Graduate Coordinator, Department of Biology, Boise State University, 1910 University Drive, Boise, ID 83725-1515.
  - A cover letter discussing professional goals and reasons for wishing to study 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 contact you've had with faculty members.
  - Three letters of recommendation.

All individuals admitted to REGULAR STATUS as graduate students in biology must have:

- an undergraduate GPA of at least 3.0 on a 4-point system;
- results that average in the 50th or higher percentile in the verbal, quantitative, and analytical 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 Graduate Student Oversight Committee; final decisions on admission will depend on qualifications of the candidates and openings that exist.

Each student who has been accepted into our program 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 choose appropriate graduate course work, evaluate the thesis/project, and conduct the final defense or comprehensive examination.

The Graduate Student Oversight Committee will, in cooperation with the student's major professor and advisory committee, assess progress in thesis/project research, progress and performance in course work and performance as a teaching assistant (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 will be available on a competitive basis. Additional support for master's research projects is available from faculty members. 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 a 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 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, Project Option		
Course Number and Title	Credits	
BIOL 598 Graduate Seminar	2	
BIOL 579 Research in the Biological Sciences (for	2	
two semesters)		
BIOL 591 Project	6	
Electives to be chosen in consultation with advisor	23	
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 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.		
Total	33	

Master of Arts in Biology, Examination Option	
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, and credits from courses outside the biological sciences. A 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

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 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/COREQ: 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).** Study of 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 or 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. PREREO: 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.
- BIOL 505 APPLIED RAPTOR BIOLOGY (0-3-2)(F)(Offered odd-numbered 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 predator-prey 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) (Offered odd-numbered 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. PREREO: BIOL 323 and BIOL 343.
- BIOL 517 SPECIES AND SPECIATION (3-0-3) (F) (Offered odd-numbered 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) (Offered odd-numbered 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. PREREO: BIOL 323.
- BIOL 526 INSECT ECOLOGY (3-0-3)(S)(Offered evennumbered years). An in-depth exploration of insect ecology, evolution and behavior. Topics include life history evolution, insectplant 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)(Offered oddnumbered 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) (Offered odd-numbered 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) (F) (Offered odd-numbered 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) (Offered odd-numbered 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)(Offered Odd-Numbered 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 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 cancer-related systems. May be repeated once for credit. Previous enrollment in BIOL 465 or BIOL 565 is recommended. PREREQ: BIOL 343 and PERM/INST.

**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) (Offered odd-numbered 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)(Offered oddnumbered years). 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) (Offered even-numbered 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. PREREQ: BIOL 323 or PERM/INST.

BOT 541 PLANT DEVELOPMENTAL BIOLOGY (3-3-4) (S) (Offered even-numbered 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, and 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)(Offered odd-

**numbered 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)(F).** 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: ZOOL 230 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) (Offered odd-numbered 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)(Offered evennumbered 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)(Offered evennumbered 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)** (Offered even-numbered 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.

## Master of Business Administration

College of Business and Economics Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135 http://cobe.boisestate.edu/graduate e-mail: ranchust@boisestate.edu

**Program Information:** J. Renee Anchustegui **Graduate Studies Director:** Phillip Fry

#### Accountancy

**Full Graduate Faculty:** Paul Bahnson, Denise M. English, Thomas J. English, David R. Koeppen, William C. Lathen, E. Shawn Novak

Adjunct Graduate Faculty: Frank Ilett Jr.

#### **CIS & Production Management**

Full Graduate Faculty: Robert Anson, Thomas Foster, Phillip Fry, V. Lyman Gallup, Gary I. Green, David F. Groebner, Jerry LaCava, Robert Minch, Murli Nagasundaram, Patrick Shannon, Gregory Wojtkowski, Wita Wojtkowski Associate Graduate Faculty: Emerson C. Maxson, Sharon Tabor

#### **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, William N. Ruud Associate Graduate Faculty: Christopher Baughn, Mark Buchanan, James E. Wanek, Keith Ward

#### Marketing and Finance

Full Graduate Faculty: Dwayne Barney, Alan Frankle, Mohan Limaye, Douglas J. Lincoln, Matthew Maher, K. G. McCain, Nina Ray, Diane Schooley, Harry White Associate Graduate Faculty: Keith Harvey, Jason MacDonald. Richard Pompian. Kirk Smith

#### **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

## **Master of Business Administration**

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 - March 1; Spring - October 1.

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.

## **Application and Admission Requirements**

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 MBA should be sent to the Business Graduate Studies office. Room B318.

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 BSU 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 expanded professional vitae which accurately reflects professional work experience.

- 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 BSU'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, calculus, 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 exam 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.

#### **Application packet deadlines:**

Summer, Fall entry ......March 1
Spring entry .....October 1

Students will typically be notified of their admittance status by March 31 or October 31.

## **Degree Requirements**

The MBA requires a minimum of 33 semester credit hours and a maximum of 54 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 can expand beyond business to such areas as health policy or public administration.

## Master of Business Administration

Master of Business Administration	
Course Number and Title	Credits
Foundation Courses:	21
The foundation 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.	
MBA 512 Business Statistics3	
MBA 514 Economic Theory and Analysis3	
MBA 516 Law for Managers3	
MBA 517 Accounting for Managers3	
MBA 523 Production and Operations Management3	
MBA 525 Corporate Finance3	
MBA 529 Marketing Management3	
Advanced Courses:	24
MBA 531 Business Perspectives3	
MBA 532 Accounting and Control Issues3	
MBA 533 Operations and Information Issues3	
MBA 536 Business in a Global Society3	
MBA 538 Organizational Issues3	
MBA 539 Marketing and Customer Service Issues3	
MBA 545 Financial Management Issues3	
MBA 546 Strategic Management3	
Electives:	9
ECON 560 Economics of Public Policy3	
MGMT 541 Human Resource Management3	
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 589 Individual Development Series	
MBA 590 Internship	
MBA 596 Directed Research1-3	
Two undergraduate "G" courses may be taken for	
graduate credit if cleared by the Graduate Program	
Director.	
Total	33-54

## **Course Offerings**

MBA — MASTER OF BUSINESS

#### FOUNDATION COURSES

**MBA 512 BUSINESS STATISTICS (3-0-3).** Examines the use of statistics in decision-making, presentation and summarization of data, estimation, hypothesis testing, regression analysis, analysis of variance, time series and forecasting, and non-parametric methods.

**MBA 514 ECONOMIC THEORY AND ANALYSIS (3-0-3).** 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 516 LAW FOR MANAGERS (3-0-3).** Explores the history and development of the partnership and corporate forms of business organization and the legal environment which creates and regulates a manager's duties toward the corporation, employees, shareholders, and members of the general public.

**MBA 517 ACCOUNTING FOR MANAGERS (3-0-3).** Provides a working knowledge of financial and managerial accounting tools, techniques and procedures.

#### MBA 523 PRODUCTION AND SYSTEMS MANAGEMENT (3-0-3).

Emphasizes the management of the production/operation function and its integration with other organizational activities, including forecasting models, design and layout of the production system, scheduling, location analysis, quality control, and material acquisition. PREREQ: MBA 512.

**MBA 525 CORPORATE FINANCE (3-0-3).** Examines concepts and techniques of corporate institutional and investment finance, including time value of money, corporate banking relationships, current assets management, and efficient markets. PREREQ: MBA 512 and MBA 517.

**MBA 529 MARKETING MANAGEMENT (3-0-3).** Covers activities and models used in marketing, identifying and interpreting buyers' needs, market segmentation, and designing a balanced marketing program.

#### ADVANCED COURSES

MBA 531 BUSINESS PERSPECTIVES (3-0-3). Examines major forces transforming business (e.g., globalization, information technology, market segmentation and workforce diversity) as well as strategic and tactical actions firms take in response to such challenges, including mass customization, flexible manufacturing, downsizing, outsourcing and strategic partnering. PREREQ: MBA 512, MBA 514, MBA 516, MBA 517, MBA 523, MBA 525, MBA 529. Students can take one of these courses concurrently with the Perspectives course if all the other prerequisite courses have been completed. In addition, MBA 531 (Business Perspectives) can also be taken concurrently with one Advanced course if it is the first Advanced course a student takes. Only one Foundation and/or Advanced course can be taken concurrently with MBA 531.

MBA 532 ACCOUNTING AND CONTROL ISSUES (3-0-3). The overall objective of this course is an understanding of accounting control systems and a thorough understanding of the emerging issues in cost management. The integration of content from computer information systems, production and cost/managerial accounting is a central part of the course. PREREQ: MBA 531, MBA 517 or equivalent. MBA 531 (Business Perspectives) is also required, but can be taken concurrently with this course if it is the first Advanced course a student takes. Only one Advanced course can be taken concurrently with MBA 531.

#### MBA 533 OPERATIONS AND INFORMATION ISSUES (3-0-3).

Considers the current state of technology in operations and information technology and how advances in these technologies interact to affect the strategic decisions organizations make about providing goods and services to a dynamic customer base. PREREQ: MBA 531, MBA 512 or equivalent.

**MBA 536 BUSINESS IN A GLOBAL SOCIETY (3-0-3).** Analyzes the relationships between business and economic, ethical, legal, political, and social systems and the effects of these relationships on management decisions from national and international perspectives. PREREQ: MBA 531, MBA 516 or equivalent.

### Master of Business Administration

**MBA 538 ORGANIZATIONAL ISSUES (3-0-3).** Examines contemporary issues in managing organizations and people from a general manager's perspective, including extended enterprise management, organization design, organization learning and the management of change. PREREQ: MBA 531.

#### MBA 539 MARKETING AND CUSTOMER SERVICE ISSUES

(3-0-3). Analyzes and integrates marketing concepts, models, and tools necessary to produce and execute marketing strategies focused upon customer needs and expectations, with emphasis on identifying "market" opportunities and challenges as well as assessing organizational marketing strengths and weaknesses. PREREQ: MBA 531, MBA 529 or equivalent.

**MBA 545 FINANCIAL MANAGEMENT ISSUES (3-0-3).** Reviews dynamic financial analysis which emphasizes the current practical applications and complexities of capital budgeting, arbitrage arguments, risk-return models and financing alternatives. PREREQ: MBA 531, MBA 525, and MBA 514 or equivalents.

MBA 546 STRATEGIC MANAGEMENT (3-0-3). Examines how organizations obtain and deploy resources within a changing environment to gain and sustain a competitive advantage and includes 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. PREREQ: MBA 531, MBA 532, MBA 533, MBA 536, MBA 538, MBA 539, MBA 545. In special circumstances, at most one of these courses can be taken as a corequisite given prior permission of the instructor.

#### **ELECTIVES**

#### **ECON 560 ECONOMICS OF PUBLIC POLICY (3-0-3)**

(Intermittent). Contribution of economic analysis to the justification, design and implementation of economic policy. The issue surrounding the need for public policy a private property, market economy and the benefits and costs associated with government intervention. The relationships between the goals and the instruments of U.S. economic policy. PREREQ: MBA 514.

#### 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. Techniques for effectively functioning within these constraints.

**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 589 INDIVIDUAL DEVELOPMENT SERIES.** Each student's skill set will be assessed during their first year of study and a program of skill development activities will be agreed to with the student's advisor. Development activities may include: skill-building workshops; approved seminars; in-class assignments (such as presentations, team projects, problem solving facilitation); organizational practicums; public service practicums. PREREQ: None.

**MBA 590 INTERNSHIP.** Available on a selective, limited basis. MBA students should consult with Director.

**MBA 596 DIRECTED RESEARCH (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

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

At most two of the following courses may be taken for graduate credit if cleared by the Graduate Program Coordinator.

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 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) (Once a year, either Fall or Spring). 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 Upper Division Business standing; or PERM/INST.

#### 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

## Master of Arts in Communication

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. PREREQ: 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 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).

#### MKTG 415G INTERNATIONAL MARKETING RESEARCH (3-0-3)

**(F/S).** Theory and the use of research for marketing decisions faced by global managers. Emphasizes planning, designing, and implementing research activities within a cross-cultural context. PREREQ: BUSSTAT 208, MKTG 301.

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

# Master of Arts in Communication

Department of Communication Communication Building, Room 101 Telephone 208 426-3320 FAX 208 426-1069

http://www.boisestate.edu//comm/e-mail: mcox@boisestate.edu

#### **Department Chair and Graduate Program**

Coordinator: Marvin Cox

**Full Graduate Faculty:** Marvin Cox, Peter Lutze, Suzanne McCorkle, Ed McLuskie, Janet Mills, Rick Moore, Dan Morris, Ben Parker, Mary Rohlfing, Robert Rudd, Laurel Traynowicz, Peter Wollheim

**Associate Graduate Faculty:** Dawn Craner, Marty Most, Heidi Reeder

#### **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

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

content regarding COMM 505, COMM 506, and COMM 507.

### Master of Arts in Communication

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:

- 1. 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.
  - B. 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.
- 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 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 or COMM 593 Thesis	3
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

COMM 507 SELECTED TOPICS IN ORGANIZATIONAL 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.

**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

## Master of Science in Computer Science

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.

# Master of Science in Computer Science

## College of Engineering Dean's Office

Engineering and Technology Building, Room 101 Telephone 208 426-1153 FAX 208 426-4466 http://coen.boisestate.edu

## **Department of Computer Science Department Chair:** John H. Griffin

Micron Engineering Center, Room 302J Telephone 208 426-5640 FAX 208 426-2470 http://cs.boisestate.edu e-mail: office@cs.boisestate.edu

#### **Graduate Program Committee Coordinator:**

Alex Feldman

Full Graduate Faculty: James Buffenbarger, Alex Feldman, John Griffin, Amit Jain

**Associate Graduate Faculty:** Tim Anderson, Gang-Ryung Uh, Jyh-haw Yeh

## **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 bachelor's 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 Department of Computer Information Systems and Production Management in 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: admission to the Graduate College, which can occur with unclassified status and 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 a \$30 application fee, to the Graduate
  Admissions Office. The application form is contained in the
  Boise State University Graduate Catalog, which may be
  obtained by contacting the Graduate Admissions Office at
  (208) 426-3903 or (208) 426-4204, or by email 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 the Graduate Admissions Office.

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 and arrange for the scores to be sent to the Graduate Admissions Office.
- 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 Admissions Office.
- 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.

## Master of Science in Computer Science

 Unless otherwise specified, all deficiencies must be removed within two years of Provisional admission to the program. Time spent in Provisional status counts toward 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 student a fair amount of flexibility in designing a program to fit his or her needs. The only fixed requirements are three "core" courses 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 advisor and the graduate computer science committee, to reflect the student's interests, ensure a coherent program, and fit within the constraints of course availability.

The Master of Science in Computer Science degree program requires a minimum of 31 credit hours, as specified in the table below. In compliance with University policy, at most 10 of those credits may be earned in G-designated undergraduate courses. A student may not count, toward the M.S. degree, any credits applied (at Boise State or elsewhere) toward the completion of a baccalaureate degree. In addition, the student's advisor 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 an explicit extension of time is granted by the Computer Science Graduate Committee. In no event will more than seven years be allowed for completion of the degree.

A student not choosing the project (COMPSCI 591) or thesis (COMPSCI 593) option must pass COMPSCI 600 ASSESSMENT Comprehensive Examination (Pass/Fail). A second attempt to pass the Comprehensive Examination is permitted if necessary but failure on a second attempt will result in dismissal from the program.

Master of Science in Computer Science	
Course Number and Title	Credits
Core computer science courses	10
COMPSCI 521 Design and Analysis of Algorithms3	
COMPSCI 531 Advanced Programming Languages3	
COMPSCI 553 Operating Systems4	
Additional approved computer science	15
courses chosen from the following:	
(See Degree Requirements for restrictions.)	
COMPSCI 510 Databases4	
COMPSCI 512 Advanced Topics in Databases3	
COMPSCI 525 Network Protocols and	
Programming3	
COMPSCI 530 Parallel Computing4	
COMPSCI 541 Computer Architecture3	
COMPSCI 546 Computer Security3	

-continued-

Master of Science in Computer Science (continued)	
COMPSCI 551 Advanced Programming	
Language Translation3	
COMPSCI 554 Advanced Operating Systems3	
COMPSCI 557 Artificial Intelligence	
COMPSCI 561 Introduction to the Theory of	
Computation3	
COMPSCI 562 Complexity Theory3	
COMPSCI 571 Software Engineering3	
COMPSCI 573 Advanced Software Engineering3	
COMPSCI 580-589 Selected Topics3	
Additional course work, project or thesis—	
one of the following options:	6
COMPSCI 591 Project6	
COMPSCI 593 Thesis6	
Additional COMPSCI courses from above list, or	
courses in related fields subject to approval6	
Written examinations (if required)	0-1
COMPSCI 600 ASSESSMENT Comprehensive	
Examination (P/F)1	
Total	31-32

## **Course Offerings**

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

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

## Master of Science in Computer Science

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 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 language (HDL) in the design of computer systems. This course 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 551 ADVANCED PROGRAMMING LANGUAGE TRANSLATION (3-0-3) (F/S). Compiler transformations to optimize code size and speed. Students will learn how to use embedded software tools and will implement various stages of compiler transformations. PREREQ: COMPSCI 451 or PERM/INST.

**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 225 and EE 332.

#### COMPSCI 554 ADVANCED OPERATING SYSTEMS (3-0-3)(S).

Structure and functions of operating systems, inter-process communication techniques, high-level concurrent programming, virtual memory systems, elementary queuing theory, security, distributed systems, case studies. Techniques in design and implementation of operating systems. PREREQ: COMPSCI 453 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. PREREO: COMPSCI 461.

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. Cross listed 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. Cross listed with MATH 308 and COMPSCI 368; credit may be received for only one of these three courses. PREREO: 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 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).** A major project involving development of a significant system.

**COMPSCI 593 THESIS (Variable credit).** A thesis containing original results that is suitable for publication.

COMPSCI 600 ASSESSMENT Comprehensive Examination (P/F) (1 Credit)

## Master of Arts in Criminal Justice Administration

# Master of Arts in Criminal Justice Administration

Department of Criminal Justice Administration Library, Room 166 Telephone 208 426-4114 FAX 208 426-4371 http://cja.boisestate.edu e-mail: sraney@boisestate.edu

Graduate Program Coordinator: Andrew Giacomazzi Department Chair: Craig Hemmens Full Graduate Faculty: Andrew Giacomazzi, Craig Hemmens, Robert Marsh, David Mueller, Mary Stohr, Anthony Walsh

#### 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.
- 2. Completion of an undergraduate statistics course.
- 3. CJA 201 Introduction to Criminal Justice or its equivalent (required for all entering students).

## **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 BSU 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, CJA 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 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
FC	DUNDATION SERIES	15
Th	ne following core courses are required of all	
stı	udents. It is recommended that these courses	
be	e taken prior to other graduate course work:	
	CJA 501 Crime and Criminal Justice3	
	CJA 502 Organization and Management of	
	Criminal Justice3	
	CJA 503 Criminal Justice Research3	
	CJA 504 Statistics for Criminal Justice3	
	CJA 506 Theories of Crime3	
SE	EMINAR SERIES	9
Stı	udents are required to complete nine credits from	
	e following list of courses. It is recommended that	
cc	ore courses be completed prior to enrolling in	
se	minar series courses.	
	CJA 505 Law and Social Control3	
	CJA 507 Issues in Contemporary Policing3	
	CJA 508 The Legal Process3	
	CJA 509 Juvenile Justice3	
	CJA 510 Punishment and Corrections3	
	CJA 511 Community Corrections3	
	CJA 512 Gender and Justice3	

-continued

## Master of Arts in Criminal Justice Administration

## Master of Arts in Criminal Justice Administration (continued)

(common )	
ELECTIVES	3-6
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. BSU	
graduates with any listed course in undergraduate	
work which applied to the undergraduate degree may	
not apply that course to the graduate degree.	
THESIS OR PROJECT OPTION	3-6
CJA 591 Project3	
CJA 593 Thesis6	
Total	33

## **Course Offerings**

## CJA — CRIMINAL JUSTICE ADMINISTRATION FOUNDATION SERIES

**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.

**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 data-sources. PREREO: 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.

#### **ELECTIVES**

**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.

### Master of Science in Earth Science

**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.

# Master of Science in Earth Science

Department of Geosciences Math/Geosciences Building, Room 225 Telephone 208 426-2390 FAX 208 426-4061

e-mail: dwilkins@boisestate.edu

**Graduate Program Coordinator:** David Wilkins

Department Chair: C. J. Northrup

**Full Graduate Faculty:** Warren Barrash, Paul R. Donaldson, Michael D. Knoll, Mitchell Lyle, James P. McNamara, Paul Michaels, John R. Pelton, Walter S. Snyder, Craig M. White, Spencer H. Wood

Associate Graduate Faculty: C. J. Northrup, David Wilkins Adjunct Graduate Faculty: William P. Clement, Thomas M. Clemo, Vladimir I. Davydov, Mary Donato, Virginia Gillerman, Kenneth M. Hollenbaugh (Emeritus), Verne Oberbeck, Kurt L. Othberg, Mark Seyfried, Claude Spinosa (Emeritus), Edward Squires, Charles J. Waag (Emeritus)

#### **General Information**

The curriculum for the Master of Science in Earth Science 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 course offerings are designed to allow flexibility in planning individual programs. 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. A preliminary examination, oral or written, will be administered to each candidate.

## **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.

Additional information may be obtained from the Earth Science Graduate Program Coordinator Department of Geosciences, Boise State University, 1910 University Drive, Boise, ID 83725 or dwilkins@boisestate.edu or http://earth.boisestate.edu.

## **Degree Requirements**

Master of Science in Education, Earth Science	
Course Number and Title	Credits
Required courses:	
Graduate Core	6
EDUC 503 Fundamentals of Educational	
Research3	
EDUC 506 Issues in Education3	
EDUC 536 Curriculum Planning and	
Implementation3	
EDUC 537 Instructional Theory3	
EDUC 597 Core Special Topics2	
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
EDUC 591 Project or EDUC 593 Thesis	6
A final comprehensive oral and/or written	
examination of the thesis or project is required	
Total	33

#### **Credit Requirements:**

All 30 credits must be taken for a letter grade, except for GEOL 593 Thesis credit which will be graded Pass/Fail.

## **Course Offerings**

Additional 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) (Lab fee).** 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. PREREQ: PERM/INST.

GEOG 561 REMOTE SENSING AND IMAGE PROCESSING (2-2-3) (F/S) (Lab fee). Introduces students to acquisition,

## Master of Science in Earth Science

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. PREREQ: GEOG 560 or PERM/INST.

**GEOG 562 GEOGRAPHIC INFORMATION ANALYSIS (2-2-3) (F/S) (Lab fee).** 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. PREREQ: GEOG 561 or PERM/INST.

**GEOG 563 GEOSPATIAL PROJECT (1-6-3) (F/S) (Lab fee).** 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. PREREQ: GEOG 562 or PERM/INST.

#### GEOL - GEOLOGY

**GEOL 403G ENGINEERING GEOLOGY (2-3-3)(S)(Field trip required).** Introduction to soil and rock mechanics. Slope stability analysis. Surface and subsurface exploration of sites. Geological and geophysical considerations for construction projects. Current applications of geology to engineering projects. Alternate years. PREREQ: GEOL 280, PHYS 102 or PHYS 211, GEOL 323 or PERM/INST.

**GEOL 431G PETROLEUM GEOLOGY (2-3-3)(F)(Field trips)** (Alternate years). A study of the nature and origin of petroleum, the geologic conditions that determine its migration, accumulation and distribution, and methods and techniques for prospecting and developing petroleum fields. PREREQ: GEOL 311, GEOL 314.

**GEOL 450G GEOLOGY OF NATIONAL PARKS (3-0-3)(S).** A systematic study of geologic materials, structures, processes and landforms in the National Parks. The course is structured by geological regions and emphasizes geological knowledge as a key to greater appreciation and understanding of these scenic areas. PREREQ: GEOL 103 (Offered alternate years.)

**GEOL 451G PRINCIPLES OF SOIL SCIENCE (3-0-3) (F/S)** (Alternate Years). Major aspects of soil science, including the physical, chemical, and biological characteristics of soils, will be presented in the classroom lectures. Demonstration laboratory exercises and field trips will be required. PREREQ: Background in geology and chemistry.

**GEOL 502 GREAT MYSTERIES OF THE EARTH (3-0-3)(F).** The earth abounds with mysteries that are seemingly related to natural phenomena. Lost continents, UFO's, Loch Ness Monster, Bermuda Triangle, Big Foot, ancient astronauts, water witching, and other mysteries, both real and contrived as discussed in terms of evidence and interpretation in the context of natural laws and processes. Techniques of skeptical inquiry and the scientific method are applied to develop critical thinking. PREREQ: Graduate standing and PERM/INST.

**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. This course can be taken for undergraduate credit by filling out necessary forms. 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 porous and fractured media. Methods of determination of

aquifer characteristics and performance and groundwater modeling. PREREQ: MATH 170.

**GEOL 514 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: GEOL 310, GEOL 314, GEOL 323 and GEOL 324 or PERM/INST.

**GEOL 516 PHYSICAL HYDROLOGY (3-0-3) (S) (GEOPH 516).** 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)(GEOPH 517).** 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 FIELD METHODS IN MARINE GEOLOGY AND GEOPHYSICS (4-0-4) (F/S/SU) (GEOPH 519).** 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 Geology or Geophysics credit, but not both. PREREQ: PERM/INST.

**GEOL 523 ADVANCED IGNEOUS PETROLOGY (3-0-3)(S)** (Alternate 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: GEOL 323, GEOL 324, CHEM 131.

**GEOL 531 REGIONAL GEOLOGY OF NORTH AMERICA (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 of 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 w/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. PREREO: GEOL 314 and 323, or PERM/INST.

**GEOL 541 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.

#### Master of Science in Earth Science

**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 102.

GEOL 560 VOLCANOLOGY (3-0-3)(F)(Field trip required)

(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. 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 571 GEOCHEMISTRY (3-0-3) (F/S).** Chemical equilibrium applied to natural water systems. Oxidation and reduction in sedimentation and ore genesis, methods of exploration geochemistry, crystallization of magmas, ore-forming solutions, isotope geochemistry. This course can be taken for undergraduate credit by filing necessary forms. Field trip required. PREREQ: GEOL 101, CHEM 133, MATH 204.

#### 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 audiovisual 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 by 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: Physical Geology or Fundamentals of Geology and/or PERM/INST.

**SPECIAL TOPICS.** Classes that deal with specialized topics and designed for small groups of students are offered frequently; recent examples include:

GEOL 597 MINERAL RESOURCES, GEOLOGY AND THE ENVIRONMENT

GEOL 597 PRINCIPLES OF SOIL SCIENCE

**GEOL 597 RESEARCH TOPICS IN GEOTECTONICS** 

**GEOL 597 APPLIED GEOHYDROLOGIC CONCEPTS** 

GEOL 597 ECONOMIC EVALUATION OF MINERAL RESOURCES

GEOL 597 BIOSTRATIGRAPHY, GRAPHIC CORRELATION GEOL 597 TECTONIC EVOLUTION OF THE URAL MOUNTAINS GEOL 597 AUTOCAD APPLICATIONS IN GEOLOGY

**GEOL 597 ADVANCED STRATIGRAPHY** 

**GEOL 597 CRUSTAL LITHOLOGY AND TECTONICS** 

GEOL 597 QUATERNARY GEOLOGY

GEOL 597 GRADUATE ORIENTATION

GEOL 597 GRADUATE FIELD GEOLOGY

**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 601 GRADUATE ORIENTATION (1-0-1)(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.

# GEOL 607 PALAEOCLIMATOLOGY AND PALAEOCEANOGRAPHY (3-0-3)(F)(Alternate years)

**(GEOPH 607).** 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. Course may be taken for either Geology or Geophysics 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.

#### GEOL 623 ADVANCED HYDROGEOLOGY (3-0-3)(F)

(**GEOPH 623**). Treatment of groundwater occurrence and flow, theory fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls. Course may be taken for either Geology or Geophysics credit, but not both. PREREQ: GEOL 412, MATH 275, MATH 233, or PERM/INST.

#### GEOL 624 APPLIED HYDROGEOLOGY (3-0-3)(S)

**(GEOPH 624).** 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 or Geophysics credit, but not both. PREREQ: GEOL 623 and GEOPH 623 or PERM/INST.

**GEOL 632 INTERPRETATION OF DEEP SEA SEDIMENTS** (3-0-3) (F/S) (GEOPH 632). 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 Geology or Geophysics credit, but not both. PREREQ: PERM/INST.

GEOL 641 PLATE TECTONICS AND GEODYNAMICS (3-0-3)(F)

(Alternate years). Reviews and identifies geologic and geophysical foundations of plate tectonic theory and characteristics of modern tectonic environments and their use in interprets Earth's geologic history. PREREQ: PERM/INST.

GEOL 672 ISOTOPE GEOCHEMISTRY AND

**GEOCHRONOLOGY (3-0-3)(S)(Alternate years).** Comprehensive overview of theory, methods, and applications of isotope geochemistry and geochronology to a wide range of earth science problems. PREREQ: PERM/INST.

## **Doctor of Education in Curriculum and Instruction**

# Doctor of Education in Curriculum and Instruction

College of Education Education Building, Room 204 Telephone 208 426-4496 or 426-1672 FAX 208 426-4006 e-mail: tharris@boisestate.edu

Dean: Joyce Garrett

#### **Graduate Program Coordinator:**

Teresa Delgadillo Harrison

Full Graduate Faculty: Holly Anderson, James Armstrong, Robert Bahruth, Robert Barr, Jeanne Bauwens, Bobbie Birdsall, Jonathan Brendefur, Steve Christensen, Kenneth Coll, Lee Dubert, Judy French, Jay Furhiman, Joyce Garrett, Heather Hanlon, Chad Harris, Teresa Delgadillo Harrison, Michael Heikkinen, Werner Hoeger, Jack Hourcade, Rich Johnson, Philip Kelly, Bill Kozar, Melinda Lindsey, Lamont Lyons, John McChesney, Margaret Miller, Rickie Miller, James Nicholson, William Parrett, Linda Petlichkoff, Ron Pfeiffer, Connie Pollard, Norma Sadler, Ted Singletary, Caile Spear, Stanley Steiner, Roger Stewart, Carolyn Thorsen, Ross Vaughn, Wenden Waite, Scott Willison

**Associate Graduate Faculty:** Kenneth Bell, Mark DeBeliso, Shelly Lucas, Rosemary Palmer, Lawrence Rogien, Jane Marie Shimon, Charlotte Silva, Connie Thorngren,

## **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 begins with an announcement that the College is accepting applications. The announcement will include an application deadline and describe the admission process which 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:

- 1. 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 should submit the following materials to the College of Education Teacher Education Graduate Programs Coordinator:

- 1. 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;
- A current resume.
- A sample of recent scholarly and/or professional writing that includes references (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 Coordinating 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 that should be admitted.

**Transfer Credits:** Doctor of Education students may transfer up to 21 credits, 15 credits 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 you and your supervisory committee. In addition, you 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

### **Doctor of Education in Curriculum and Instruction**

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	
Course Number and Title	Credits
Curriculum and Instruction	15
EDUC 610 The American Culture and the	
Context of Schooling3	
EDUC 660 Teaching and Learning3	
EDUC 662 Curriculum3	
EDUC 663 Evaluation3	
EDUC 664 Seminar in Curriculum and	
Instruction3	
School Improvement	10
EDUC 611 School Culture and the Problems	
of Change3	
EDUC 612 Strategies for School Improvement3	
EDUC 620 Field Experience: Learners At-risk2	
EDUC 621 Field Experience: School	
Improvement2	
Research	12
EDUC 651 Intermediate Statistics in	
Educational Research3	
EDUC 652 Quantitative Approaches to	
Research3	
EDUC 653 Qualitative Approaches to	
Research3	
Approved Elective Research Credits3	
Note: See Doctoral Handbook for a list of	
suggested electives.	
Cognate Area	17-20
Dissertation	9-12
EDUC 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 (EDUC 503 or equivalent) must be completed prior to taking EDUC 651 Intermediate Statistics in Educational Research and EDUC 653 Qualitative Approaches to Research.

- Beginning statistics (PE 552 or equivalent) must be completed prior to taking EDUC 651 Intermediate Statistics in Educational Research.
- Foundations of curriculum (EDUC 536 or equivalent) must be completed prior to taking EDUC 662 Curriculum.
- Instructional theory or educational psychology (EDUC 537 or EDUC 501 or equivalents) must be completed prior to taking EDUC 660 Teaching and Learning.
- Philosophy of education or foundations of education (EDUC 505 or equivalent) must be completed prior to taking EDUC 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, 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.

## **Program Sequence:**

9
Summer: Year 1 (residency)  EDUC 610 The American Culture and the Context of Schooling
<u> </u>
Fall: Year 1 (residency)EDUC 653 Qualitative Approaches to Research
Spring: Year 1 (residency)
EDUC 620 Field Experience: Learners At-risk
<b>Summer: Year 2 (residency)</b> EDUC 611 School Culture and the Problems of Change
Fall: Year 2
EDUC 621 Field Experience: School Improvement
Spring: Year 2
EDUC 663 Evaluation
Cognate
The cognate supports a school curricular area or has
other professional relevance. It is developed by the
student in consultation with the student's advisor and
program committee.
EDUC 693 Dissertation9-12

## **Doctor of Education in Curriculum and Instruction**

# **Course Offerings**

EDUC - EDUCATION

EDUC 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 EDUC 505, EDUC 506 or equivalents; or permission of instructor and EDUC 505, EDUC 506 or equivalents.

EDUC 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 EDUC 610; or permission of instructor and EDUC 610.

**EDUC 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 for school-based decision making. PREREQ or COREQ: Admission to doctoral program and EDUC 611; or permission of instructor and EDUC 611.

EDUC 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. PREREO: EDUC 653.

**EDUC 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: EDUC 620.

EDUC 651 INTERMEDIATE STATISTICS IN EDUCATIONAL RESEARCH (3-0-3) (F/S). Students will study parametric and nonparametric statistical procedures commonly used in educational research, including analysis of variance, analysis of covariance, chi square, and multiple regression. Students will develop competence in data analysis and interpretation procedures via computer-based

statistical packages, including SAS and SPSS. PREREQ: Admission to doctoral program and Introduction to Statistics; or permission of instructor and Introduction to Statistics.

EDUC 652 QUANTITATIVE APPROACHES TO RESEARCH (3-0-3) (F/S). Students will examine procedures involved in the selection of appropriate research designs and data analysis techniques in quantitative research, and study related design and measurement issues. Students will integrate the use of technologies in the process of quantitative research, and learn the content requirements and structure of a dissertation proposal. PREREQ: Admission to the doctoral program and EDUC 651; or permission of instructor, EDUC 651 and EDUC 503 or equivalent.

**EDUC 653 QUALITATIVE APPROACHES TO RESEARCH (3-0-3) (F/S).** Students will examine the uses and values of qualitative methods in educational research and analyze various approaches to qualitative research, including case studies, biographical, phenomenological, ethnographic, interactional, and critical analyses. They will evaluate ways of gathering and analyzing data, and will apply their knowledge in a research study that investigates some facet of the teaching-learning process. PREREQ: Admission to the doctoral program or permission of instructor and EDUC 503 or equivalent.

**EDUC 660 TEACHING AND LEARNING (3-0-3)(SU).** Students will examine historic and contemporary explanations of human learning and relate them to past and current models of teaching. Students will devote particular attention to teaching and learning in culturally diverse student populations and the impact of technology on education environments. PREREQ: Admission to the doctoral program and EDUC 501 or EDUC 537 or equivalents; or permission of instructor and EDUC 501 or EDUC 537 or equivalents.

**EDUC 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 EDUC 536 or equivalents; or permission of instructor and EDUC 536 or equivalent.

**EDUC 663 EVALUATION (3-0-3) (S or SU).** Students will examine questions evolving from making judgments about such educational issues as school effectiveness, individual performances, and other educational endeavors. They will explore ethical issues in assessment and evaluation, and analyze social, cultural, and political influences affecting assessment and evaluation procedures. PREREQ: Admission to doctoral program, EDUC 651 and EDUC 653; or permission of instructor, EDUC 651 and EDUC 653.

**EDUC 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. PREREO: EDUC 660 and EDUC 662.

**EDUC 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.

College of Education Education Building, Room 705 Telephone 208 426-1134 FAX 208 426-4365 http://education.boisestate.edu/grad/ e-mail: mhunt@boisestate.edu

#### **Graduate Program Coordinators:**

Curriculum and Instruction, Elementary Education Ted Singletary, tsingle@boisestate.edu Curriculum and Instruction, Secondary Certification Teresa Delgadillo Harrison, tharris@boisestate.edu Curriculum and Instruction, Bilingual/ESL Jay Fuhriman, jfuhrim@boisestate.edu Curriculum and Instruction, Physical Education Pedagogy Ken Bell, kbell@boisestate.edu Early Childhood Judy French, jfrench@boisestate.edu Reading

Stan Steiner, ssteine@boisestate.edu Special Education

Melinda Lindsey, mlindse@boisestate.edu **Educational Technology** Carolyn Thorsen, cthorse@boisestate.edu

Curriculum, Instruction, and Foundational Studies

Chair: Michael Heikkinen

Educational Technology Chair: Carolyn Thorsen **Elementary Education and Specialized Studies Chair:** 

Full Graduate Faculty: Holly Anderson, James Armstrong, Robert Bahruth, Robert Barr, Jonathan Brendefur, Steve Christensen, Lee Ann Dubert, Judy French, Jay Fuhriman, Teresa Delgadillo Harrison, Michael Heikkinen, Jack Hourcade, Joyce Garrett, Rich Johnson, Philip Kelly, Melinda Lindsey, Lamont Lyons, Rickie Miller, William Parrett, Constance Pollard, Norma Sadler, Ted Singletary, Stanley Steiner, Roger Stewart, Carolyn Thorsen, Wenden Waite, Scott Willison

Associate Graduate Faculty: Rosemary Palmer, Lawrence Rogien, Charlotte Silva

## **General Information**

The College of Education offers a Master's degree in education in Curriculum and Instruction with an emphasis in Bilingual Education, Physical Education, or Secondary Certification; Educational Technology, Early Childhood Education, Reading, or Special Education. The Graduate Program Coordinators oversee the administration of these programs and coordinate their operation across the Department of Elementary Education and Specialized Studies, the Department of Curriculum, Instruction, and Foundational Studies, the Department of Educational Technology, and the related subject area departments. Additional programs that support school personnel include:

- Art Contact Cheryl Shurtleff-Young at 426-3450
- Earth Science Contact David Wilkins at 426-2390
- English Contact Bruce Robbins at 426-3036
- History Contact Peter Buhler at 426-3538
- Math Contact Sharon Walen at 426-4095
- Music Contact Peggy Jo Wilhelm at 426-3704
- School Counseling Contact Bobbie Birdsall at 426-3204
- School of Social Work Contact Bill Whitaker at 426-2579

Graduate Assistantships are available for any student qualifying for admission. Awards may consist of a stipend, a fee waiver or a combination of both. Applications must be received at the Graduate Studies in Education Office by March 1 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.

A maximum of nine semester graduate credits may be accepted from other accredited graduate schools upon approval of the advisor and coordinator. A maximum of six semester credits of pass-fail credits may be applied toward the

#### **In-service Teacher Education Credit Restriction:**

Effective Fall, 1998, Idaho public school teachers or other professional employees of an Idaho school district may take approved in-service teacher education courses at a reduced fee rate; however, the credit awarded cannot be applied toward a degree program.

## **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 the Graduate Admissions Office by July 1 for the fall semester, November 15 for the spring semester, or April 1 for the summer session:

- 1. Application for admission (http://www.boisestate.edu/gradcoll).
- 2. \$30.00 application fee.
- 3. Official transcripts of all undergraduate and graduate course work sent directly to the BSU Graduate Admissions Office.
- 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.

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. A candidate 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 he or she applies. If deemed appropriate, provisional status may be granted to an applicant who does not meet the listed requirements.

#### **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.

# **Degree Requirements**

The M.A. and M.S. in Education require a minimum of 33 semester credit hours. The exact number of credits depends upon the program and area of specialization upon which the student chooses.

**Graduate Core:** The Graduate Core provides a set of integrated experiences designed to focus participants' attention on critical issues in education, to foster serious reflection through extensive reading, writing, and conversation about those issues, and to promote collaboration with colleagues who have diverse experiences and varied areas of expertise. The Graduate Core is required of all candidates for a Master of Arts in Education, but not those seeking a Master of Science in Educational Technology. Graduate Core is offered once during the academic year and during summer session.

Master of Arts in Education, Curriculum and Instruction	
Course Number and Title	Credits
Education 506 Graduate Core: Issues in Education	4
Elective Core Courses	2
Approved two-credit electives will be listed in the	
class schedule as EDUC 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 EDUC 597 Special Topics: Core-	
Interpreting Educational Research (2 credits), or EDUC 503 Fundamentals of Educational Research (3 credits).	
EDUC 536 Curriculum Planning and	
Implementation	3
EDUC 537 Instructional Theory	3

-continued

Master of Arts in Education, Curriculum and Instruction (continued)	
Content elective courses  Content electives should be chosen to support an area normally taught in the schools. These include bilingual/ESL, any secondary certification content area, mathematics, science, reading, technology, etc. Each student should determine an individual program with an assigned advisor.	9-12
Elective options Option I. Thesis or Project: EDUC 503 Fundamentals of Educational Research	9-12
TOTAL	33

# Master of Arts in Education, Curriculum and Instruction Option: Bilingual Education/ESL (Spanish-English)

Course Number and Title	Credits
EDUC 506 Graduate Core: Issues in Education	4
Elective Core Courses	2
Approved two-credit electives will be listed in the	
class schedule as EDUC 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	

-continued

#### Master of Arts in Education, Curriculum and Instruction Option: Bilingual Education/ESL (Spanish-English) (continued)

(commuea)	
Students in the Middle School	
Contemporary Education Policy	
EDUC 505 Philosophy of Education3	9
OR EDUC 503 Fundamentals of Educational	
Research3	
EDUC 536 Curriculum Planning and	
Implementation3	
EDUC 537 Instructional Theory3	
Bilingual Education/ESL Option Requirements	
(Spanish-English):	16-17
EDUC 510 The Culturally Diverse Learner3	
EDUC 511 Techniques of Grant Application	
Writing3	
EDUC 512 Second Language Methods and	
Materials3	
EDUC 513 Theoretical Fundamentals of	
Bilingual Education/ESL3	
EDUC 524 Language Acquisition and	
Development	
EDUC 590 Practicum: Clinical Experience1-2	
Bilingual Strand Requirement:	3
EDUC 514 Language and Literacy3	
OR	
ESL Strand Requirement:	
EDUC 515 Applied Linguistics: Comparative	
Language Study3	
Elective option	0
Option II. Comprehensive Writen 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. 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.)  NOTE: Students electing Option II must take a	
research class.	
TOTAL	34-35
_ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	0.00

**Note:** This master's program is for both elementary and secondary teachers P-12. Participants select either the Bilingual Education or the ESL strand. The Bilingual Education strand uses only the Spanish and English languages and the Hispanic and Anglo cultures. It requires a student to be bilingual in Spanish and English prior to entering the program. The ESL strand 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 Bilingual Education or ESL strand does not qualify the candidate for state certification. However, these courses may be used toward certification renewal or endorsement.

# Master of Arts in Education, Curriculum and Instruction Option: Physical Education Pedagogy

Course Number and Title	Credits
EDUC 506 Graduate Core Issues in Education	4
Elective Core Courses:	2
Students must take an approved two credit elective.	
These will be listed in the class schedule as	
"EDUC 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	
KINES 555 Physical Education Pedagogy	3
EDUC 503 Fundamentals of Educational Research or	
KINES 551 Research Design in Exercise & Sport	3
KINES 591 Project OR KINES 595 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	N 7
KINES 580 Selected Topics in Applied Sport Psycholog	y

# Master of Arts in Education, Curriculum and Instruction Option: Secondary Certification

# **Application and Admission Requirements**

Students holding undergraduate degrees who plan to receive initial secondary teacher certification must apply and be accepted for admission to the Graduate College and to the Master of Arts in Education, Curriculum and Instruction with the Secondary Certification option program. Admission to teacher education is required before a student may enroll in any course on the graduate level leading toward certification. Applications for secondary teacher certification are made through the Office of College School Partnerships and Field Experiences (OCSPFE) in the Education Building, Room 222.

It is the responsibility of the individual student to provide the OCSPFE with transcripts and other documentation to show that those requirements have been completed. Requirements for admission to secondary teacher certification shall be

determined and implemented by the Teacher Education Coordinating Counsel (TECC) and administered by the OCSPFE and the Department of Curriculum, Instruction, and Foundational Studies (CIFS).

#### Admission Schedules

Prospective students may apply for admission at any time. However, the OCSPFE must receive the application materials prior to beginning Block 1 by the first Friday in February for the fall semester, or the first Friday in September for the spring semester. Students beginning courses in the summer should contact the OCSPFE Office. You may contact the office for details at 208 426-1991 or wwaite@boisestate.edu.

#### **Limitations to Admissions**

Because of the large number of students seeking admission to secondary teacher education, not all applicants may be admitted. Each academic year, a target number of applicants is established and applicants are accepted until that number is reached. Priority is given to those with the highest academic grade point average and to those specialty areas that have been identified as shortage areas in Idaho. Shortage areas may change over time.

#### **Academic Standards**

The following academic standards are required for admission to secondary teacher certification:

- 1. A minimum overall GPA of 3.0 (on a 4.0 scale) for undergraduate work and a minimum GPA of 2.75 in both the content major and minor fields.
- Be within six hours of completion of required major and minor area content courses.
- 3. Successful completion of the PRAXIS I Writing with a score of 172 or higher. It may not be taken more than three times.
- 4. Successful completion of the Educational Technology Assessment (ETA) with a score of 75% or higher. It may not be taken more than three times.
- For those seeking Endorsement in Special Education: A passing score of 175 or higher on the Preprofessional Skills Test (PPST) for mathematics. It may not be taken more than three times.

# Admission to Professional Year in Secondary Education

An application for a specific professional year assignment must be filed with the Office of the College School Partnerships and Field Experiences (OCSPFE) by the following dates:

- 1. The first Friday in February for students desiring to student teach in the fall.
- 2. The first Friday in September for students desiring to student teach in the spring.

Students must give six weeks notice prior to the beginning date for professional year if they wish to withdraw their application for professional year. Students choosing to postpone professional year must reapply.

General requirements for admission to professional year in secondary teacher certification include the following:

- 1. Recommendation of the faculty advisor or the chair of the student's department.
- Major field, minor field (when appropriate), and required education courses completed.
- 3. Successful completion of Block 1.

## Special Information on Professional Year in Secondary Teacher Certification

- 1. Students who transfer to Boise State University must meet requirements for admission to teacher education and professional year and complete at least 6 semester hours at the university before being placed in professional year.
- Student teachers are expected to do responsible teaching, participate in co-curricular activities, maintain close contact with faculty and students in the public schools, and participate in seminars and conferences with their university supervisors.
- 3. Any student may be dismissed from a program leading to certification if he or she is found guilty of any offense which would be grounds for revocation or denial of an Idaho teaching certificate, including conviction in a court of law or an offense other than a minor traffic violation. Questions regarding this policy should be addressed to the OCSPFE (Education Building, Room 222).
- 4. Prior to professional year, students may be required by school districts to be fingerprinted.
- 5. Professional year can be taken only once.

# **Secondary Teacher Certification**

To be recommended for certification from Boise State University, students should complete the secondary option degree program within a selected department. Students with a major and a minor will complete a minimum of 50 credit hours. Such completion represents a major certification endorsement (at least 30 credit hours) in a teaching field. It is highly recommended that students complete a minor certification endorsement of at least 20 credit hours in another field, as an additional minor certification endorsement enhances the opportunity for employment. Students who do not have an endorsement in a minor area must have at least 45 credit hours in their major.

The major certification endorsements (secondary option degree programs) are described in the undergraduate catalog under each department. A listing of secondary options follows:

Anthropology-Social Science, Art, Biology, Chemistry, Communication, Earth Science, Economics-Social Science, English, History, History-Social Science, Mathematics, Music, Physical Education, Physics, Political Science-Social Science, Sociology-Social Science, Theatre Arts

Note: Minor certification endorsements are listed in the undergraduate catalog. Check with the Graduate Program Coordinator for the Curriculum and Instruction/Secondary Certification emphasis, for the most current information regarding requirements for minor certification endorsements recognized by the State of Idaho.

# Certification Requirements and Endorsements for Secondary Teacher Certification

Standards for the certification of teachers for the State of Idaho are listed in the *Idaho Department of Education Professional School Personnel Certification Standards, Revised July 1, 1996* (www.sde.state.id.us/), as prepared by the Idaho Department of Education. The following requirements are based on that document and other policies of the Idaho State Board of Education.

To be recommended to the State Department of Education for a secondary school teaching certificate, students from Boise State University must meet the following requirements:

- 1. Be of good moral character.
- 2. Have completed an appropriate baccalaureate degree.
- Have satisfactorily completed teacher education requirements that include a minimum of 26 semester credit hours in the philosophical, psychological, methodological, and technological foundations of education, including 16 weeks of student teaching.
- 4. Be recommended by the Dean of the College of Education. This recommendation verifies that the candidate has been approved by his or her department of subject matter specialization and by the Department of Curriculum, Instruction, and Foundational Studies. Such approval is based on evidence of the student's knowledge of the subjects to be taught, of demonstrated teaching techniques, and of ability and aptitude to work with students and adults.
- 5. PRAXIS II.

#### Master of Arts in Education, Curriculum and Instruction Option: Secondary Certification

promote a constant of the cons	
Course Number and Title	Credits
EDUC 506 Graduate Core: Issues in Education	4
Elective Core Courses:	2
Approved two-credit electives will be listed in the	
class schedule as "EDUC 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	
EDTECH 575 Integrating Technology into	9
Classroom Curricula3	
EDUC 505 Philosophy of Education3	
EDUC 536 Curriculum Planning and	
Implementation3	
Content Area	9
A minimum of 9 graduate credits to be selected	
in the area of the endorsement.	

-continued

# Master of Arts in Education, Curriculum and Instruction Option: Secondary Certification (continued)

Opnon. Secondary Cermication (commoed	<u>'</u>
Block I (Block courses are corequisites.) EDUC 538 Learning and Instruction	8
EDUC 550 Exceptional Needs	
Block II (Block courses are corequisites.)	8
EDUC 544 Content Literacy	
# varies Content Methods3	
EDUC 561 Professional Year-Teaching	
Experience II2	
Block III	10
EDUC 562 Professional Year-Elementary	
Teaching Experience III(A/M/PE)5	
EDUC 563 Professional Year-Jr. High	
Teaching Experience IV (A/M/PE)5	
EDUC 564 Professional Year-Sr. High	
Teaching Experience IV (A/M/PE)5	
EDUC 565 Professional Year-Jr. High	
Teaching Experience III10	
EDUC 566 Professional Year-Sr. High	
Teaching Experience III10	
Culminating Activity	0-9
Option I. Thesis or Project:	
EDUC 503 Fundamentals of Educational	
Research3	
EDUC 591 Project <b>OR</b> EDUC 593 Thesis6	
(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 instruction, curriculum, or some other aspect of	
an educational program.)	
Option II. Comprehensive Writen 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. 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.)	
EDUC 505 Philosophy of Education3	
OR	
EDUC 503 Fundamentals of Educational	
Research	
Approved electives9	
NOTE: Students selecting Option II must take a	
research class, which may be EDUC 597 Special Topics:	
Core - Interpreting Educational Research (2 credits), or EDUC 503 Fundamentals of Educational Research	
(3 credits).	
TOTAL	50-59
-	

Master of Arts in Education, Early Childhoo	d
Course Number and Title	Credits
EDUC 506 Graduate Core: Issues in Education	4
Elective Core Courses:	2
Approved two-credit electives will be listed in the	
class schedule as "EDUC 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	_
EDUC 521 Early Childhood: Reading	3
Two of the following three courses:	6
EDUC 522 Early Childhood: Advanced Child	
Development	
EDUC 523 Early Childhood: Environments and	
Programs	
EDUC 524 Early Childhood: Language Acquisition and Development3	
	9.4
EDUC 590 Practicum: Early Childhood	2-4
Elective Options:	14-16
Option I. Thesis or Project: EDUC 503 Fundamentals of Educational	
Research3	
EDUC 591 Project <b>OR</b> EDUC 593 Thesis	
(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 instruction, curriculum, or some other aspect of an educational program.)	
Option II. Comprehensive Writen 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. 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.)	
EDUC 505 Philosophy of Education3	
OR	
EDUC 503 Fundamentals of Educational	
Research	
research class, which may be EDUC 597 Special Topics:	
Core - Interpreting Educational Research (2 credits), or	
EDUC 503 Fundamentals of Educational Research (3 credits).	
Approved electives11-13	
TOTAL	33

Master of Arts in Education, Reading	
Course Number and Title	Credits
EDUC 506 Graduate Core: Issues in Education	4
Elective Core Courses:	2
Approved two-credit electives will be listed in the	
class schedule as "EDUC 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	
EDUC 540 Foundations of Reading Instruction	3
EDUC 541 Assessment and Instruction:	
Reading Difficulties	3
EDUC 542 Practices in Literacy Improvement	3
EDUC 543 Seminar in Reading Education	3
Elective Options:	15
Option I. Thesis or Project:	
EDUC 503 Fundamentals of Educational	
Research3	
EDUC 591 Project <b>OR</b> EDUC 593 Thesis6	
Reading electives	
Approved electives3-9 (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 instruction, curriculum, or some other aspect of an educational program.)	
Option II. Comprehensive Writen 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. 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.)	
EDUC 505 Philosophy of Education3	
OR	
EDUC 503 Fundamentals of Educational Research3	
NOTE: Students selecting Option II must take a research	
class, which may be EDUC 597 Special Topics: Core -	
Interpreting Educational Research (2 credits) or EDUC 503	
Fundamentals of Educational Research (3 credits).  Reading electives6	
Approved electives	
TOTAL	33
1 V 11 11 11 11 11 11 11 11 11 11 11 11	- 50

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.

Master of Arts in Education, Special Education
Students with Disabilities

Students with Disabilities	
Course Number and Title	Credits
EDUC 506 Graduate Core: Issues in Education	4
Elective Core Courses:	2
Approved two-credit electives will be listed in the	
class schedule as "EDUC 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	
EDUC 551 Counseling/Consulting Skills for	
Educators	3
EDUC 552 Advanced Theory of Instructional	
Design in Special Education	3
EDUC 554 Emotionally Disturbed Child in	_
the Classroom	3
EDUC 555 Issues and Trends in Special	0
Education	3
EDUC 590 Practicum: Special Education	3 12
Elective Options: Option I. Thesis or Project:	12
EDUC 503 Fundamentals of Educational	
Research3	
EDUC 591 Project <b>OR</b> EDUC 593 Thesis6	
Approved electives3	
(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 instruction, curriculum, or some other aspect of an educational program.)	
Option II. Comprehensive Writen 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. 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.)	
EDUC 505 Philosophy of Education3	
OR	
EDUC 503 Fundamentals of Educational	
Research3	
NOTE: Students selecting Option II must take a research class, which may be EDUC 597 Special Topics: Core -	
Interpreting Educational Research (2 credits), or EDUC 503	
Fundamentals of Educational Research (3 credits).	
Approved electives	
EDUC 541 Diagnosis and Correction of	
Reading Problems3	
EDUC 542 Clinic for Reading Specialists3	
EDUC 596 Directed Research: Special	
Education3	
TOTAL	33

NOTE: Completion of the required courses in the Master of Arts in Education, Special Education emphasis may not qualify the candidate for state certification. The candidate should seek the help of his or her advisor to determine certification requirements.

# Master of Arts in Education, Special Education Severe Disabilities

Severe Disabilities	
Course Number and Title	Credits
EDUC 506 Graduate Core: Issues in Education	4
Elective Core Courses:	2
Approved two-credit electives will be listed in the	
class schedule as "EDUC 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	
EDUC 551 Counseling/Consulting Skills for	9
Educators	3
EDUC 554 Emotionally Disturbed Child in the	0
Classroom	3
EDUC 555 Issues and Trends in Special Education	3
EDUC 556 Seminar in Severe Disabilities	3
EDUC 590 Practicum: Special Education	3
Elective Options:	12
Option I. Thesis or Project:	
EDUC 503 Fundamentals of Educational	
Research	
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 instruction, curriculum, or some other aspect of	
an educational program.)	
Option II. Comprehensive Writen 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. 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.)	
EDUC 505 Philosophy of Education3	
OR	
EDUC 503 Fundamentals of Educational	
Research	
research class, which may be EDUC 597 Special Topics:	
Core - Interpreting Educational Research (2 credits), or	
EDUC 503 Fundamentals of Educational Research	
(3 credits). Approved electives9	
Suggested electives:	
TEACH-ED 423G Teaching Students with	
Moderate and Severe Disabilities3	
TOTAL	33
NOTE: Completion of the required courses in the Master of A	Arts in

NOTE: Completion of the required courses in the Master of Arts in Education, Special Education emphasis may not qualify the candidate for state certification. The candidate should seek the help of his or her advisor to determine endorsement requirements.

# **Course Offerings**

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

EDUC — EDUCATION

#### **EDUC 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 objectives. PREREQ: P 101 and TEACH-ED 225.

**EDUC 502 EDUCATION IN EMERGING NATIONS (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.

**EDUC 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.

**EDUC 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.

EDUC 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.

**EDUC 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.

EDUC 510 THE CULTURALLY DIVERSE LEARNER (3-0-3)

**(Demand).** Students will study educational changes and adjustments resulting from the interactions of a variety of cultural backgrounds in schools. Specialized techniques, methods, processes, and programs designed to meet the unique learning needs of linguistically and culturally diverse learners will be presented.

**EDUC 511 TECHNIQUES OF GRANT APPLICATION WRITING** (3-0-3) (Demand). This is a course on techniques of writing grants to public and/or private agencies. Students will practice writing grants. A review of the authorizing legislation and regulations governing grants will also be presented. Students will learn how to implement and close out grants.

**EDUC 512 SECOND LANGUAGE METHODS AND MATERIALS** (3-0-3) (Demand). A critical study of various methodologies in second language teaching is presented. Students learn to evaluate commercial and teacher-made materials and to integrate language teaching with

subject matter areas.

EDUC 513 THEORETICAL FOUNDATIONS OF BILINGUAL EDUCATION/ESL (3-0-3) (Demand). This is a course on the study and analysis of bilingual education and English as a Second Language programs. Students will study the most current research on student assessment, program implementation and adaptation of these programs to community needs.

**EDUC 514 LANGUAGE AND LITERACY (3-0-3) (Demand).** This course considers the connection between written and oral language development, first and second language reading and writing processes, and the techniques and processes of teaching literacy in a second language. Instruction is in English and in Spanish.

EDUC 515 TEACH-ED 579 APPLIED LINGUISTICS: COMPARATIVE LANGUAGE STUDY (3-0-3) (Demand). This course provides an in-depth study of sociolinguistic aspects of the Spanish and English languages. Differences and similarities in Spanish, English and other selected languages and dialects are studied in order to assist limited English proficient students acquire a second language more efficiently.

**EDUC 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.

EDUC 522 EARLY CHILDHOOD: ADVANCED CHILD DEVELOPMENT (3-0-3) (F). The student will examine in depth the physical, social-emotional, cognitive-language, and creative development of children, birth to age eight.

EDUC 523 EARLY CHILDHOOD: ENVIRONMENTS AND PROGRAMS (3-0-3) (S). The student will examine critical elements in the development and administration of effective early childhood programs including evaluating children, setting up the environment, developing and implementing curriculum, and teaching methods.

EDUC 524 EARLY CHILDHOOD: LANGUAGE ACQUISITION AND DEVELOPMENT (3-0-3) (F/Demand). The student will examine various theories and stages of language development, and will study approaches to facilitate language development in children of English and non-English speaking backgrounds.

EDUC 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.

# EDUC 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.

EDUC 532 ADVANCED PRINCIPLES AND PRACTICES IN TEACHING LANGUAGE ARTS AND LINGUISTICS (3-0-3) (F).

Emphasis will be given to the role of language arts and linguistics in the school curriculum, stressing modern approaches to language development, semantics, phonetics, phonics, and orthography.

EDUC 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.

**EDUC 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, EDUC 538, EDUC 550, EDUC 560. COREQ: EDUC 544 and EDUC 561.

EDUC 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, EDUC 538, EDUC 550, and EDUC 560. COREQ: EDUC 544 and EDUC 561.

EDUC 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.

**EDUC 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.

EDUC 538 LEARNING AND INSTRUCTION (4-0-4) (F/S). Provides students with an overview of those principles of psychology especially relevant to secondary school instruction. Topics include cognition, motivation, assessment theory and practice, and applications of learning theory. Students will learn to plan and execute diverse and appropriate pedagogical methods to establish a positive learning environment, to assess student learning, and to analyze the effectiveness of instruction. Students will examine professional literature on best teaching practices for increased student learning. PREREQ: Admission to Graduate Secondary Teacher Certification. COREO: EDUC 550 and EDUC 560.

**EDUC 539 TEACHING GIFTED AND TALENTED STUDENTS** (3-0-3)(S). Teachers and others working with the instructional needs of gifted and talented students will develop skills in the techniques of meeting the educational goals of these exceptional individuals. Methods and materials for this approach will be evaluated as to application and assessment.

**EDUC 540 FOUNDATIONS OF READING INSTRUCTION (3-0-3) (F/S/SU).** 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.

EDUC 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.

**EDUC 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 BSU 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: EDUC 541 or the equivalent.

**EDUC 543 SEMINAR IN READING EDUCATION (3-0-3) (S/SU).** Covers current issues and trends in literacy education and leadership techniques. PREREO: EDUC 540 or PERM/INST.

**EDUC 544 CONTENT LITERACY IN SECONDARY SCHOOL** (3-0-3) (F,S). 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, EDUC 538, EDUC 550, and EDUC 560. COREQ: EDUC 561 and the content methods course for the declared major.

**EDUC 545 TECHNIQUES FOR CREATIVE WRITING IN ELEMENTARY SCHOOLS (3-0-3)(S).** Methods and techniques for encouraging creative writing in the elementary school.

**EDUC 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.

EDUC 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.

EDUC 548 PSYCHOLINGUISTICS AND READING (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.

**EDUC 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.

EDUC 550 TEACHING SECONDARY STUDENTS WITH EXCEPTIONAL NEEDS (3-0-3) (F,S). Addresses what educators should know about students with exceptional needs at the secondary level, including those with disabilities and with special gifts and talents. Topics will include characteristics of students from common areas of exceptionality; relevant litigation and legislation; assessment techniques, instructional strategies; and collaboration. PREREQ: Admission to Graduate Secondary Teacher Certification. COREQ: EDUC 538 and EDUC 560.

EDUC 551 COUNSELING/CONSULTING SKILLS FOR EDUCATORS (3-0-3) (F). This course will cover the development of counseling and consulting skills for educators to work with parents and other professionals. Instruction will focus on developing skills to work with students who experience various social and emotional concerns relating to learning. Major areas to be addressed will include theories and approaches to counseling and consulting, communication skills, and intervention programs. PREREQ: GRAD or PERM/INST.

EDUC 552 ADVANCED THEORY OF INSTRUCTIONAL DESIGN FOR SPECIAL EDUCATORS (3-0-3) (F). The course is designed to teach students advanced design components to effectively instruct children and adults with special education needs. The course will include the theoretical and programmatic considerations of instructional design. The course may be useful to general education teachers who wish to gain some knowledge in dealing with students with special needs. PREREQ: TEACH-ED 431 or PERM/INST.

**EDUC 553 IN-SERVICE TEACHER EDUCATION WORKSHOP (0-1-1 to 0-3-3).** Available at special fee rate (approximately one-third 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.

EDUC 554 STUDENTS WITH EMOTIONAL AND/OR BEHAVIORAL DISABILITIES (3-0-3) (F/SU). This course is designed to assist school personnel in understanding the educational and psychological needs of students with severe behavioral problems. PREREO: PERM/INST.

**EDUC 555 ISSUES & TRENDS IN SPECIAL EDUCATION (3-0-3) (S) (Even years).** This course will investigate the current issues and trends in the field of special education. It will be organized around six topical areas: 1) identification, 2) assessment, 3) eligibility, 4) service delivery, 5) intervention approaches, and 6) instructional strategies. Discussion will be library research based and will focus on all areas of exceptionality in both elementary and secondary school settings. PREREQ: GRAD or PERM/INST.

EDUC 556 SEMINAR IN SEVERE DISABILITIES (3-0-3)(S)(Odd years). This course is designed to facilitate student knowledge and skills relevant to providing services to individuals with severe disabilities. Special emphasis is placed on current trends and issues in the field. PREREQ: TEACH-ED 423 or PERM/INST.

**EDUC 560 TEACHING EXPERIENCE I (0-3-1) (F,S).** Students will work with a master teacher for a minimum of 50 hours. They will observe the teaching/learning process in action, which they have studied on campus, and demonstrate teaching competence in a P-12 school setting. PREREQ: Admission to Secondary Teacher Certification. COREQ: EDUC 538 and EDUC 550.

**EDUC 561 PROFESSIONAL YEAR – TEACHING EXPERIENCE II** (0-6-2) (F/S). Students will work with master teachers for a minimum of 100 hours. They will observe the teaching/learning process (which they have studied on campus) in action, and demonstrate competence in a P-12 school setting. PREREQ: Admission to Secondary Teacher Certification. COREQ: EDUC 544 and the content methods course for the students' declared major.

EDUC 562 PROFESSIONAL YEAR – ELEMENTARY TEACHING EXPERIENCE III DUAL OPTION (1-40-5) (F,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. (Pass/Fail.) PREREQ: Admission to Professional Year, required course work in specialty area, and approval for placement in an appropriate classroom setting. COREQ: EDUC 563 or EDUC 564.

EDUC 563 PROFESSIONAL YEAR – JR HIGH TEACHING EXPERIENCE IV DUAL OPTION (1-40-5) (F,S). Supervised student teaching in a junior high 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 Professional Year. COREQ: EDUC 562 or EDUC 564.

EDUC 564 PROFESSIONAL YEAR – SR HIGH TEACHING EXPERIENCE IV DUAL OPTION (1-40-5) (F,S). Supervised student teaching in a senior high 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 Professional Year. COREQ: EDUC 562 or EDUC 563.

EDUC 565 PROFESSIONAL YEAR – JR HIGH TEACHING EXPERIENCE III (1-40-10) (F,S). Supervised student teaching in a junior 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. Seminars are required. (Pass/Fail.) Not available for Art, Music, or Physical Education Majors. PREREQ: Admission to Professional Year.

EDUC 566 PROFESSIONAL YEAR – SR HIGH TEACHING EXPERIENCE III (1-40-10) (F,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. Seminars are required. (Pass/Fail.) Not available for Art, Music, or Physical Education Majors. PREREQ: Admission to Professional Year.

EDUC 580-582 SELECTED TOPICS.

EDUC 584-589 SELECTED TOPICS

EDUC 590 PRACTICUM (Variable).

EDUC 591 PROJECT (0-V-6).

EDUC 593 THESIS (0-V-6).

EDUC 597 SPECIAL TOPICS.

EDTECH — EDUCATIONAL TECHNOLOGY

**EDTECH 570 ONLINE SKILLS AND STRATEGIES (1-0-1)(As needed).** 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: EDUC 202, or completion of the Educational Technology Assessment, or EDUC 573.

#### EDTECH 583 SELECTED TOPICS: TECHNOLOGY (3-0-3).

EDTECH 591 PROJECT (0-V-6).

EDTECH 593 THESIS (0-V-6).

#### TEACH-ED TEACHER EDUCATION

**TEACH-ED 423G TEACHING STUDENTS WITH MODERATE AND SEVERE DISABILITIES (3-0-3)(S).** This course is an overview of program development and instructional techniques appropriate for students who have moderate to severe disabilities. Major emphasis is on the development of functional programming within integrated educational settings. PREREQ: Admission to Teacher Education.

**TEACH-ED 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. This course may be taken for either HLTHST or EDUC but not both.

# Master of Science in Engineering

#### **College of Engineering**

Dean: Lynn Russell

Engineering Technology Building, Room 101

Telephone 208 426-1153

FAX 208 426-4466

E-mail: roxford@boisestate.edu

http://coen.boisestate.edu

#### **Department of Civil Engineering**

**Department Chair:** Stephen Affleck

Engineering Technology Building, Room 201C

Telephone 208 426-3575

## **Department of Electrical and Computer Engineering**

**Department Chair:** Gary Erickson

Micron Engineering Center, Room 302G

Telephone 208 426-4401

#### **Department of Mechanical Engineering**

Department Chair: John Gardner

Engineering Technology Building, Room 240B

Telephone 208 426-5702

#### **Graduate Program Information:** Rex Oxford

Micron Engineering Center, Room 302A

Telephone 208 426-5744

E-mail: roxford@boisestate.edu

**Full Graduate Faculty:** Said Ahmed-Zaid, Jacob Baker, Paul Dawson, Rudy Eggert, Gary Erickson, John Gardner, David Haws, Molly Gribb, George Murgel, Donald Parks, Nader Rafla, Lynn Russell, Joseph Sener, Steven Tennyson

**Associate Graduate Faculty:** Stephen Affleck, Elisa Barney-Smith, James Ferguson, Joe Guarino, Robert Hamilton, Joseph Hartman, Jeff Jessing,

Mandar Khanal, William Knowlton, Amy Moll, Stephen Parke,

Michelle Sabick

## **General Information**

The College of Engineering offers the Master of Science in Engineering (MSE) degree in Civil, Computer, Electrical, and Mechanical Engineering. The MSE program provides students with the background and skills required for career enhancement, admission into a Ph.D. program, or careers in research and development.

# **Admission and Application Requirements**

Prospective students may apply for admission at any time. Admission to these MSE programs is a two step process. First, students must be admitted to the Graduate College (see General Admission policies for the Graduate College). Once a student is admitted to the Graduate College all admission materials, including a Statement of Purpose explaining the student's interest in pursuing the field of study, are submitted to the appropriate Departmental Graduate Studies Committee (i.e. Civil, Electrical and Computer, Mechanical). The Committee then evaluates these materials and determines the student's

admission status. To be admitted under Regular or Provisional status, a student must have: (i) an undergraduate degree from an ABET-accredited program in the respective major, or a degree from a program in a closely related field, and (ii) undergraduate GPA of at least 3.0 or higher, and (iii) results of the GRE examination. Final admission will be based upon review of transcripts, the Statement of Purpose, and scores on the verbal, quantitative, and analytical portions of the general test of the GRE. Graduates of the BSU College of Engineering may petition the appropriate Committee to have the GRE test waived. PROVISIONAL STATUS as a graduate student may be granted to those otherwise promising applicants who do not meet the above requirements for REGULAR STATUS. No applicant will be admitted unless a member of the BSU engineering faculty has agreed to serve as that applicant's thesis/project advisor. International students should refer to the Boise State University Admissions Office homepage for a listing of additional requirements.

The Departmental Graduate Studies Committee will also assign each admitted graduate student an advisor (BSU full-time faculty). This committee will, in cooperation with the student's advisor and the student's supervisory committee, assess progress in thesis/project research, progress and performance in course work and performance as a graduate assistant (where applicable). Continuing enrollment in the program requires a minimum 3.0 GPA and satisfactory progress toward the degree.

Each student will form a thesis/project supervisory committee, which will consist of at least three members; the student's thesis/project advisor (BSU full-time faculty), and two other faculty members from BSU or other appropriate academic institutions. The thesis/project supervisory committee will determine if academic deficiencies exist that must be remedied, help design thesis/project research, help choose appropriate graduate course work, evaluate the thesis/project, and conduct the final defense.

# **Degree Requirements**

The Master of Science in Engineering (MSE) degree program is structured to provide majors in Civil, Computer, Electrical and Mechanical Engineering plus minors in a variety of supporting areas. The program will include both thesis and non-thesis options as outlined in the following.

**Master of Science in Engineering – Thesis Option:** The thesis option is for those students interested in research and development engineering careers and who may want to pursue a Ph.D. in the future. It requires a minimum of 30 credits of study beyond the baccalaureate degree. The 30 credits are comprised of at least a minimum of 24 credits of course work and 6 credits of thesis work. The thesis must be an original contribution by the student to the state of knowledge in the area of his/her major.

#### **Master of Science in Engineering - Project Option:**

The project option is for those interested in becoming practicing professional engineers or engineering project managers. It requires a minimum of 30 credits beyond the baccalaureate degree. The 30 credits are comprised of a minimum 24 to 27 credits of course work and a project of 3 to 6 credits. The project will be an application of established

engineering methods and practices in the solution of a comprehensive problem in the area of his/her major.

To assure breadth as well as depth, each student's plan of study must include at least fifteen credits in the major area and at least six credits in an interdisciplinary (minor) area. In addition, no more than nine transfer credits (per the Graduate College's academic policy) and no more than nine 300G or 400G-level credits may be included in the plan of study. With the recommendation of the student's supervisory committee and approval of the Dean of the Graduate College, graduate credits earned from the University of Idaho and Idaho State University through the inter-institutional cooperative program will be counted as residence credits.

Students will be expected to produce a written thesis/project proposal and give an oral presentation of that proposal after the completion of their first 12 credits of graduate engineering courses. Completion of the program requires a GPA of 3.0 or better for all course work applied to the 30 credit-hour minimum. An oral defense of the completed thesis/project is also required. All requirements for the MSE degree must be completed within a period of seven years.

Master of Science in Engineering Civil Engineering	
Course Number and Title	Credits
The MSE degree requires a minimum of 30 credit	
hours. Up to nine hours of undergraduate "G" may	
be included in meeting that requirement.	
Elective Courses	15-21
CE 452G Structural Steel Design3	
CE 460G Geotechnical Engineering Design3	
CE 512 Hydrology3	
CE 520 Advanced Environmental Engineering	
Processes & Design4	
CE 522 Hazardous Waste Engineering3	
CE 524 Water & Wastewater Treatment Plant	
Design3	
CE 526 Environmental Process Chemistry	
CE 533 Contaminant Transport3	
CE 538 Water Resources Engineering	
CE 540 Pavement Design & Evaluation	
CE 551 Structural Dynamics	
CE 553 Structures II	
CE 554 Timber Design	
CE 562 Foundation Design3 CE 564 Seepage, Drainage, Flow Nets &	
Embankments3	
CE 570 Highway & Traffic Systems Design	
CE 570 Frighway & France Systems Design	
CE 572 Transportation Fighting	
CE 575 Advanced Traine Management	
CE 623 Advanced Hydrogeology3	
Minor	6-9
Two or three courses selected from Business &	0-9
Economics, Communication, Mathematics,	
Computer Science, Physical Sciences, Material	
Computer science, i hysical sciences, material	

-continued

Master of Science in Engineering, Civil Engineering (continued)	
Science and Engineering, or another Engineering discipline, and approved by the student's advisory	
committee.	
Project or Thesis Requirement	3-6
CE 591 Project3-6	
CE 593 Thesis6	
TOTAL	30

Master of Science in Engineering Computer Engineering	
Course Number and Title	Credits
The MSE degree requires a minimum of 30 credit hours. Up to nine hours of undergraduate "G" may be included in meeting that requirement.	
Elective Courses:	15-21
EE 510 IC Physical Design	
Programming	
Minor Two or three courses selected from Business & Economics, Communication, Mathematics, Computer Science, Physical Sciences, Material Science and Engineering, or another Engineering discipline, and approved by the student's advisory committee.	6-9
Project or Thesis COMPE 591 Project	3-6
TOTAL	30

Master of Science in Engineering Electrical Engineering	
Course Number and Title	Credits
The MSE degree requires a minimum of 30 credit	
hours. Up to nine hours of undergraduate "G" may	
be included in meeting that requirement.	
Elective Courses	15-21
EE 510 IC Physical Design	
EE 511 CMOS Analog IC Design3	
EE 512 VLSI Design	
EE 513 RF IC Design	
EE 515 CMOS Mixed-Signal IC Design	
EE 520 Advanced Device Design and Simulation3 EE 520L Advanced Device Characterization Lab1	
EE 521 Advanced Topics in Semiconductor	
Devices3	
EE 522 Microwave Semiconductor Devices3	
EE 530 Digital Hardware Design	
EE 532 Computer Architecture	
EE 533 Embedded & Portable Computing	
Systems	
EE 534 Computer Networks3	
EE 540 Intro to Integrated Circuit and MEMS	
Processing3	
EE 540L Intro to Integrated Circuit and MEMS	
Processing Lab1	
EE 541 Advanced Topics in Silicon Technology3	
EE 542 Photolithography	
EE 542L Photolithography Lab	
EE 546 Frontiers of IC Processing	
EE 550 Communication Systems	
EE 554 Digital Signal Processing	
EE 557 Digital Image Processing3	
EE 560 Linear Systems	
EE 564 Robotics and Automated Systems	
EE 566 Multivariable Control Systems	
EE 570 Electric Machines	
EE 571 Electric Motor Drives3	
EE 572 Power Electronics	
EE 573 Power System Analysis3	
EE 574 Power System Control3	
EE 596 Directed Research3	
Minor	6-9
Two or three courses selected from Business &	
Economics, Communication, Mathematics,	
Computer Science, Physical Sciences, Material	
Science and Engineering, or another Engineering	
discipline, and approved by the student's advisory	
committee.	9.6
Project or Thesis	3-6
EE 591 Project	
	20
TOTAL	30

Master of Science in Engineering Mechanical Engineering	
Course Number and Title	Credits
The MSE degree requires a minimum of 30 credit hours. Up to nine hours of undergraduate "G" may be included in meeting that requirement.	
<b>Elective Courses</b>	15-21
ME 402G Applied Numerical Methods3	
ME 420G Thermodynamics II3	
ME 472G Vibrations3	
ME 474G Controls3	
ME 486G Human Factors Design3	
ME 522 Advanced Thermodynamics3	
ME 530 Fluid Dynamics3	
ME 532 Acoustics3	
ME 533 Dynamic Meteorology3	
ME 536 Computational Fluid Dynamics3	
ME 538 Convective Heat Transfer3	
ME 550 Advanced Mechanics of Materials3	
ME 554 Composites3	
ME 560 Computer Aided Design3	
ME 570 Finite Element Methods	
ME 574 Advanced Vibrations	
ME 576 Advanced Dynamics	
ME 578 Design and Analysis of Mechatronic	
Systems3	
ME 582 Optimal Design3	
ME 584 Robust Design	
ME 586 Advanced Engineering Design3	
ME 588 Design for Manufacture & Assembly3	
ME 596 Directed Research3	
Minor	6-9
Two or three courses selected from Business &	
Economics, Communication, Mathematics,	
Computer Science, Physical Sciences, Material	
Science and Engineering, or another Engineering	
discipline, and approved by the student's advisory	
committee.	
Project or Thesis	3-6
ME 591 Project3-6	
ME 593 Thesis6	
TOTAL	30

Minor AreaCoursesMaterial Science and EngineeringENGR 540 Electrical, Optical, and Magnetic Properties of Materials ENGR 541 Semiconductor Materials ENGR 542 Bonding and Structure of Materials ENGR 544 Mechanical Properties of Material ENGR 545 Solid State Thermodynamics and Kinetics ENGR 549 Advanced Topics in Materials Science & EngineeringBusiness & EconomicsMBA 517 Accounting for Managers MBA 523 Production & Systems Managemen MBA 525 Corporate Finance
Science and Engineering Properties of Materials ENGR 541 Semiconductor Materials ENGR 542 Bonding and Structure of Materials ENGR 544 Mechanical Properties of Materials ENGR 545 Solid State Thermodynamics and Kinetics ENGR 549 Advanced Topics in Materials Science & Engineering  Business & MBA 517 Accounting for Managers MBA 523 Production & Systems Management
Economics MBA 523 Production & Systems Managemen
MBA 529 Marketing Management
Communication COMM 506 Selected Topics in Interpersonal Communication COMM 507 Selected Topics in Organizationa Communication
Mathematics & Computer Science MATH 414G Advanced Calculus MATH 436G Partial Differential Equations MATH 456G Linear Programming MATH 465G Numerical Analysis COMPSCI 521 Design & Analysis of Algorithms COMPSCI 525 Network Protocols and Programming COMPSCI 530 Parallel Computing COMPSCI 554 Advanced Operating Systems COMPSCI 561 Theory of Computation COMPSCI 571 Software Engineering
Physical Sciences  BIOL 415G Applied & Environmental Microbiology BIOL 527 Stream Ecology CHEM 401G Advanced Inorganic Chemistry CHEM 411G Analytical Chemistry CHEM 431G Biochemistry GEOL 403G Engineering Geology GEOPH 525 Earthquake Seismology GEOPH 610 Geophysical Method and Geotechnical Engineering
Other CMGT 417G Project Scheduling CMGT 441G Construction Safety & Supervision CMGT 475G Project Management Other courses and minors may be recommended by the

Other courses and minors may be recommended by the student's supervisory committee and approved by the Dean of the Graduate College.

# **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 HYDROGEOLOGY (GEOL 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 porous and fractured media. Methods of determination of aquifer characteristics and performance and groundwater modeling. PREREQ: MATH 170.

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: CE 320. 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 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. 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, CE 341 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 and 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. PREREQ: PERM/INST.

**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 ADVANCED HYDROGEOLOGY (GEOL 623, GEOPH 623) (3-0-3) (F).** Treatment of groundwater occurrence and flow, theory of fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls. Course may be taken for credit in Geology, Geophysics, or Civil Engineering, 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.

#### **COMPE — COMPUTER ENGINEERING**

#### COMPE 560 ADVANCED DIGITAL HARDWARE DESIGN (3-0-3)

**(F/S).** In-depth study of modern digital design practices based on Hardware Description Languages and CAD tools, particularly logic synthesis, test bench design and design management. PREREQ: EE 430.

COMPE 561 DIGITAL SYSTEM TESTING AND TESTABLE DESIGN (3-0-3) (F/S). In-depth theory and practice of fault analysis, test 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, and EE 410.

#### **COMPE 562 ADVANCED COMPUTER ARCHITECTURE (3-0-3)**

**(F/S).** Study of up-do-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: F.F. 432.

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; and simulation, functional, and timing verification issues. The course includes individual and group projects to build ASICs using standard ASIC design tools. PREREQ: EE 430 and EE 432.

**COMPE 564 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

**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: PERM/INST.

#### CMGT — CONSTRUCTION MANAGEMENT

embedded computers. PREREQ: EE 432.

**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 & PDM), computerized scheduling, P.E.R.T. charts resource leveling and time-cost trade offs used as planning, scheduling, and management techniques. Occasional Friday field trips required. PREREQ: CMGT 374 and ENGR 107, or PERM/INST.

**CMGT 441G CONSTRUCTION SAFETY AND SUPERVISION (2-3-3) (F/S).** Students plan and supervise safety procedures, quality control, and monitor/inspect construction operations. Emphasis is placed on leadership, teamwork, the safety plan and safety procedures. PREREQ: CMGT 374 or PERM/INST.

**CMGT 475G PROJECT MANAGEMENT (3-0-3) (F/S).** Application of professional construction management techniques including site investigation, contractor and subcontractor qualifications, conceptual estimating and budgeting, quality assurance, business development, risk management, and ethics; preparation of proposals, claims, and negotiations. PREREQ: CMGT 240, CMGT 385, and senior status, or PERM/INST.

#### **EE — ELECTRICAL ENGINEERING**

**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:  $\ensuremath{\mathsf{EE}}\xspace 322, \ensuremath{\mathsf{EE}}\xspace 410.$ 

EE 512 VLSI DESIGN (3-0-3)(F/S). The design of ultra large scale integrated circuits using VERILOG and VHDL, or other hardware description languages. Using a silicon compiler to turn an HDL circuit description into a file that can be used to make the circuit. Includes packaging, testing and reliability issues. PREREQ: EE 230 and either COMPSCI 117 or COMPSCI 125.

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, ultra-low-power circuit design techniques, on-wafer microwave measurement techniques. S-parameter device evaluation methods, low-noise design & measurement, analysis of distortion in amplifiers, power amplifiers with application to wireless transmitter design, transmission lines and distributed circuit elements. The laboratory component will teach wafer-level microwave measurement techniques. PREREQ: EE 410 or EE 411.

**EE 515 CMOS MIXED-SIGNAL IC DESIGN (3-0-3) (F/S).** Design of CMOS phase- and delay-locked loops, A/D and D/A converters, sigmadelta data converters and digital filters. Course will review current literature in these areas. PREREQ: EE 511.

**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. PREREO: EE 320.

**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 320.

**EE 521 ADVANCED TOPICS IN SEMICONDUCTOR DEVICES** (3-0-3) (F/S). Study of advanced semiconductor devices, particularly 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.

**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. The laboratory component will teach on-wafer microwave measurement techniques. Topics will include: Short-channel CMOS device physics, Parasitic CMOS device elements, Advanced small-signal build 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 520.

**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. 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) (Offered on demand).** 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, and MATH 360 or MATH 361.

**EE 540 INTRO TO INTEGRATED CIRCUIT AND MEMS PROCESSING (3-0-3).** 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: 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 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.

- **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, antireflective 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 accompany EE 342, 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.
- **EE 550 COMMUNICATION SYSTEMS (3-0-3)(S).** 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.
- **EE 552 WIRELESS COMMUNICATIONS (3-0-3) (F/S).** Modern cellular communication systems, including propagation, handoff, noise, and interference studies. CDMA and other spread-spectrum systems. PREREQ: EE 350.

**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 222.

**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 MATH 360 or MATH 361.

**EE 557 DIGITAL IMAGE PROCESSING (3-0-3) (S) (Alternate years).** Pictures and their computer representation. Image digitization, transformation, and prediction methods. Image coding and image data compression. Digital enhancement techniques, histogram equalization, differencing, smoothing and geometric corrections. Restoration and filtering. Edge detection and picture segmentation. PREREQ: EE 350, and COMPSCI 117 or 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 350 or PERM/INST.

**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 or PERM/INST.

**EE 566 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. Linear quadratic regulator control PREREQ: EE 560 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 evennumbered 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 and EE 470, 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 574 POWER SYSTEM CONTROL (3-0-3)(F/S)(Offered only upon sufficient student interest).** Faulted power system operation, symmetrical components, power system protection,

transient stability, economic dispatch, automatic generation control, voltage and reactive power control. PREREQ: EE 473.

#### **ENGR — ENGINEERING SCIENCE**

ENGR 540 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.

#### ENGR 541 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.

#### ENGR 542 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.

#### **ENGR 544 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.

# **ENGR 545 SOLID STATE THERMODYNAMICS AND KINETICS (4-0-4) (F/S).** The laws of thermodynamics, fundamental equation for multicomponent elastic solids and electromagnetic media, equilibrium criteria. Application to solution thermodynamics, point defects in solids, phase diagrams. Phase transitions, Landau rule, symmetry rules. Interfaces, nucleation theory, elastic effects. Kinetics: diffusion of

solids, phase diagrams. Phase transitions, Landau rule, symmetry rules. Interfaces, nucleation theory, elastic effects. Kinetics: diffusion of heat, mass and charge; coupled flows. PREREQ: CHEM 322 or ENGR 320 or PHYS 432.

ENGR 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.

#### 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 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 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 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

# Master of Arts in English

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 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 multivariable 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 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. PREREO: 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.

# Master of Arts in English

Department of English Liberal Arts Building, Room 228 Telephone 208 426-1246 FAX 208 426-4373 http://english.boisestate.edu/grad/ e-mail: cmartin@boisestate.edu

Director of Graduate Studies in English: Carol A. Martin

Department Chair: Bruce Ballenger

Full Graduate Faculty: Bruce Ballenger, John Battalio, Devan Cook, Martin Corless-Smith, Jon P. Dayley, Charles Guilford, Janet Holmes, Daryl Jones, Helen Lojek, James H. Maguire, Mike Markel, Carol A. Martin, Roger Munger, Marcy Newman, Steven Olsen-Smith, Michelle Payne, Tara Penry, Bruce Robbins, Mary Ellen Ryder, Rena Sanderson, R. Ken Sanderson, Louis Simon, Tom Trusky, Karen Uehling, Jan Widmayer, Mitchell Wieland, Linda Marie Zaerr Associate Graduate Faculty: Elise Blackwell, Ann Campbell, Michael Mattison, Jacqueline O'Connor, Gail Shuck, Jeffrey Wilhelm

## **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 degree in English enables candidates to emphasize study in English and American Literature, English Education, and Rhetoric and Composition. A Master of Arts degree in Technical Communication and a Master of Fine Arts in Creative Writing are also available from the Department of English. Information about these degrees can be found under their own headings.

The Department of English, in response to Boise State University's goals, 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 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 Assistantships in teaching, tutoring, and editing. The assistantships include waivers of tuition and fees, resident or non-resident, and a stipend of over \$9,000. Complete applications are due February 15 for priority consideration. Applications received after that date will be considered if there are openings. More detailed information is available from the Director of Graduate Studies in English.

Prospective students who do not intend to matriculate in the graduate program in English but wish to take graduate courses for general interest/lifelong learning should consult with the Director of Graduate Studies in English about obtaining permission to enroll in 500-level courses.

# **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, 1910 University Dr., Boise, Idaho 83725) and the following department requirements:

- A Bachelor of Arts in English. In lieu of this, 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 program.
- 2. 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.
- 4. 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 Graduate Studies in English.
- 5. 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 should be accompanied by a brief statement of the context for which the writing was done.
- 6. Three confidential letters of recommendation from people who know the applicant's academic work, sent directly to the Director of Graduate Studies in English.

Applicants who do not satisfy one or more of these requirements by the time they wish to begin classes should contact the Director of Graduate Studies in English to discuss their options.

## **Degree Requirements**

Master of Arts in English	
Course Number and Title	Credits
Core Requirements:	
ENGL 500 Seminar in English Studies	3
ENGL 561 Theories of Rhetoric and Composition	0
OR ENGL 588 Survey of Critical Theory	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.	o
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 American Literature	
Studies in Twentieth-Century Postcolonial	
Literature in English	
Electives:	18
To be selected from other graduate offerings in	
Literature, Linguistics, English Education, Rhetoric	
and Composition, Creative Writing, and Technical	
Communication. The electives include thesis/project	
credits, ENGL 598 (Seminar for Teaching Assistants),	
up to six credits for ENGL 400G courses, and up to	
three credits of independent work.	
ENGL 598 Seminar for Teaching Assistants	3
This seminar is required and reserved exclusively for teaching assistants to be completed the first	
semester of the appointment.	
Culminating Activity:	
A comprehensive written examination, followed by	0
a one-hour oral examination, both consisting	o
chiefly of questions covering the general history of	
English and American literature, not merely the	
courses taken by a candidate. No credit hours are	
granted for taking the examination.	
OR	
Students not taking the comprehensive examination	3
should register for ENGL 591 Project or ENGL 593	
Thesis in their final semester to receive the three	
hours credit for a completed project or thesis that	
applies to the 33 credit hour minimum required for the degree.	
—continued—	
— continued—	

-continued-

# Master of Arts in English

Master of Arts in English (continued)	
Additional Information:  A maximum of six (6) credits in ENGL 400G courses may be applied toward graduation requirements.  A combined total of three credits in ENGL 590 (Practicum/Internship), ENGL 595 (Readings and Conference), and ENGL 596 (Directed Research) may be applied toward graduation requirements with the approval of the Graduate Director and the Department Chair.  No credits taken outside the English Department may be applied toward graduation requirements.	
TOTAL	33

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 Seminar in English Studies ENGL 501 The Teaching of Writing ENGL 581 Literature for Use in Junior and Senior	3 3
High Schools ENGL 580 English Teaching: Writing, Literature, and Language	3
English Electives: Courses to be selected from graduate offerings in Literature, Linguistics, English Education, Rhetoric and Composition, Creative Writing, and Technical Communication.	6
ENGL 600 Assessment English Comprehensive Examination Based on guidance from advisory committee, preparation and successful completion of comprehensive essay examination.	3
College of Education graduate courses: EDUC 505 Philosophy of Education EDUC 538 Learning and Instruction EDUC 544 Content Literacy in Secondary Schools EDUC 550 Secondary Exceptional Needs	3 4 3 3
TOTAL  Not part of the English M.A. Education strand, but required for teaching certification:	34

-continued

#### Master of Arts in English, English Education (continued)

EDUC 202 Educational Technology3
EDUC 560 Teaching Experience I (50 hours
school experience)1
EDUC 561 Professional Year—Teaching Experience II
(100 hours school experience)2
Professional Year Teaching Experience*10
*EDUC 562 and 564 or EDUC 565 or EDUC 566

Students should meet with the Director of the M.A. program before they begin their course work. If prior undergraduate work at Boise State University or at another institution indicates that a student has studied the body of course material for any of the required courses before being admitted to the program, one or more required courses may be waived.\*\* In that case, the student may substitute English electives to meet the degree requirement of 34 credits.

\*\*At the discretion of the Director of the Program, a

\*\*At the discretion of the Director of the Program, a maximum of nine transfer graduate credits may be counted toward the degree.

# **Course Offerings**

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

**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 406G ADVANCED POETRY WRITING (3-0-3)(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.

#### ENGL 407G ADVANCED FICTION WRITING (3-0-3)(F).

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 credit hours.

**ENGL 500 SEMINAR IN ENGLISH STUDIES (3-0-3) (F/S).** An orientation to graduate study in English, with particular focus on research techniques, methods of bibliography, and methods of critical analysis. PREREQ: Admission to graduate 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 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 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. PREREO: Admission to Master of Arts in English

program or Master of Fine Arts in Creative Writing program or

PERM/CHAIR. (Repeatable for credit.)

**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. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR. (Repeatable for credit.)

**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. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR. (Repeatable for credit.)

**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. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR. (Repeatable for credit.)

# ENGL 554 INTRODUCTION TO APPLIED RESEARCH AND PROJECTS IN THE ENGLISH LANGUAGE ARTS (3-0-3)(F/S).

Methods of and approaches to conducting applied research in classrooms and the workplace and developing projects in the English Language Arts from such research. This course is recommended for students electing the project option for the M.A. in English. Intended primarily for classroom teachers, the course is appropriate for others who offer instruction, including technical writing trainers and teachers of literacy in GED centers, workplace literacy projects, and community education projects. PREREQ: ENGL 501 or ENGL 581 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 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. PREREQ: Admission to Master of Arts in English program or Master of Fine Arts in Creative Writing program or PERM/CHAIR. (Repeatable for credit.)

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: EDUC 544 and EDUC 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 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 591 PROJECT (V-0-V).** A project may include, but is not limited to, a library research paper, experimental research on some aspect of pedagogy, or preparation of written curriculum with related teaching materials. 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 are 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. The seminar provides information and support for first year teaching assistants while they learn to meet their obligations as classroom teachers. PREREQ: PERM/INST.

**ENGL 600 ASSESSMENT: English Comprehensive Examination (3 Credits).** 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.

# Master of Science in Exercise and Sport Studies

# Master of Science in Exercise and Sport Studies

Department of Kinesiology Kinesiology Building, Room 209 Telephone 208 426-4270 FAX 208 426-1894 e-mail: lpetlic@boisestate.edu

**Graduate Program Coordinator:** Linda Petlichkoff **Department Chair:** Ross Vaughn

**Full Graduate Faculty:** Chad Harris, Werner Hoeger, Bill Kozar, John McChesney, Linda Petlichkoff, Ron Pfeiffer,

Glenn Potter, Caile Spear, Ross Vaughn

**Associate Graduate Faculty:** Kenneth Bell, Mark DeBeliso,

Terry-Ann Gibson, Shelly Lucas, Jane Shimon

**Adjunct Graduate Faculty:** Paul Baehr, Gregory Mondin, James Moore, Jeff Pitman, Kevin Shea

#### **General Information**

The Master of Science Degree in Exercise and Sport Studies is designed to accommodate students with diverse academic backgrounds. The program offers three areas of emphasis: Behavioral, Biophysical and Socio-Historical.

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. <u>All students in the Behavioral and Biophysical areas of emphasis MUST complete a thesis.</u>

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 and sport. Important outcomes for learners include:

- 1. Acquiring a sound conceptual basis from which leadership can be exercised in the profession.
- 2. Demonstrating the expertise to interpret, communicate and effectively promote health lifestyles in occupational settings.
- 3. 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:

1. 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 sixty 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.
- The Coordinator of the Graduate Program recommends acceptance and approval is granted by the Graduate College.

## **Degree Requirements**

Master of Science in Exercise and Sport Stud	ies
Course Number and Title	Credits
Core Requirements	9
Select one course from each of the following areas:	
Behavioral Studies	
KINES 530 Psychology of Exercise & Sport3	
KINES 560 Motor Learning3	
Biophysical Studies	
KINES 500 Functional Anatomy3	
KINES 510 Physiology of Activity3	
KINES 520 Biomechanics3	
Socio-historical Studies	
KINES 535 Sociology of Exercise & Sport3	
KINES 550 Philosophy of Exercise & Sport3	
Modes of Inquiry	6
KINES 551 Research Design in Exercise	
and Sport3	
Select one of the following courses:	
KINES 552 Applied Statistical Methods3	
EDUC 503 Fundamentals of Educational	
Research3	
EDUC 513 Theoretical Fundamentals of	
Bilingual Education/ESL3	
EDUC 552 Advanced Theory of Instructional	
Design in Special Education3	
HIST 500 Historians and Historical	
Interpretation	
PSYCH 405G Advanced Statistical Methods3	
SOC 500 Advanced Social Statistics3	
SOC 502 Qualitative Social Research Methods3	
SOC 571 Feminist Sociological Theory3	
<b>Electives Approved by Graduate Committee</b> See areas of emphasis.	15-18
-	2.0
Thesis Option	3-6
KINES 593 Research & Thesis6	
Or Non Thosis Ontion	
Non-Thesis Option KINES 591 Project3	
	9.0
TOTAL	36

# Master of Science in Exercise and Sport Studies

#### Master of Science in Exercise and Sport Studies, Behavioral Studies

20.14710141 0104103	
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	
Activity3	
KINES 375G-376G Human Growth and Motor	
Learning & Lab3	
KINES 510 Physiology of Activity3	
KINES 520 Biomechanics3	
KINES 530 Psychology of Exercise and Sport3	
KINES 535 Sociology of Exercise and Sport3	
KINES 560 Motor Learning3	
KINES 570 Health Promotion3	
KINES 580 Selected Topics in Applied Sport	
Psychology3	
KINES 596 Directed Research3	
PSYCH 331G The Psychology of Health3	
Thesis Option Only	
KINES 593 Research and Thesis	6
TOTAL	36

#### Master of Science in Exercise and Sport Studies, Biophysical Studies

Course Number and Title	Credit
Core Requirements	9
Methods of Inquiry	6
Approved Electives	15
Suggested courses include, but are not limited to	
the following:	
BIOL 331G Pharmacology3	
KINES 330G and 331G Exercise Physiology	
and Lab3	
KINES 370G and 371G Biomechanics and Lab3	
KINES 500 Functional Anatomy3	
KINES 515 Exercise Physiology Lab3	
KINES 520 Biomechanics3	
KINES 525 Mechanical Analysis of Motor	
Activities3	
KINES 540 Applied Principles of Conditioning3	
KINES 545 Exercise Testing and Prescription3	
KINES 570 Applied Principles of Conditioning3	
ME 486G Human Factors Design3	
MHLTHSCI 522 Management for Health	
Professionals3	
MHLTHSCI 530 Developing In-service	
Education3	
MHLTHSCI 548 Counseling Techniques for	
Health Professionals3	
MHLTHSCI 550 Current Issues in Health Policy3	

—continued—

#### 

Master of Science in Exercise and Sport Stud Socio-historical Studies	ies,
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:	
EDUC 505 Philosophy of Education3	
EDUC 513 Theoretical fundamentals of	
Bilingual Education/ESL3	
HIST 334G U.S. Social and Cultural History3	
HIST 503 The Historian and the Classroom3	
KINES 535 Sociology of Exercise and Sport3	
KINES 550 Philosophy of Exercise and Sport3	
SOC 510 Conflict and Change in Socio-Cultural	
Systems3	
SOCWK 512 Human Development Through	
the Life Cycle3	
SOCWK 514 Ethnicity, Gender and Class3	
SOCWK 521 Social Dimensions of Human	
Behavior3	
Thesis/Project Option	3-6
KINES 593 Research and Thesis6	
or	
KINES 591 Project3	
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.

# Master of Science in Exercise and Sport Studies

**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 prosection. In addition, indepth study of joint structure and function, gross-motor-movement, and skill will be included.

**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 APPLIED STATISTICAL METHODS (MHLTHSCI 552) (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. 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 HEALTH PROMOTION (MHLTHSCI 570) (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.

**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 591 PROJECT (3 credits).** Students select a project related to Exercise and Sport Studies and pursue it to a logical conclusion. PREREQ: Admission to candidacy and approval of the student's graduate committee.

**KINES 593 RESEARCH AND 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 DIRECTED RESEARCH (variable credits).

Opportunity for the student to pursue a topic of interest on an individual basis.

# Master of Physical Education in Athletic Administration

Department of Kinesiology Kinesiology Building, Room 209 Telephone 208 426-3709 FAX 208 426-1894 e-mail: lpetlic@boisestate.edu

Graduate Program Coordinator: Linda Petlichkoff

Department Chair: Ross Vaughn

**Full Graduate Faculty:** Werner Hoeger, Bill Kozar, Linda Petlichkoff, Ron Pfeiffer, Glenn Potter, Caile Spear, Ross Vaughn

**Associate Graduate Faculty:** Kenneth Bell, Mark DeBeliso, Terry-Ann Gibson, Chad Harris, Shelly Lucas, John McChesney, Jane Shimon, Connie Thorngren

Adjunct Graduate Faculty: Paul Baehr, Gregory Mondin,

James Moore, Jeff Pitman, Kevin Shea

**Idaho State University Graduate Faculty:** Mike Lester, Gerard Lyons, Cynthia Pemberton

#### **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 BSU Directory 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 BSU 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 BSU 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 BSU. Therefore, students applying for financial aid will do so through the Financial Aid Office at BSU.

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	
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 &	
Administration3	
ATHLADM 515 or KINES 550 (PE 615) Philosophy	
of Athletics3	
ATHLADM 531 (PE 631) Athletics & the Law3	
ATHLADM 535 (PE 635) Management of Athletics3	
ATHLADM 540 or KINES 551 (PE 640) Research	
& Writing	10
ATHLADM 549 (PE 649) Issues in Administration3	18
THESIS OPTION	
ATHLADM 550 (PE 650) Thesis1-6	
Approved Electives9	15
Or	or
NON-THESIS OPTION	
ATHLADM 510 (PE 610) Advanced Sport Psychology	15
or KINES 530 Psychology of Exercise and Sport3	
ATHLADM 545 (PE 645) Sports Medicine3	
Approved Electives9	
Total	33

# Master of Fine Arts in Creative Writing

# Master of Fine Arts in Creative Writing

Department of English Liberal Arts Building, Room 228 Telephone 208 426-2195 FAX 208 426-4373 http://english.boisestate.edu/mfa e-mail: jholmes@boisestate.edu

**Director of Creative Writing:** Janet Holmes

**Department Chair:** Bruce Ballenger

Full Graduate Faculty: Bruce Ballenger, John Battalio, Devan Cook, Martin Corless-Smith, Jon P. Dayley, Charles Guilford, Janet Holmes, Daryl Jones, Helen Lojek, James H. Maguire, Mike Markel, Carol A. Martin, Roger Munger, Marcy Newman, Steven Olsen-Smith, Michelle Payne, Tara Penry, Bruce Robbins, Mary Ellen Ryder, Rena Sanderson, R. Ken Sanderson, Louis Simon, Tom Trusky, Karen Uehling, Jan Widmayer, Mitch Wieland, Linda Marie Zaerr

**Associate Graduate Faculty:** Elise Blackwell, Ann Campbell, Michael Mattison, Jacqueline O'Connor, Gail Shuck, Jeffrey Wilhelm

#### **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 Assistantships. These assistantships include waivers of tuition and fees, resident or non-resident, and a stipend of over \$9,000. Complete applications are due February 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.
- 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.
- 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

Master of Fine Arts in Creative Writing	
Course Number and Title	Credits
Workshops:	12
ENGL 525 Fiction, Nonfiction, or Poetry  NOTE: Students entering the program must select a genre of concentration in fiction, nonfiction, or poetry. All workshops must be taken in this declared genre.	
MFA Courses	3
ENGL 502 Teaching Fiction, Nonfiction, and	
Poetry Writing	
ENGL 507 Small Press Production	
ENGL 508 Writing, Editing, and Designing for	
Professional Advancement	
ENGL 509 Book Arts	
ENGL 526 Form and Theory of Fiction, Nonfiction,	
or Poetry	
English Electives:	18
Students must choose 500 level courses from at	
least 2 of the following areas:	
Composition/Rhetoric, Creative Writing,	
Linguistics, Literature, Technical	
Communication. One 400G writing course	
allowed. ENGL 598 required for Teaching	
Assistants.	
Electives:	9
Graduate courses, any discipline	
NOTE: May include 400-level G courses.	
Thesis	6
TOTAL	48

# **Course Offerings**

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

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 high 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 nontextual information, and the use of desktop publishing and graphics software. Students will produce basic print documents, such as brochures, data sheets, flyers, and manuals. 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. May be repeated for nine credit hours. 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 205 or PERM/INST.

#### 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 credit hours.

**ENGL 502 TEACHING FICTION, NONFICTION, AND POETRY 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 poetry, fiction, and essay or article. Emphasis is on teaching in classroom and workshop settings. PREREQ: Admission to program or PERM/INST.

**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 525 FICTION, NONFICTION, OR POETRY WRITING WORKSHOP (3-0-3) (F). An advanced workshop in fiction, nonfiction, or poetry. Students will study the form and theory of poetry, nonfiction, or fiction from the perspective of practicing writers and will apply these principles to the analysis and criticism of one another's work. Students must declare themselves for fiction, nonfiction, or poetry. PREREQ: Admission to program or PERM/INST.

**ENGL 526 FORM AND THEORY OF FICTION, NONFICTION, OR POETRY (3-0-3)(S).** An intensive study of aspects of craft in fiction, nonfiction, or poetry genres. Course will encourage students to reflect on and experiment with particular methods, approaches, and techniques in particular genres and explore their aesthetic effects. PREREQ: Admission to program or PERM/INST.

**ENGL 593 THESIS (V-0-V).** Students must complete a book-length thesis project of either fiction, nonfiction, or poetry for 6 credit hours of thesis.

**ENGL 597 SPECIAL TOPICS.** Courses are offered in response to student and faculty interests and are 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.

# Master of Fine Arts, Visual Arts

# Master of Fine Arts, Visual Arts

Department of Art Liberal Arts Building, Room 252 Telephone 208 426-4070 or 426-3450 FAX 208 426-1243 e-mail: artdept@boisestate.edu http://www.boisestate.edu/art/

**Graduate Program Director:** Cheryl Shurtleff-Young

**Department Chair:** Richard Young

**Full Graduate Faculty:** Jim Blankenship, Heather Hanlon, Gary Rosine, Cheryl Shurtleff-Young, Brent Smith, John Taye,

Ron Taylor, Richard Young

**Associate Graduate Faculty:** Stephanie Bacon, Laurie Blakeslee, James Budde, Francis Fox, John Francis, Larry McNeil, Lee Ann Turner

#### **General Information**

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, 24 credits in the studio major, 12 credits in the studio elective, 9 credits of general electives, 6 credits in seminar and thesis.

Students admitted to the program will be provided with semiprivate studio space. Graduate faculty will schedule 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.

**Teaching Assistantships** are available for full-time students. Assistantships include an out-of-state tuition waiver, in-state 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 February 15.

# **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.

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

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

• A portfolio of at least 20 labeled slides of recent art work.

- Three letters of recommendation.
- A statement outlining the objectives in your studio work and why you are interested in the program.
- Self-addressed, stamped envelope.

# **Degree Requirements**

Master of Fine Arts, Visual Arts	
Course Number and Title	Credits
Art History	9
A combination of undergraduate and graduate	
credits to total 21 credits.	
Studio Courses	
A. Studio major	24
B. Studio electives	12
Studio electives are intended to:	
1) strengthen and enhance the major area;	
2) to broaden the student's art experience;	
3) to allow for interarts applications; and	
4) to enhance the candidate's employment	
potential.	
Seminar and Thesis	9
General electives	6
To be selected in consultation with the student's	
thesis committee	
TOTAL	60

## Sequence of the Program

1st	2nd
Sem	Sem
FIRST YEAR	
Art History	3
Studio Major	6
Studio Elective	3
General Elective	3
TOTAL15	15
SECOND YEAR	
Art History	_
Studio Major	6
Studio Elective	-
Seminar and Thesis	6
General Electives	3
TOTAL 15	15

# Course Offerings

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

ART — ART

**ART 301G NINETEENTH CENTURY ART HISTORY (3-0-3) (F).** A study of important artists and movements from Neoclassicism through Post-Impressionism. Critical writing will be assigned.

**ART 302G HISTORY OF TWENTIETH CENTURY MOVEMENT IN ART (3-0-3)(S).** An analysis of important European artistic movements up to World War II, including Fauvism, German

## Master of Fine Arts, Visual Arts

Expressionism, Cubism, Futurism, Constructivism, Dada and Surrealism. Critical writings will be assigned.

**ART 335G ART OF THE BRONZE AGE (3-0-3) (F/S) (Alternate Years).** A survey of the art and architecture of the Bronze Age (3000-1100 BC) Mediterranean civilizations including Egypt, Mesopotamia, Minoan, Crete, and Mycenaean Greece. Recommended: ART 201.

**ART 336G GREEK ART (3-0-3)(F/S)(Alternate Years).** A survey of the art and architecture of ancient Greece, from the Iron Age through the Hellenistic Period (1100-33 BC), with emphasis on the artistic achievements of Classical Athens. Recommended: ART 201.

**ART 337G ART OF ANCIENT ITALY (3-0-3)(F/S)(Alternate Years).** A survey of the art and architecture of ancient Italy from the time of the Etruscans through the Roman Republic and Imperial Periods (700 BC-330 AD), with emphasis on the artistic achievements of the Roman Empire. Recommended: ART 201.

**ART 338G MEDIEVAL ART (3-0-3) (F/S) (Alternate Years).** A survey of the art and architecture of the Medieval world (5th-15th centuries AD) including Byzantine Greece and Turkey, the Islamic Near East and Spain, and Europe from the time of the migrations through the Carolingian, Ottonian, Romanesque, and Gothic periods. Recommended: ART 201.

**ART 352G ART OF CHINA (3-0-3) (F/S) (Alternate Years).** A survey of the art and architecture of China from the earliest times to the end of the Ch'ing Dynasty. Emphasis will be placed on the relationship of Chinese art to native and foreign philosophies and religions. Recommended: ART 103.

ART 354G NORTHERN RENAISSANCE ART (3-0-3)(F/S) (Alternate Years). An examination of painting, sculpture, architecture, and decorative arts of the Netherlands, France, England, and Germany from 1400-1550 and the role these arts played in the culture that produced them. Recommended: ART 102.

**ART 355G ITALIAN RENAISSANCE ART (F/S) (Alternate Years).** A survey of the key artistic monuments in Renaissance Italy (1200-1600 AD), from the work of Cimabue to that of Caravaggio. Recommended: ART 202.

**ART 356G ART OF INDIA (3-0-3)(F/S)(Alternate Years).** A survey of the art and architecture of India from the earliest times until the end of the Mughal period, emphasizing artistic expression as a reflection of the general culture and religion. Recommended ART 103.

**ART 357G ART OF JAPAN (3-0-3) (F/S) (Alternate Years).** A survey of the traditional arts of Japan from the earliest times until the first influences of Western culture, including painting, sculpture, architecture, calligraphy, prints, and ceramics. Recommended ART 103.

**ART 359G PRE-COLUMBIAN ART (3-0-3) (F/S) (Alternate Years).** A survey of the Middle American art of the Olmecs, Nayarit, Colima, Maya, Teotihuacan, Zapotecs, Toltecs, and Aztecs from ancient times until the arrival of the Spanish in the 16th century.

**ART 365G BAROQUE ART (3-0-3) (F/S) (Alternate Years).** A survey of European visual culture during the last sixteenth and seventeenth centuries. Emphasis will be placed on the relationship of the arts to such concurrent events as the exploration and expansion into the New World, urban growth, the development of nation-states, and religious controversy. Recommended: ART 202.

#### ART 366G EIGHTEENTH CENTURY ART (3-0-3)(F/S)

(Alternate Years). A survey of the art of the Enlightenment from the time of Louis XIV through the Napoleonic Wars. Emphasis will be placed on the relationship between eighteenth century visual culture and developments in science, philosophy, and the changing political and social ideologies of the newly industrial nations of Europe and North America. Recommended: ART 102.

**ART 371G HISTORY OF TWENTIETH CENTURY AMERICAN ART (3-0-3)(F).** Beginning with a short survey of American Art from the Ashcan School through the Thirties with concentration on Abstract Expressionism, Pop, Op, and Minimal. Critical writings will be assigned. Advisable to take AR 302 prior to AR 371G.

**ART 451G CONTEMPORARY CONCEPTS IN ART (3-0-3)(F/S)** (Alternate Years). An exploration of contemporary art in the context of current theoretical concepts. The pluralistic nature of art during the postmodern era will be emphasized and recent developments in criticism will be introduced. Critical writings will be assigned. PREREQ: ART 302 or ART 371 or PERM/INST.

**ART 580-589 SERIES 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 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. PREREQ: Consent of instructor and Graduate Program Coordinator.

**ART 593 THESIS (V-V-6).** The thesis will consist of a written and visually documented presentation of the technical and historical developments within the student's area of concentration. The second phase will consist of a presentation of the student's art work (graduate exhibition) as it may relate to artists and art movements, both past and present. PREREQ: Graduate status.

#### ART 596 DIRECTED RESEARCH ART 597 SPECIAL TOPICS

**ART 598 SEMINAR IN ART (3-0-3)(S).** The seminar course will address the areas of art criticism and self-evaluation through a historical and contemporary perspective. The student will research a topic, present an annotated bibliography, and present an oral report on the topic, utilizing visual material in the presentation. The student will then present a research paper concerning the topic. PREREQ: Graduate standing.

# Master of Science in Geology

# Master of Science in Geology

Department of Geosciences Math/Geosciences Building, Room 225 Telephone 208 426-1581 or 426-1631 FAX 208 426-4061 http://earth.boisestate.edu e-mail: jmcnamar@boisestate.edu

**Graduate Program Coordinator:** James McNamara **Department Chair:** C. J. Northrup

**Full Graduate Faculty:** Warren Barrash, Paul R. Donaldson, Michael Knoll, Mitchell Lyle, James McNamara, Paul Michaels, C.J. Northrup, John R. Pelton, Walter S. Snyder, Craig M. White, David Wilkins, Spencer H. Wood

Associate Graduate Faculty: Partha Routh
Adjunct Graduate Faculty: William P. Clement,
Thomas M. Clemo, Vladimir I. Davydov, Mary Donato,
Virginia Gillerman, Kenneth M. Hollenbaugh (Emeritus),
Verne Oberbeck, James Osiensky, Kurt L. Othberg,
Mark Seyfried, Claude Spinosa (Emeritus), Edward Squires,
Charles J. Waag (Emeritus)

## **General Information**

Boise State University offers studies leading to the M.S. degree in geology to students with a bachelor's degree in geology or a related discipline who are seeking to develop the capability for research or professional careers. All candidates for the M.S. in Geology at Boise State University must successfully complete and defend a thesis; usually the thesis is original research that involves field work. The department does not offer an option for the M.S. degree in Geology without a thesis. Students may include one or more fields in their studies and in their theses, such as biostratigraphy, economic geology, environmental geology, geomorphology, exploration geophysics, hydrogeology, paleontology, petrography and petrology of igneous rocks, stratigraphy and sedimentology, structural geology, shallow subsurface seismic studies and volcanic stratigraphy. University of Idaho courses in geohydrology are offered via video and live video link and may be counted towards the M.S. degree.

A cooperative agreement with Idaho State University provides students access to broader studies leading to a Master of Science degree in Geology. Boise State University students are encouraged to enroll in the ISU/BSU cooperative program and to attend Idaho State University for one semester or more, thereby enriching their graduate experience through course work and intellectual exchange with a larger faculty of greater professional diversity.

Students are encouraged to attach to the department's home page at: http://earth.boisestate.edu for information about potential thesis topics, ongoing research, and current activities within the research units of the department.

# **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.

# **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.

Additional information may be obtained from the Geology Graduate Coordinator, Department of Geosciences, Boise State University, 1910 University Drive, Boise, ID 83725 or jmcnamar@boisestate.edu or http://earth.boisestate.edu for the most up-to-date information. Information regarding the cooperative program may also be obtained from the Geology Graduate Coordinator, Department of Geology, Idaho State University.

## **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	2
Enrollment in Graduate Seminar is required each semester of all graduate students in residence; one credit may be applied towards graduation.  GEOL 598 Graduate Seminar	1
A maximum of 6 graduate thesis credits may be applied towards graduation. GEOL 593 Thesis	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.	21
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.

## **Graduate College Requirements:**

The general requirements of the Boise State University Graduate College also govern the Master of Science in Geology degree program.

## Graduate Certificate in Geospatial Information Analysis

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.

## Graduate Certificate in Geospatial Information Analysis

Course Number and Title	Credits
GEOG 560 Introduction to Geographic	
Information3	12
GEOG 561 Remote Sensing and Image	
Processing3	
GEOG 562 Geographic Information Analysis3	
GEOG 563 Geospatial Project3	
TOTAL	12

## **Course Offerings**

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

**GEOG - GEOGRAPHY** 

**GEOG 560 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (2-2-3) (F/S) (Lab fee).** 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. PREREQ: PERM/INST.

**GEOG 561 REMOTE SENSING AND IMAGE PROCESSING** (2-2-3) (F/S) (Lab fee). 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. PREREQ: GEOG 560 or PERM/INST.

**GEOG 562 GEOGRAPHIC INFORMATION ANALYSIS (2-2-3) (F/S) (Lab fee).** 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. PREREQ: GEOG 561 or PERM/INST.

**GEOG 563 GEOSPATIAL PROJECT (1-6-3) (F/S) (Lab fee).** 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. PREREQ: GEOG 562 or PERM/INST.

#### GEOL — GEOLOGY

**GEOL 403G ENGINEERING GEOLOGY (2-3-3)(S)(Field trip required).** Introduction to soil and rock mechanics. Slope stability analysis. Surface and subsurface exploration of sites. Geological and geophysical considerations for construction projects. Current applications of geology to engineering projects. Alternate years. PREREQ: GEOL 280, PHYS 102 or PHYS 211, GEOL 323, or PERM/INST.

**GEOL 431 G PETROLEUM GEOLOGY (2-3-3)(F)(Field trips)** (Alternate years). A study of the nature and origin of petroleum, the geologic conditions that determine its migration, accumulation and distribution, and methods and techniques for prospecting and developing petroleum fields. PREREQ: GEOL 311, 314.

**GEOL 450G GEOLOGY OF NATIONAL PARKS (3-0-3) (S).** A systematic study of geologic materials, structures, processes and landforms, in the national parks. The course is structured by geological regions and emphasizes geological knowledge as a key to greater appreciation and understanding of these scenic areas. PREREQ: GEOL 103 (Alternate years.)

**GEOL 451G PRINCIPLES OF SOIL SCIENCE (3-0-3) (F/S)** (Alternate years). Major aspects of soil science, including the physical, chemical, and biological characteristics of soils will be presented in the classroom lectures. Demonstration laboratory exercises and field trips will be required. PREREQ: Background in Geology and Chemistry.

**GEOL 502 GREAT MYSTERIES OF THE EARTH (3-0-3) (F).** The earth abounds with mysteries that are seemingly related to natural phenomena. Lost continents, UFO's, Loch Ness Monster, Bermuda Triangle, Big Foot, ancient astronauts, water witching, and other mysteries, both real and contrived as discussed in terms of evidence and interpretation in the context of natural laws and processes. Techniques of skeptical inquiry and the scientific method are applied to develop critical thinking. PREREQ: Graduate standing and PERM/INST.

**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 porous and fractured media. Methods of determination of aquifer characteristics and performance and groundwater modeling. PREREQ: MATH 170.

## Master of Science in Geology

PERM/INST.

**GEOL 514 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: GEOL 310, GEOL 314, GEOL 323 and GEOL 324 or

**GEOL 516 PHYSICAL HYDROLOGY (3-0-3)(S)(GEOPH 516).** 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)(GEOPH 517).** 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 FIELD METHODS IN MARINE GEOLOGY AND GEOPHYSICS (GEOPH 519) (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 Geology or Geophysics credit, but not both. PREREQ: PERM/INST.

**GEOL 523 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: GEOL 323, GEOL 324, CHEM 131.

**GEOL 531 REGIONAL GEOLOGY OF NORTH AMERICA (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 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 w/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 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 102.

GEOL 560 VOLCANOLOGY (3-0-3)(F)(Field trip required)

(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. 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 571 GEOCHEMISTRY (3-0-3) (F/S).** Chemical equilibrium applied to natural water systems. Oxidation and reduction in sedimentation and ore genesis, methods of exploration geochemistry, crystallization of magmas, ore-forming solutions, isotope geochemistry. Field trip required. PREREQ: GEOL 101, CHEM 133, MATH 204.

**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 audiovisual 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.

**SPECIAL TOPICS.** Classes that deal with specialized topics and designed for small groups of students are offered frequently; recent examples include:

GEOL 597 MINERAL RESOURCES, GEOLOGY AND THE ENVIRONMENT

GEOL 597 PRINCIPLES OF SOIL SCIENCE

GEOL 597 RESEARCH TOPICS IN GEOTECTONICS

GEOL 597 APPLIED GEOHYDROLOGIC CONCEPTS

GEOL 597 ECONOMIC EVALUATION OF MINERAL RESOURCES

GEOL 597 BIOSTRATIGRAPHY, GRAPHIC CORRELATION GEOL 597 TECTONIC EVOLUTION OF THE URAL MOUNTAINS

GEOL 597 AUTOCAD APPLICATIONS IN GEOLOGY

GEOL 597 ADVANCED STRATIGRAPHY

**GEOL 597 CRUSTAL LITHOLOGY AND TECTONICS** 

GEOL 597 OUATERNARY GEOLOGY

GEOL 597 GRADUATE ORIENTATION

**GEOL 597 GRADUATE FIELD GEOLOGY** 

**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 601 GRADUATE ORIENTATION (1-0-1)(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.

## GEOL 607 PALAEOCLIMATOLOGY AND PALAEOCEANOGRAPHY (GEOPH 607) (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. Course may be taken for either Geology or Geophysics credit, but not both. PREREO: 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.

#### GEOL 623 ADVANCED HYDROGEOLOGY (GEOPH 623,

**CE 623) (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 both. PREREQ: GEOL 412, MATH 275, MATH 233, or PERM/INST.

#### GEOL 624 APPLIED HYDROGEOLOGY (GEOPH 624) (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 or Geophysics credit, but not both. PREREQ: GEOL 623 and GEOPH 623 or PERM/INST.

#### **GEOL 632 INTERPRETATION OF DEEP SEA SEDIMENTS**

(GEOPH 632) (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 Geology or Geophysics credit, but not both. PREREQ: PERM/INST.

#### GEOL 641 PLATE TECTONICS AND GEODYNAMICS (3-0-3)(F)

(Alternate years). Reviews and identifies geologic and geophysical foundations of plate tectonic theory and characteristics of modern tectonic environments and their use in interprets Earth's geologic history. PREREQ: PERM/INST.

## GEOL 672 ISOTOPE GEOCHEMISTRY AND

**GEOCHRONOLOGY (3-0-3)(S)(Alternate years).** Comprehensive overview of theory, methods, and applications of isotope geochemistry and geochronology to a wide range of earth science problems. PREREQ: PERM/INST.

#### **Idaho State University Courses:**

GEOL 648 Research Problems GEOL 650 Thesis

## **University of Idaho Courses:**

XY 502 Directed Study (Hydrology) XY 569 Contaminant Hydrology

XY 577 Computer Applications in Geohydrology

Course descriptions for additional graduate courses are listed under the Master of Science in Education, Earth Science Emphasis and Master of Science in Geophysics.

# Doctor of Philosophy in Geophysics

Department of Geosciences Math/Geosciences Building, Room 225 Telephone 208 426-1929 FAX 208 426-4061 email: pm@cgiss.boisestate.edu

Graduate Program Coordinator: Paul Michaels

Department Chair: C. J. Northrup

**Full Graduate Faculty:** Warren Barrash, Paul Donaldson, Molly Gribb, Michael D. Knoll, Mitchell Lyle, James P. McNamara, Paul Michaels, John R. Pelton, Dale Russell, Walter S. Snyder, Craig M. White, Spencer H. Wood

Associate Graduate Faculty: C. J. Northrup, David Wilkins Adjunct Graduate Faculty: William P. Clement, Thomas M. Clemo, Mary M. Donato, Virginia Gillerman, Kenneth M. Hollenbaugh (Emeritus), Mark Seyfried, Claude Spinosa (Emeritus), Charles J. Waag (Emeritus)

## **General Information**

Boise State University offers a Doctor of Philosophy in Geophysics through the Department of Geosciences. The 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 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 geophysics doctoral program.

## **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.

## **Doctor of Philosophy in Geophysics**

## **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 examination 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) 426-3640 or email: pm@cgiss.boisestate.edu.

## **Degree Requirements**

Doctor of Philosophy in Geophysics	
Course Number and Title	Credits
GEOPH 501 Properties and Processes in	
Geophysics I4	
GEOPH 502 Properties and Processes in	
Geophysics II4	8
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
Subtotal	48
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, engineering, mathematics, 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 semester 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 one of the following: pass, conditional pass, or fail. A student who fails the comprehensive examination is dismissed from the Ph.D. program. A student who receives a conditional pass must satisfy scheduled conditions stipulated by the Supervisory Committee; failure to meet the conditions results in dismissal 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.

#### **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 regular 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

## **Doctor of Philosophy in Geophysics**

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.

**Graduate College Requirements:** The general requirements of the BSU Graduate College also govern the Doctor of Philosophy in Geophysics degree program.

## **Course Offerings**

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 thermal processes and the dynamics of fluids. Required core class for all geophysics graduate students. PREREQ: GEOPH 303, GEOL 412; 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 mechanical deformation and seismic and electromagnetic wave propagation. Required core class for all geophysics graduate students. PREREQ: 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 PHYSICAL HYDROLOGY (3-0-3) (S) (GEOL 516).** 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.

#### GEOPH 517 WATERSHED PROCESSES (3-0-3)(F)(GEOL 517). 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 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, isostatic compensation, postglacial rebound, creep in rocks, mantle convection. Project and report required. PREREQ: PERM/INST.

**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,

## Master of Science in Geophysics

gradient descent methods, grid searches, simulated annealing. Computer laboratory exercises. PREREQ: MATH 301.

GEOPH 607 PALAEOCLIMATOLOGY AND

**PALAEOOCEANOGRAPHY (3-0-3)(F)(Alternate years).** (Crosslisted GEOL 607.) 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. Course may be taken for either Geology or Geophysics 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, CX 360, GEOPH 530; 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 530; or PERM/INST.

**GEOPH 623 ADVANCED HYDROGEOLOGY (3-0-3) (F).** (Crosslisted GEOL 623.) Treatment of groundwater occurrence and flow, theory fundamental mechanisms, hydrologic parameters, flow regimes and systems, geologic controls. Course may be taken for either Geology or Geophysics credit, but not both. PREREQ: GEOL 412, MATH 275, MATH 233, or PERM/INST.

**GEOPH 624 APPLIED HYDROGEOLOGY (3-0-3)(S).** (Crosslisted GEOL 624.) 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 or Geophysics credit, but not both. PREREQ: GEOL 623 and GEOPH 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 INTERPRETATION OF DEEP SEA SEDIMENTS** (3-0-3)(F/S). (Cross-listed GEOL 632.) 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 Geology or Geophysics 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 650 DESIGN OF GEOPHYSICAL WASTE SITE CHARACTERIZATION PROGRAMS (2-2-3) (F/S). Application of design principles of 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, CX 320, GEOL 412, GEOPH 530; 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 530; 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 530 or PERM/INST.

GEOPH 693 DISSERTATION.

## Master of Science in Geophysics

Department of Geosciences Math/Geosciences Building, Room 225 Telephone 208 426-1929 FAX 208 426-4061 email: pm@cgiss.boisestate.edu

Graduate Program Coordinator: Paul Michaels Department Chair: C. J. Northrup Full Graduate Faculty: Warren Barrash, Paul Donaldson, Molly Gribb, Michael D. Knoll, Mitchell Lyle, James P. McNamara, Paul Michaels, John R. Pelton, Dale Russell, Walter S. Snyder, Craig M. White,

Associate Graduate Faculty: C. J. Northrup, David Wilkins Adjunct Graduate Faculty: William P. Clement, Thomas M. Clemo, Mary M. Donato, Virginia Gillerman, Kenneth M. Hollenbaugh (Emeritus), Mark Seyfried, Claude Spinosa (Emeritus), Charles J. Waag (Emeritus)

## **General Information**

Spencer H. Wood

Boise State University offers a Master of Science in Geophysics through the Department of Geosciences. The 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;

## Master of Science in Geophysics

- 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 BSU 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 BSU.

The BSU Master of Science program in geophysics interacts cooperatively with the University of Idaho (UI) Master of Science program in geophysics through the joint listing of graduate geophysics courses, the application of BSU graduate geophysics courses for UI credit, and the application of UI graduate geophysics courses for BSU credit. Cooperation is extended to 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 UI. In addition, faculty at BSU, UI, 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, UI, 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.

## **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.

## 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, UI, 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 examination 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.

## Master of Science in Geophysics

## **Degree Requirements**

Master of Science in Geophysics	
Course Number and Title	Credits
Credit Requirements:	
The 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. Oncampus 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 UI and/or ISU. 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 BSU.

#### **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.

**Graduate College Requirements:** The general requirements of the BSU Graduate College also govern the Master of Science in Geophysics degree program.

## **Course Offerings**

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 thermal processes and the dynamics of fluids. Required core class for all geophysics graduate students. PREREQ: GEOPH 303, GEOL 412; 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 mechanical deformation and seismic and electromagnetic wave propagation. Required core class for all geophysics graduate students. PREREQ: 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 PHYSICAL HYDROLOGY (3-0-3)(S)(GEOL 516).** 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.

#### GEOPH 517 WATERSHED PROCESSES (3-0-3)(F)(GEOL 517). 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 FIELD METHODS IN MARINE GEOLOGY AND GEOPHYSICS (4-0-4) (F/S/SU) (GEOL 519). 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 Geology or Geophysics 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, isostatic compensation, postglacial rebound, creep in rocks, mantle convection. Project and report required. PREREQ: PERM/INST.

**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.

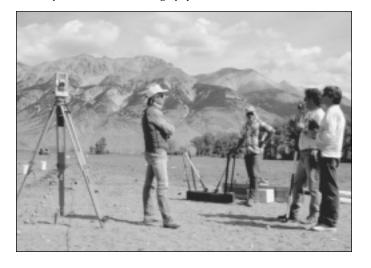
**GEOPH 565 SEISMIC METHODS (2-2-3) (F/S).** Comprehensive discussion of modern seismic methods of subsurface investigation. Applications to exploration geology (mining and petroleum), engineering geology, hydrogeology, and crustal geology. PREREQ: GEOL 101, GEOPH 303 or PERM/INST.

**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.

Graduate students in the Master of Science program in Geophysics may also enroll for GEOPH 600-level courses (see courses listed under Doctor of Philosophy in Geophysics).

#### **UoI Graduate Course Offerings**

Geoph 520	Exploration Geophysics	3
Geoph 521	Mining Geophysics	3
Georgh 523	Spiemic Stratigraphy	3



## Master of Health Science

College of Health Sciences
Health Science Riverside Building, Room 123
Telephone 208 426-2217
FAX 208 426-2199
http://www.boisestate.edu/health/
e-mail: stoevs@boisestate.edu

**Graduate Program Director:** Sarah Toevs

Full Graduate Faculty: Les Alm, John Freemuth,
James Girvan, Richard Kinney, James Munger, Sara LaRiviere,
Elaine Long, Uwe Reischl, Larry Reynolds, Robert Rychert,
Caile Spear, James Weatherby, Stephanie Witt
Associate Graduate Faculty: Patricia Elison-Bowers,
Margaret Downey, Pamela Springer, Patricia Taylor, Sarah Toevs
Adjunct Graduate Faculty: Pat Aksamit, Marnie Basom,
Mark Emerson, Andrea Fletcher, Christine Hahn,
Elizabeth Hannah, Margaret Henbest, Lyla Hill, Bonnie Lind,
Galen Louis, Patricia McGavran, Alison Miller, Joanne Mitten,
Richard Olsen, Linda Powell, Ted Ryan, Beth Stamm,
Robert Sterling, Kurt Brown Stevenson, Helen Stroebel,
Nancy Van Maren, Pamela Weinberg, Stephen West
Emeritus Graduate Faculty: Rudy Andersen

## **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, addiction studies, 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 Health Services Leadership.

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, Business, 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, while the Master of Business Administration (MBA) provides added focus in the health services leadership emphasis area.

## **Application and Admission Requirements**

Students interested in the MHS 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 BSU. This certificate is a prerequisite to admission into the MHS program, but does not by itself guarantee admission into the MHS 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 MHS program must meet the following requirements prior to enrollment in MHS courses:

- 1. Meet with the Program Director to discuss the admission process, the applicant's career interests, and reasons for seeking admission to the MHS program.
- 2. Possess a baccalaureate degree from an accredited institution. Preference will be given to applicants with education and work experience in a health-related field. See catalog for work experience requirements for Health Promotion, Health Services Leadership, and Environmental Health emphasis areas.
- 3. Demonstrate satisfactory academic competency be 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, or minimum of 475 on GMAT, or a minimum predictive score of 50 on the MAT.
- 4. Submit official transcripts from all previous academic institutions to the Graduate Admissions Office.
- 5. 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.)
- 6. 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 at Boise State University.
- 7. Provide evidence to the MHS Program Director or individual course instructors that course prerequisites are met. See Graduate Catalog for list of course offerings.

Applicants who do not meet all of the above requirements MAY be recommended by the MHS 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. Applicants selecting the health policy emphasis area must be approved by both the MHS Program Director and the MPA Program Director.

## **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 that may be available from these sources.

## **Degree Requirements**

A minimum of 33 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 (33-36 credits) is comprised of required core courses of 15 credits with an additional 18-21 credits of required area of concentration courses, a thesis, project, or case study, and elective courses. The student, counseled by a graduate committee faculty member or the MHS Program Director, selects the elective courses. Electives may come from throughout BSU. Selected courses are also available from Idaho State University's Master of Public Health program. In order to enroll in required courses, students must first be admitted to the MHS program or obtain permission of the Program Director. No more than 9 credits of 300-400G courses will count toward the MHS degree.

Graduate Core	
Course Number and Title	
THSCI 505 Health Science Inquiry2	
	_

Master of Health Science

Course Number and Title	Credits
MHLTHSCI 505 Health Science Inquiry2	15
MHLTHSCI 520 Health Care Systems Organization	
and Administration2	
MHLTHSCI 535 Ethics of Health Policy2	
MHLTHSCI/KINES 552 Applied Statistical	
Methods3	
MHLTHSCI 555 Program Evaluation in the Health	
Sciences3	
MHLTHSCI 579 Applications in Biostatistics and	
Epidemiology in Public Health3	

Note: In addition to the core health science courses noted above, completion of a thesis, project, or case study is required. See specific emphasis area listings for course and credit requirements related to that area of study.

## Master of Health Science, Environmental Health

Course Number and Title	Credits
MHS Graduate Core	15
Select 9 credits from the following:	9
MHLTHSCI 510 Advanced Environmental Health3	
MHLTHSCI 560 Risk Management3	
MHLTHSCI 570 Health Promotion3	
PUBADM 541 Environmental Regulatory Policy	
and Administration3	
PUBADM 542 Science, Democracy &	
Environment3	
In addition, students need one 3 credit elective	9-12
course and 6 credits of thesis or project or 12 credits	
of electives for a case study option.	
TOTAL	33-36

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	
Course Number and Title	Credits
MHS Graduate Core	15
SOC 500 Advanced Social Statistics	12
In addition, students need 6 credits of thesis/project or 9 credits of elective course work for the case study option.	6-9
TOTAL	33-36

Master of Health Science, Health Policy	
Course Number and Title	Credits
MHS Graduate Core	15
PUBADM 500 Administration in the Public Sector3 PUBADM 501 Public Policy Process	15
In addition, students need 4 credits of thesis/project or 6 credits of elective course work for the case study option.	4-6
TOTAL	34-36

Master of Health Science, Health Promotion	n
Course Number and Title	Credits
MHS Graduate Core	15
MHLTHSCI 550 Current Issues in Health Policy3 MHLTHSCI 570 Health Promotion	12
In addition, students need 6 credits of thesis/project or 9 credits of elective course work for the case study option.	6-9
TOTAL	33-36
Note: Students with no prior experience in health promotion	

## **Health Professions Internship**

will be required to take MHLTHSCI 590 Practicum.

Students are expected to have work experience in some part of environmental health, health care delivery, addiction studies, or financing and administration of health care providing hands-on experience with health policy/program development and

Master of Health Science, Health Services Leadership	
Course Number and Title	Credits
MHS Graduate Core	15
DISPUT 501 Human Factors in Conflict	
Management1	12
DISPUT 502 Negotiation Theory and Practice1	
DISPUT 503 Conflict Intervention Methods1	
ECON 440G Health Economics3	
MHLTHSCI 522 Management for Health	
Professionals3	
MHLTHSCI 525 Leadership for Health	
Professionals3	
In addition, students need 6 credits of thesis/project	6-9
or 9 credits of elective course work for the case study	
option.	
TOTAL	33-36

Note: Persons who have no experience in health services leadership will also be required to take MHLTHSCI 527 Supervisory Leadership Internship.

Master of Health Science, Addiction Studies	S
Course Number and Title	Credits
MHS Graduate Core	15
MHLTHSCI 544 Alcohol/Drug Abuse & the	12
Family3	
MHLTHSCI 545 Foundations of Chemical	
Dependency3	
MHLTHSCI 549 Counseling Techniques for Alcohol	
and Drug Problems3	
MHLTHSCI 564 Assessment of Alcohol and Drug	
Problems, Part I3	
In addition, students need 6 credits of thesis/project	6-9
or 9 credits of elective course work for the case study	
option.	
TOTAL	33-36

implementation issues. Applicants with less than one year work experience must complete a health professions internship. The student, in consultation with her/his supervisory committee, will identify the appropriate internship experiences.

## **Comprehensive Examination**

In fulfillment of the MHS degree requirements, students must take a comprehensive exam. The exam takes place following completion of the course work and has both a written and oral defense component.

## Thesis/Project/Case Study 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 will be determined by requirements of emphasis area and the student's committee. The case study option may be created in lieu of a thesis or project by completing additional elective credits and addressing a case study designed by faculty teaching in the student's area of emphasis. No student may sign up for any of the options 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.

## **Supervisory Committee**

Students admitted with regular or provisional admission status will be appointed a supervisory committee whose purpose is to establish, with the student, a program of study and internship requirements; to guide the student's thesis or project; to conduct the thesis/project defense; to approve the final thesis/project; and to administer the comprehensive examination (written and oral). The supervisory committee consists of at least three individuals, including a chair who assumes the role of graduate advisor and at least two other committee members. The committee must be established no later than advancement to candidacy.

## Graduate Certificate in Health Services Leadership

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 Admissions 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 University. 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.

- Demonstrate satisfactory academic competency by attaining an overall GPA of at least 3.0 in previous college-level course work.
- 3. 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.
- 4. 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	3	
MHLTHSCI 525 Leadership for Health Professionals	3	
MHLTHSCI 529 Marketing for Health Professionals	3	
DISPUT 501 Human Factors in Conflict Management	1	
DISPUT 502 Negotiation Theory and Practice	1	
DISPUT 503 Conflict Intervention Methods	1	
A minimum of three credits from one of the following: ECON 440G Health Economics	3-4	

## **Course Offerings**

Additional 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 foundations of negotiation and mediation, types of mediation, mediation models, mediation case work skills, building the mediation plan, interpersonal communication skills for mediation, and various resolution techniques. Students will mediate several simulated and/or actual practice cases.

**DISPUT 501 HUMAN FACTORS IN CONFLICT MANAGEMENT (1-0-1)(F/S).** This course presents communication theories to assist managers in understanding, analyzing, and managing conflict. The course focuses on the causes of conflict, and includes the influence of gender and culture. This course is pragmatic as well as theoretical.

# **DISPUT 502 NEGOTIATION THEORY AND PRACTICE (1-0-1) (F/S).** The successful manager in professional settings is involved in a variety of negotiation activities. The tactics, strategies, and operations of effective and ineffective bargaining/negotiating behaviors will be presented. The course develops negotiator skills and knowledge leading to collaborative based actions and solutions.

**DISPUT 503 CONFLICT INTERVENTION METHODS (1-0-1) (F/S).** This course overviews the various contexts of third party intervention into conflicts: facilitation, public involvement processes, mediation, and arbitration and develops skills at first level supervisor/manager intervention into employee conflicts.

#### **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 role of information and incentives in the system will be considered. PREREQ: ECON 205, Admission to MHS program, or PERM/PROGRAM DIRECTOR.

#### **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.

## MBA — MASTER OF BUSINESS ADMINISTRATION

**MBA 529 MARKETING MANAGEMENT (3-0-3).** Covers activities and models used in marketing, identifying and interpreting buyers' needs, market segmentation, and designing a balanced marketing program.

# 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 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/INSTR.

### 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/INSTR.

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 community. 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/INSTR.

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/INSTR.

MHLTHSCI 518 ENVIRONMENTAL HEALTH LAW (2-0-2)(S) (Offered even-numbered 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/PROGRAM DIRECTOR.

MHLTHSCI 522 MANAGEMENT FOR HEALTH PROFESSIONALS (3-0-3) (F/SU). In-depth discussion of management strategies as they apply to health care, with emphasis on communication, program planning, organization, staff development, program coordination, and evaluation of results.

MHLTHSCI 525 LEADERSHIP FOR HEALTH PROFESSIONALS (3-0-3) (F/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 527 SUPERVISORY LEADERSHIP INTERNSHIP (3-0-3) (F/S/SU). Actual hands-on experience in operational health facilities, health education units, health promotion activities, consulting agencies, state health agencies, or similar health-related facility. Persons currently employed in a supervisory capacity are not eligible to take this course for credit. PREREQ: MHLTHSCI 522.

**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/INSTRUCTOR.

### 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/INSTRUCTOR.

#### 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 544 ALCOHOL/DRUG ABUSE AND THE FAMILY (COUN 541) (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. This course may be taken for MHLTHSCI or COUN credit, but not both.

**MHLTHSCI 545 FOUNDATIONS OF CHEMICAL DEPENDENCY (3-0-3) (F/S).** Cross listed COUN 545. 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. This course may only be taken for MHLTHSCI or COUN. PREREQ: PERM/INST.

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 COUNSELING TECHNIQUES FOR CHEMICAL DEPENDENCY (COUN 510) (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. This course may only be taken for either MHLTHSCI or COUN, but not both.

#### 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 STATISTICAL METHODS (KINES 552) (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. 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 ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART I (COUN 544) (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. This course may be taken for MHLTHSCI or COUN credit, but not both.

MHLTHSCI 565 ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART II (COUN 546) (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. This course 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 570 HEALTH PROMOTION (3-0-3)(F/S)

**(KINES 570).** A critical examination of health promotion and education policy with an emphasis on planning, implementation and evaluation of health programs for various public sectors.

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).

**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 surveys a number of important issues in contemporary public administration, including an emphasis on political, legal, economic and social institutions, and processes. PREREQ: Admission to MHS program or PERM/PROGRAM DIRECTOR.

**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/PROGRAM DIRECTOR.

#### 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/PROGRAM DIRECTOR.

## 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.

#### 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 behavior, and similar problems. PREREQ: PSYC 101.

#### SOC - SOCIOLOGY

**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



## Master of Arts in History

Department of History Library Building, Room 192 Telephone 208 426-1255 Fax 208 426-4058 http://www.bojcestate.edu/5

http://www.boisestate.edu:80/history e-mail: gjohnson@boisestate.edu

**Director of Graduate Studies:** Nicholas Miller

**Department Chair:** Peter Buhler **Full Graduate Faculty:** Peter Buhler,

Allan Fletcher, Errol Jones, Nicholas Miller, Charles Odahl, Sandra Schackel, Todd Shallat, Shelton Woods,

Michael Zirinsky

**Associate Graduate Faculty:** Barton Barbour, Joanne Klein, Lynn Lubamersky. Lisa McClain. Jill Gill

**Adjunct Graduate Faculty:** Ellis Knox, Carol MacGregor, Beverly Miller, Robert Sims (Emeritus), Alan Virta.

## **General Information**

The M.A. degree in history at BSU prepares students for advanced work in the field of history. Established in 1977, the M.A. program in history is based upon a solid, committed faculty and multiple resources. Faculty and library strengths enable students to specialize in the fields of north American, western, public, women's, ancient and medieval, religious, international, European, and non-western 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. The BSU 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 BSU students. Several large corporations with home offices in Boise have opened their archives to students and faculty doing research on department-supported topics.

## **Three Tracks**

Students have an option of choosing from three tracks in earning their History graduate degree. The first track is for those who wish to emphasize research. Individuals on this track, the **Research track**, are required to write and publicly defend a thesis related to their area of study and interest. The **Education track** is for those who wish to increase their skill in the classroom through advanced course work. Students on this track must pass a cumulative examination. Recognizing the need to apply a graduate degree in the broadest sense, the third track, the **Applied track**, is for individuals interested in promoting an established career or beginning a career that combines research, technology, writing, management and other related areas. Students on the Applied track complete a project to round out their program.

## Master of Arts in History

## **Major Fields**

With fourteen permanent and many adjunct faculty, the department of history offers courses in a wide variety of topics in north American, European, and non-western history. In addition to covering these traditional geographical areas, the department emphasizes the following major fields.

**U.S. History:** Students may concentrate on the history of the United States in any era from the colonial period to the present. Possible subfields include social, economic, political, ethnic, regional, gender, and diplomatic history. Within these broad fields, students are free to focus on specific issues that draw on the expertise of faculty. Some of those topics are civil rights, science and technology, the military, environmental history, women in America, Vietnam, Hispanics, African American and Native American history. A major theme is the growth and expansion of the American nation over four centuries and its emergence as a world power.

**Western and Public History:** The study of the American west at Boise State stresses the diversity of the region and the practical value of scholarly research. Topics include natural resources and environmental history, western women, American Indians, exploration, museums and archives, and historic preservation. Team research projects, a variety of internships, and cultural events at the Hemingway Center of Western Studies broaden the learning experience. Library holdings are extensive. In 1988 the program received the Bureau of Land Management's "Outstanding Service Award."

**Women's History:** The study of women's history as a field of emphasis is designed to introduce students to the contributions and significance of women's past experiences. It also uses materials and methods which increase an awareness of the importance of women's many roles and expands students' horizons beyond those set by gender-based stereotypes. Students may select from a variety of courses such as Introduction to Women's History, Women in America, Women in the American West, Women and Religion, Witchcraft in Europe, Women and War, and Women and Autobiography, among others.

Ancient and Medieval Studies: The department offers courses in Ancient Greek & Roman, Early Christian, and Medieval European history, with advance seminars on Augustus & the Golden Age of Rome, and Constantine & the Byzantine Empire. Courses are also available in the classical languages through department faculty, while other university departments offer courses in ancient and medieval art, literature, and philosophy for a broad cultural approach in this area. Latin is required for work in this field.

**European History:** The department offers courses dealing with the European continent from Great Britain and France to Russia and the Balkans, and covering a chronological sweep from the late Medieval and Byzantine eras up to the present century. A European language might be required for work in these areas.

**Religious History:** The department offers a strong program in the history of Christianity, emphasizing the ancient,

medieval, Reformation, and modern American periods, backed with courses in early Christian, Patristic and medieval church Latin; and it also offers courses dealing with African, Middle Eastern, and East Asian religious traditions for a broader approach to world religions.

**Regional History:** The department offers courses that include the histories of East, South and Southeast Asia, Africa, Latin America, and the Middle East. Students who wish to focus their program on a particular region will also find that there are courses in other disciplines across campus which will enhance their knowledge of their area of interest.

Graduate faculty are deeply involved in research and writing in their respective major fields. 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.

## **Financial Assistance**

Financial aid applications, scholarship applications, and guidelines can be obtained from the Graduate Admissions office. Applicants who wish to be considered for financial aid should complete applications by March 1 of the academic year prior to their first enrollment in the M.A. program. Applicants must be sure that the history department has in hand by March 1 a completed application for financial assistance, two letters of recommendation, complete transcripts of the applicant's academic record, and demonstrated ability to write effectively in English.

**Graduate Assistantships:** The purpose of the graduate assistantship program is to support promising individuals who are committed to continuing their education at the graduate level. Assistantship awards include a waiver of all registration fees and/or a monetary stipend. Graduate assistants are required to spend up to twenty hours per week in service to the department depending on the stipend awarded. Duties will vary with area of study. A limited number of assistantships are awarded on a competitive basis.

**Internships:** The department sometimes may be able to arrange a paid internship as part of the graduate program. Make enquiry with the department to see what may be available at the time of registration.

## Designation of Advisor and Graduate Committee

The director of graduate studies in history will act as temporary advisor for all newly admitted students. The student will establish an advisory 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 advisory committee.

**Note:** Courses taken without prior approval of the advisory committee may not be accepted as part of the student's degree

## Master of Arts in History

program. To make sure all courses taken are accepted as part of the degree program, the student and the advisory committee should fill out and adhere to the *Program Development Form*.

## **Other Academic Regulations**

**Incompletes:** Incompletes in any graduate course, except thesis (HIST 593) and project (HIST 591), will be granted only under extraordinary circumstances and the work must be made up before the student will be allowed to register for a subsequent semester.

**Language Requirements:** All students are required to complete at least one year of a foreign language (language courses completed in a student's undergraduate program are accepted as fulfilling this requirement). In addition, some areas of study demand a working ability to translate a language of that region, e.g. Spanish for Latin America.

**Overloads:** Students wishing to take an overload (more than 9 graduate credits) must secure written permission from their advisory committee chair, the director of graduate studies, and the department chair.

Admission to Candidacy: Students should apply for admission to candidacy as soon as possible after completing 18 hours in an approved program of study. There can be no deficiencies at this point (e.g., the student must have been raised from provisional to regular status) and language or other special requirements must have been met. Students will be recommended by the department for admission to candidacy only on a positive vote of the advisory committee, after careful assessment of progress toward the degree, to the date of application. (See the specific Graduate College statement, "Applying for Candidacy.")

**Thesis or Project:** The first formal step toward a thesis or project is to prepare a prospectus which must be approved by the committee no later than the tenth week of the first semester registered for thesis or project credit. The student must publicly defend the thesis or project at an oral examination scheduled by his or her advisory committee in either fall or spring semester.

**Cumulative Exam:** A four-hour cumulative exam prepared and graded by the student's committee is the culminating activity for students in the Education track.

## **Application and Admission Requirements**

**Application Procedures:** The history department now accepts new candidates only for the fall semester. Application for admission to the history graduate program must be made prior to March 1 for the following fall semester. At that time the student will pay the application fee, fill out an application form and make provision 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 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.

The History Department can take no action on the application until all of the above materials have been received. Applicants should complete applications by March 1.

**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. Students without a strong history background may be required to remove deficiencies before admission.

Minimum standards for admission with regular status to the history graduate program include a minimum GPA of 3.0 with 3.2 in history and 3.2 for the last two years of undergraduate study. In addition, for admission with regular status applicants must present at least one year of college-level language other than English. Students not meeting these minimum requirements for admission with regular status are encouraged to apply for provisional status.

Applicants must also be aware that some areas require additional foreign language skills or other research tools.

## **Degree Requirements**

For students transferring from other graduate programs, the department will accept up to nine graduate credits subject to the advisory committee's approval. As noted above, there are three tracks for the History Graduate program at Boise State University. Listed below are the requirements for each of these tracks:

Master of Arts in History, Applied		
Course Number and Title	Credits	
HIST 500 Historians and Historical Interpretation	3	
HIST 501 Sources of Human Traditions	3	
Approved Electives Outside of History	6	
Approved History Electives	6	
HIST 595 Readings and Conference (in Area)	9	
Approved History or Non History Elective	3	
HIST 591 Project	3	
Total	33	

Master of Arts in History, Education	
Course Number and Title	Credits
HIST 500 Historians and Historical Interpretation	3
HIST 501 Sources of Human Traditions	3
Approved History Electives27 OR	27
Approved History Electives	

-continued

## Master of Arts in History

Master of Arts in History, Education (continued)			
Cumulative Exam 0			
Total	33		

Master of Arts in History, Research	
Course Number and Title	Credits
HIST 500 Historians and Historical Interpretation	3
HIST 501 Sources of Human Traditions	3
Approved History Electives21 OR	21
Approved History Electives12	
Approved Electives Outside of History9	
HIST 593 Thesis6	6
Total	33

## **Course Offerings**

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

HIST - HISTORY

#### HIST 334G UNITED STATES SOCIAL AND CULTURAL

**HISTORY (3-0-3) (F/S).** Selected themes from colonial times to the present. The nature and meaning of the national experience, customs, traditions and intellectual developments. HIST 151, HIST 152 recommended. Alternate years.

#### HIST 423G EUROPEAN DIPLOMATIC HISTORY 1871

**PRESENT (3-0-3)(F/S).** Major problems in European diplomacy since 1871; search for security after unification of Germany, potential collapse of Ottoman Empire, imperialism in Africa and Asia, alliance systems, origins of World Wars One and Two, cold war and merging of European diplomacy into world diplomacy. Alternate years.

#### HIST 500 HISTORIANS AND HISTORICAL INTERPRETATION

**(3-0-3).** 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).** 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 580 SELECTED TOPICS: GRADUATE SEMINAR IN U.S. HISTORY (3-0-3). Studies of the principal themes or problems within well-defined periods of particular fields of U.S. History. Emphasis will be placed on reading, discussion, writing and research. Reports and discussion on various aspects of the controlling subject will be performed by the students with the assistance of the instructor. PREREQ: Admission to the graduate program or PERM/CHAIR.

HIST 581 SELECTED TOPICS: GRADUATE SEMINAR IN EUROPEAN HISTORY (3-0-3). Critical analysis of source materials and historical literature on topics of restricted scope in European history. Emphasizes reading, discussion, writing and research. Student

participation in discussion and reports are expected. PREREQ: Admission to graduate program or PERM/CHAIR.

HIST 582 SELECTED TOPICS: GRADUATE SEMINAR IN THIRD WORLD HISTORY (3-0-3). Critical analysis of source materials and historical literature on topics of restricted scope in Third World history. Reports and discussion on various aspects of the topic under consideration will be performed by the students under the direction of the instructor. Emphasis will be placed on reading, discussion, research and writing. PREREQ: Admission to graduate program or PERM/CHAIR.

HIST 590 PRACTICUM/INTERNSHIP

HIST 591 PROJECT (3 credits).

HIST 592 HISTORY COLLOQUIUM (3 credits).

HIST 593 THESIS (6 credits).

HIST 594 WORKSHOP

#### HIST 595 READING AND CONFERENCE (Variable 1 to 3). A

rigorous reading course designed to fit the personal interests of the student in collaboration with the directing faculty member. It is not intended to duplicate courses already taught in a classroom setting, but to supplement those offerings. Requirements will be established by the directing instructor based on the difficulty of material to be analyzed and the number of credits to be granted.

**HIST 596 DIRECTED RESEARCH (3-0-3).** The purpose of this course is to provide the student with an opportunity to do individual research on a topic within one of the areas of specialization offered by the department. While it is expected that a research paper will result from this work, the directing faculty member will determine the requirements for the course.

HIST 597 SPECIAL TOPICS.

HIST 598 HISTORY SEMINAR (3 credits).

LATIN — LATIN

#### LATIN 323G EARLY CHURCH LATIN LITERATURE (2-2-3)(F).

Translation and analysis of selections from the major writings of the Latin Fathers of the early Church, such as Tertullian, Cyprian, Lactantius, Ambrose, Jerome and Augustine. Recommended: A year of college Latin and HIST 323 Early Christianity. Alternate years.

#### LATIN 324G MEDIEVAL LATIN LITERATURE (2-2-3)(S).

Translation and analysis of selections from significant medieval Latin writers, such as the papal biographers, Egeria, Gregory of Tours, the Venerable Bede, Einhard, Pope Gregory VII, Fulcher of Chartres, Abelard and Jacque De Vitry. Recommended: A year of college Latin and HIST 324 Medieval Europe. Alternate years.

LATIN 491 G ADVANCED LATIN TUTORIAL - AUGUSTAN AGE

(2-2-3) (SU/F). Translation and analysis of classical texts from authors of the "Golden Age of Latin Literature," such as Cicero, Caesar, Vergil and Livy. Survey of materials and methods for teaching Latin in secondary schools. Recommended: HIST 481/581 European Seminar on Augustus and the Golden Age of Rome. PREREQ: PERM/INST. Alternate years.

**LATIN 492G ADVANCED LATIN TUTORIAL - CONSTANTINIAN ERA (2-2-3) (SU/F).** Translation and analysis of Christian texts from the Constantinian Era, such as imperial biographies, laws, letters, and creeds. Survey of materials and methods for teaching Latin in secondary schools. Recommended: HIST 481/581 European Seminar on Constantine and the Late Roman Empire. PREREQ: PERM/INST. Alternate years.

# Master of Science in Instructional & Performance Technology

### College of Engineering Dean's Office:

Engineering Technology Building, Room 101 Telephone 208 426-1153 FAX 208 426-4466 http://coen.boisestate.edu

## Department of Instructional & Performance Technology Department Chair and Graduate Program

**Coordinator:** David Cox

Engineering Technology Building, Room 338

Telephone 208 426-1312 FAX 208 426-1970

http://coen.boisestate.edu/dep/ipt.htm

e-mail: lburnett@boisestate.edu

Full Graduate Faculty: David Cox, Mark Eisley,

Donald Winiecki

Adjunct Graduate Faculty: Bobbie Allaire, Marcia Belcheir, Yonnie Chyung, Larry Crookham, Daniel Eastmond, Theodore Eisele, Robert Erickson, Peggy Ertmer, Jo Ann Fenner, Diane Gayeski, Ben Hambelton, Timothy Newby, David Ripley, Penelope Schweibert, Donald Stepich

## 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, 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 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 Association of Schools and of Colleges and Universities.

Online classes are conducted primarily through asynchronous computer conferencing via the Web or Lotus Notes client. Courses taught in this medium enable students to view the questions and comments of the instructor and students threaded in a natural flow of class discussion. It 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 (within any given week) 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 tuition is 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. Online courses do not follow the normal schedule indicated 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://coen.boisestate.edu/dep/ipt.htm.

## **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:

- Documented evidence of an earned baccalaureate degree from an accredited institution.
- 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 to help determine satisfaction of this requirement.)

## **Admission Procedures:**

- Obtain a graduate application and submit it with a \$30 application fee to the Graduate Admissions Office. Note: International students should submit the International Student Graduate Application, a \$30 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.
- 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.
- 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://coen.boisestate.edu/dep/ipt/de\_checklist.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 BSU 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, and the IPT Program Committee will decide which credits, if any, will be accepted.

## **Degree Requirements**

## Master of Science in Instructional & Performance Technology Course Number and Title **Credits Core Requirements:** 24 IPT 530 Evaluation Methodology......4 IPT 535 Learning Theory for Instructional Designers .....4 IPT 536 Introduction to Instructional and Performance Technology ......4 IPT 537 Instructional Design......4 IPT 550 Delivery Technology for Instruction ......4 IPT 560 Human Performance Technology .......4 12 Thesis Option: Electives ......6 IPT 593 Thesis (Oral defense required) ......6 **Project Option:** Electives ......6 IPT 591 Project (Oral defense required)......6 **Portfolio Option:** Electives (Oral defense required) ......12 **Nonthesis Option:** Electives ......12 (Comprehensive examination required) **Total** 36 **Electives:** Appropriate electives will be selected by the student and his/her advisor based on an evaluation of the student's educational and professional goals. Note: Some courses may be offered only on campus or by distance. Suggestions: IPT 510 Collaborative Online Communications and Learning .....1 IPT 520 Video Delivery Systems......3 IPT 523 Authoring Skills for Instructional Multimedia.....3 IPT 524 Internet Applications for IPT Professionals ......3 IPT 525 E-Learning Principles and Practices ......3 IPT 529 Needs Assessment......3

## Master of Science in Instructional & Performance Technology (continued)

## **Electives (continued):** IPT 531 Overview of Research Design. Measurement, and Statistics......3 IPT 532 Ethnographic Research in Organizations ......3 IPT 540 Applications of Learning Styles in Instructional & Performance Technology ......3 IPT 551 Designing Computer-Based Training ......3 IPT 561 Human Factors Engineering......3 IPT 563 Job Performance Aids (JPAs) & Electronic Performance Support Systems (EPSSs)..........3 IPT 564 Motivation in Instructional and Performance Technology ......3 IPT 571 Management Concerns for Performance Technologists.....3 IPT 583 Selected Topics in Instructional Technology ......3 IPT 590 Practicum/Internship......Variable IPT 591 Project (Non-culminating activity)...Variable IPT 594 Extended Conference or Workshop......Variable IPT 595 Readings and Conference ......Variable IPT 596 Directed Research.....Variable IPT 597 Special Topics......Variable IPT 598 Seminar.....Variable

#### **Portfolio Option**

A student selecting the Portfolio experience will create and document products and projects from course projects, directed research, and work done for employers or clients. If this alternative is selected, at the end of a student's program the student will present and defend the portfolio and respond to any question that the examining committee might ask. These questions will deal primarily with the way the projects in the portfolio relate to the field of IPT and with the student's explanations of why they conducted particular projects in the

way presented. A student choosing the portfolio activity will be required to declare that decision (using the appropriate form) before they enroll in their 19th credit. An application to follow the portfolio path must be accepted by the student's advisor and Department Chair.

All students will be admitted with the tentative presumption of the portfolio approach, since it would be difficult for them to reconstruct the past if they do not capture it in professional documents during their earliest classes. Although students are initiated in the portfolio undertaking, they may select a different culminating activity at any time.

## **Academic Scholarship Requirement**

The IPT program has high academic expectations for its students. In general, grades below B cannot be used to meet the requirements of the M.S. degree in IPT. A student who earns a grade of C in a *required* course will be asked by the 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.

If a student leaves a course during a semester without following the proper procedures to drop or withdraw, the student will receive a final grade of 'F' in the course. A student who receives an 'F' in a REQUIRED course is automatically excluded from ANY further Master's degree work at Boise State University.

## -continued

## Master of Science in Instructional & Performance Technology (continued)

#### **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 courses are invited to come to campus to participate in the project/thesis option, or they may pursue the nonthesis or portfolio option with no obligation to be on campus at any time.

## **Course Offerings**

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

IPT — INSTRUCTIONAL/PERFORMANCE TECHNOLOGY IPT 450G METHODS AND MEDIA FOR DELIVERING INSTRUCTION VIA TWO-WAY COMPRESSED VIDEO (1-0-1)

**(F/S/SU).** This course will prepare students to make use of compressed video technologies for the delivery of academic and vocational instruction. It will help current and preservice teachers adapt their instructional methods and media for use in a two-way compressed video classroom.

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 communications 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 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 (3-0-3) (S).** Through analysis of case studies, independent fieldwork, guided practice, professional readings,

and other methods, students learn to use tools, data and systematic methods to assess organizational needs, identify performance problems and their causes, and help decision makers target the more critical problems to solve and the most feasible solutions. PREREQ: IPT 536

**IPT 530 EVALUATION METHODOLOGY (4-0-4) (SU).** 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 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 537 INSTRUCTIONAL DESIGN (3-0-3) (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 539 ARTIFICIAL INTELLIGENCE APPLICATIONS FOR INSTRUCTION (3-0-3) (Demand). This course provides students with an overview of artificial intelligence and an introduction to expert systems. Students learn how expert systems can be used to increase the efficiency and effectiveness of instruction and performance interventions.

## 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 FOR INSTRUCTION (4-0-4)**

**(F).** 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 packages by applying principles pertaining to the use of media and technologies in instruction. PREREQ: IPT 537 or PERM/INST.

**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 (3-0-3)(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, 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 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 590 PRACTICUM/INTERNSHIP (Variable).** Note: This course is used by IPT students as an internship experience. A prospectus requiring faculty sponsor, employer, and student agreement must be submitted <u>before</u> registering for the course; a brief report endorsed by the employer is required at the end of the semester; the student's final grade is determined by the faculty sponsor. IPT students may count no more than a total of 3 semester hours of IPT 590 toward their program.

IPT 591 PROJECT (0-V-6). Note: The IPT program uses the 591 Project course in both the traditional way and in a unique way to serve an additional purpose. Other BSU graduate programs typically use 591 Project only as a culminating activity requiring 6 credits of 591. If you are an on-campus student and you wish to use 591 in the traditional manner, you may do so by forming a faculty committee and following the requirements and procedures for the "Project Option." These are outlined in the section at the beginning of this catalog titled, "Project, Thesis, and Dissertation Requirements." The second (and more recommended) way in which IPT 591 may be used is to enroll in 1 to 3 credits (per project) and engage in an independent development project under faculty direction. (Research projects should be conducted under IPT 596.) You must first have the recommendation of your advisor and obtain a faculty sponsor for the project you would like to propose. Then prior to registration in IPT 591, an agreement form must be signed by the faculty sponsor. A total of 6 semester hours from IPT 591 may be applied toward your program.

**IPT 593 THESIS (0-V-6).** Note: Students conduct empirical research in an area related to IPT and report the results in the form of a thesis.

#### IPT 594 EXTENDED CONFERENCE OR WORKSHOP.

Such as: Web Design and Development, Pathways to Performance, Systems Thinking in Action

**IPT 595 READINGS AND CONFERENCE (Variable).** Note: With the aid of a faculty sponsor, the student selects a cohesive set of readings, and then discusses them with the faculty member on an agreed-upon schedule throughout the semester. The planned reading list may be changed (with faculty approval) to respond to emphases and interests stimulated by initial reading. Students are expected to do a least 50 hours of reading, thinking, and conferring for <u>each</u> credit hour earned.

**IPT 596 DIRECTED RESEARCH (Variable).** Note: At the discretion of the student's advisor and under the direction of a faculty sponsor, the student performs research on any approved subject relating to IPT. (A faculty sponsor must be found prior to registration, and an agreement form must be signed by the faculty sponsor prior to registration for the course.) A total of 9 semester hours from IPT 596 may be applied toward your program.

#### IPT 597 SPECIAL TOPICS (3-0-3) (Variable).

Such as: Leadership Principles for Performance Technologists, Creative Performance, Project Management, Front Page, Literature Review Techniques, Analysis of Instructional Design Issues in Professional Practice, Performance Consulting, Effective Training Strategies, Interactive Strategies for Improving Performance

IPT 598 SEMINAR (Variable).

# Master of Arts or Science in Interdisciplinary Studies

College of Arts and Sciences Science/Nursing Building, Room 106 Telephone 208 426-1414 FAX 208 426-3006

e-mail: ids@boisestate.edu

Director of Interdisciplinary Studies: Martin Schimpf

## **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 their education at the graduate level but do not seek specialized training in a single discipline. The program is not a substitute for the traditional graduate 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 who is Associate Dean of that College. 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 will recommend 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 *BSU 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:

## Master of Arts or Science in Interdisciplinary Studies

- 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:
  - a. meeting with the IDS Program Director to discuss expectations and be advised as to the remainder of the application process,
  - 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 transcripts and two letters of recommendation.
  - 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 or a preliminary description of their proposed program of study may do so. 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 Science in 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:

- 1. 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.
- 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.
- 8. 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 studied, 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 Management Information Systems

## Master of Science in Management Information Systems

College of Business and Economics Business Building, Room 318 Telephone 208 426-1126 FAX 208 426-1135 http://cobe.boisestate.edu/graduate e-mail: ranchust@boisestate.edu

Program Information: J. Renee Anchustegui Graduate Studies Director: Phillip Fry Full Graduate Faculty: Robert Anson, Thomas Foster, Phillip Fry, Lyman Gallup, Gary Green, David Groebner, Jerry LaCava, Robert Minch, Murli Nagasundaram, Patrick Shannon, Gregory Wojtkowski, Wita Wojtkowski Associate Graduate Faculty: Emerson Maxson, Sharon Tabor

## **General Information**

The Master of Science in Management Information Systems at Boise State University is designed to prepare candidates for a career in the rapidly changing field of Information Technology (IT).

In the MIS master's program, a minimum of 33 credits will be required for graduation. The M.S. in Management Information Systems 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; but the program length may not be longer than five years, except under exceptional circumstances.

The curriculum is comprised of 18 credits of required courses with an additional 15 credits of elective courses. The student and his/her graduate advisor will select the elective courses depending on the desired specialization. Admission to the program will be limited to 35 students a year.

Although the requirements of the BSU Graduate College also govern the M.S. in Management Information Systems degree program, the Certificate of Admission to enroll in graduate courses at BSU does not guarantee admission into the MIS program. Enrollment in the program is limited. In order to enroll in required courses, students must first be admitted to the MIS program or obtain permission of the program advisor.

Students are asked to subscribe to a listserv during their first semester of study.

## **Graduate Assistantships**

Graduate assistantships covering tuition and fee waivers may be available through research grants and contracts. Contact the MIS director for information on assistantships which may be available from these sources.

## **Application and Admission Requirements**

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 B318.

Applicants should have a demonstrated interest in the application of information technology to organizational betterment and should be adept in at least one procedural programming language.

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
  - a. Baccalaureate degree from an accredited college or university in a CS, CIS, or related (including engineering) field; and at least one year work experience in a computer information systems-related field; or
  - Baccalaureate degree in another field and at least three years of information systems work experience in a technical area.

## 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.

- 3. Official transcript of all post-secondary institutions attended.
- 4. 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 BSU or another accredited institution. These courses are not counted for the graduation requirements in this program.

- An essay discussing professional goals and reasons for desiring to study in Management Information Systems program at BSU.
- 7. Three letters of reference (one preferably from an academic source) which address the applicant strengths, weaknesses, benefits the applicant may receive from our MIS program and what the applicant can contribute to our MIS program.
- 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

## Master of Science in Management Information Systems

recommendations, responses to interview (if performed), and personal essay.

## **Application Deadline**

Applicants will be admitted only once a year for the Fall entry. To be considered, applicants must submit the admission packet by March 1. Prospective graduate students interested in financial aid should contact Financial Aid Office and consult the BSU catalog. Students will typically be notified of their admittance status by March 31 or October 31.

Applications for admission to the BSU Graduate College are available from BSU Graduate Admissions Office. Application materials for the MIS program are available from:

College of Business and Economics Graduate Studies Office Master of Science in MIS program Boise State University Boise, ID 83725-1600

## **Degree Requirements**

## Master of Science in Management Information Systems

Master of Science in Management Information	Systems
Course Number and Title	Credits
Required Courses  MIS 517 Database Management	18 15
will be counted in this category.  Student may also elect up to 6 credits from any othe graduate courses offered at BSU as part of the 15 credit requirement.	r
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 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.	d.

-continued

## Master of Science in Management Information Systems (continued)

MIS graduate students taking thesis credit will consolidate the knowledge and skills gained during their graduate studies and carry out an independent scholarly inquiry of a management information systems topic. The thesis will require the student to draw critically upon two or more disciplines studied, as well as to integrate disciplinary insights and to publicly defend the work. Thesis research and writing may begin no earlier than the second year of the program or following completion of 18 required credit hours. Students will be required to register for a maximum of 6 thesis credits, at least 3 credits per semester. Students must be registered for the thesis credit in the semester in which they are planning to defend the thesis.

Total

33

## **Course Offerings**

#### MIS — MANAGEMENT INFORMATION SYSTEMS

MIS 517 DATABASE 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). This course offers an overview of Information Engineering methodology. The topics covered include: phases of information engineering; implementation and planning of information engineering projects; techniques and tools of information engineering 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 530 OBJECT ORIENTED SYSTEM DEVELOPMENT (3-0-3)

**(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)(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 the information systems and the information technology function in an organization. It addresses both, behavioral and technical issues, and uses case studies as a means of exploring a number of decision situations in organizations. All issues are considered from the managerial perspective.

## Master of Science in Materials Science & Engineering

## MIS 557 INTERNATIONAL DIMENSIONS OF THE INFORMATION TECHNOLOGIES (3-0-3) (F). This course

considers international regional and national information technology development strategies and policies. The 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 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 580 SELECTED TOPICS - 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.

MIS 593 THESIS (0-V-6).

#### **BUSCOM — BUSINESS COMMUNICATION**

#### **BUSCOM 534 MANAGING TECHNICAL COMMUNICATION**

(3-0-3) (F). An advanced study of technical communication for managers and technical professionals who must originate, specify, and/or approve technical instructions, proposals, reports, and related 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.

# Master of Science in Materials Science & Engineering

#### **College of Engineering**

Engineering Technology Building, Room 101 Telephone 208 426-1153 FAX 208 426-4466 http://coen.boisestate.edu

## College of Arts & Sciences

Science and Nursing Building, Room 100 Telephone 208 426-1414 FAX 208 426-3006 http://artsci.boisestate.edu

## **Graduate Program Coordinator:** Amy Moll

Micron Engineering Center, Room 403C Telephone 208 426-5719 FAX 208 426-4800 E-mail: amoll@boisestate.edu

#### Graduate Program Information: Rex Oxford

Micron Engineering Center, Room 302A Telephone 208 426-5744

E-mail: roxford@boisestate.edu

**Full Graduate Faculty:** Charles Hanna, Dale Russell, Martin Schimpf

**Associate Graduate Faculty:** William Knowlton, Francisco Lamelas, Amy Moll, Alex Punnoose

## General Information

The Master of Science in Materials Science and Engineering is an interdisciplinary program offered by the College of Engineering and the College of Arts and Sciences with faculty involvement from the departments of Electrical Engineering, Mechanical Engineering, Physics, and Chemistry. The program provides students with the background and skills required for career enhancement, research and development, and admission into a Ph.D. program.

## Admission Requirements and Application Procedures

Admission Requirements: Applicants are required to have a baccalaureate degree from an accredited institution in engineering, physics, chemistry, or a closely related field, and must have achieved a cumulative undergraduate GPA of at least 3.0 on a 4.0 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, letters of reference, a Statement of Purpose, and scores on the GRE General Test.

**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 (1) take the GRE General Test and have the scores submitted to Boise State University (code R4018), (2) arrange to have three letters of recommendation submitted directly by the references to the Graduate Program Coordinator, and (3) submit a Statement of Purpose to the Graduate Program Coordinator. The Statement of Purpose should explain the student's motivation for pursuing a graduate degree in materials science and engineering and describe his or her research interests. 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 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.

## **Advisor and Supervisory Committee**

The Materials Science and Engineering Graduate Studies Committee will assign each admitted student a three-member supervisory committee consisting of an advisor who will serve as chair and two additional members appointed such that the committee contains at least one representative from the College of Engineering and at least one representative 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, including choice of course work to meet the degree requirements, and design, execution, and final evaluation of the thesis or project. The Materials Science and Engineering Graduate Studies Committee maintains oversight of the

## Master of Science in Materials Science & Engineering

program by monitoring the academic progress of each student and the student's performance as a graduate assistant (where applicable).

## **Degree Requirements**

The Master of Science in Materials Science and Engineering requires course work and either a thesis or a project as described below. Students will be expected to produce a written thesis or project proposal during their first year.

**Thesis Program:** The thesis program is for those students interested in research and development careers and who may want to pursue a Ph.D. in the future. It requires 30 graduate credits comprised of 24 course credits and 6 credits of thesis work. The thesis must be an original contribution by the student to the state of knowledge in materials science and engineering. Each student choosing the thesis program must pass a public oral defense of the completed thesis.

**Project Program:** The project program is for those students interested in becoming practicing engineers or scientists or technical project managers. It requires 30 graduate credits comprised of 24 to 27 course credits and 3 to 6 credits of project work. The project must be an application of established engineering and scientific methods and practices to the solution of a significant problem in materials science and engineering. Each student choosing the project program must pass a public oral defense of the completed project.

Maratan af	Calaman	in Mataria	la Caiamaa	& Engineering
master of	' Science	in <i>i</i> Materia	is ocience	& Engineering

<b>.</b>	
Course Number and Title	Credits
Required Courses:	13
ENGR 542 Bonding and Structure of Materials3	
ENGR 545 Solid State Thermodynamics and	
Kinetics4	
PHYS 515 Solid State Physics3	
PHYS 523 Physical Methods of Materials	
Characterization3	
<b>Elective Courses</b> (chosen from the following):	11-14
ENGR 540 Electrical, Optical, and Magnetic	
Properties of Materials3	
ENGR 541 Semiconductor Materials3	
ENGR 549 Advanced Topics in Materials	
Science & Engineering3	
CHEM 401G Advanced Inorganic Chemistry3	
CHEM 411G Analytical Chemistry3	
CHEM 440G Spectrometric Identification3	
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 Processing3	
PHYS 512 Introductory Quantum Mechanics3	
PHYS 530 Optics3	
PHYS 532 Thermal Physics3	
PHYS 534 Optics Lab1	

<b>—со</b>	ntinu	Jed—	-

Master of Science in Materials Science & Engineering (continued	<b>l</b> )
Project or Thesis	3-6
ENGR 591 or PHYS 591 or CHEM 591 Project3-6	
ENGR 593 or PHYS 593 or CHEM 593 Thesis6	
TOTAL	30

## **Course Offerings**

**CHEM — CHEMISTRY** 

## CHEM 401 G 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 non-transition metal chemistry. PREREQ: CHEM 322 or PERM/INST.

**CHEM 411G 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 440G SPECTROMETRIC IDENTIFICATION (3-0-3) (S). Identification of compounds using modern spectrometric techniques. PREREO: CHEM 318 and CHEM 321.

#### 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. PREREQ: 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: FF. 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/EE 540.

#### **ENGR — ENGINEERING**

ENGR 540 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.

## Master of Science in Mathematics Education

#### ENGR 541 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.

#### ENGR 542 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.

#### **ENGR 544 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.

#### **ENGR 545 SOLID STATE THERMODYNAMICS AND KINETICS**

(4-0-4)(F/S). The laws of thermodynamics, fundamental equation for multi-component elastic solids and electromagnetic media, equilibrium criteria. Application to solution thermodynamics, point defects in solids, phase diagrams. Phase transitions, Landau rule, symmetry rules. Interfaces, nucleation theory, elastic effects. Kinetics: diffusion of heat, mass and charge; coupled flows. PREREQ: CHEM 322 or ENGR 320 or PHYS 432.

ENGR 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.

#### PHYS - PHYSICS

#### PHYS 512 INTRODUCTORY QUANTUM MECHANICS (3-0-3)

**(F/S).** Introduction to fundamentals of quantum mechanics, including Schoedinger 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) (F/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.

# Master of Science in Mathematics Education

Department of Mathematics
Math/Geosciences Building, Room 235
Telephone 208 426-1172
FAX 208 426-1356
http://math.boisestate.edu
e-mail: office@math.boisestate.edu

Graduate Program Coordinator: Sharon Walen

Department Chair: Alan Hausrath

**Full Graduate Faculty:** Kathleen Ayers, Tomek Bartoszynski, Phillip Eastman, Alex Feldman, Alan Hausrath, Randall Holmes, Margaret Kinzel, Mary Jarratt Smith, Joanna Kania-Bartoszynska, Otis Kenny, Charles Kerr, Daniel Lamet, Marion Scheepers, Sharon Wale

Associate Graduate Faculty: Stephen Brill, Douglas Bullock,

Jodi Mead

## **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. People seeking secondary certification should consult with the Associate Chair of the Department of Mathematics to design a program leading to certification.

## **Admission Requirements**

Application for admission may be made by graduates of accredited institutions holding a bachelor's degree in mathematics secondary education, mathematics, elementary

## Master of Science in Mathematics Education

education, or a related degree. Regular admission may be awarded to applicants based on having earned a minimum grade point average, mathematics classes taken, and letters of recommendation. Continued enrollment in the program requires a minimum of 3.0 grade point average (B) and satisfactory progress toward a degree.

## **Degree Requirements**

Master of Science in Mathematics Education	n
Course Number and Title	Credits
Required Mathematics Education Courses:  MATHED 510 Mathematics Curriculum 7-122  MATHED 511 Survey of Research in  Mathematics Education I	7
Required Education Courses:  EDUC 503 Fundamentals of Educational Research	6
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.  All candidates who do not have content in their previous education equivalent to MATH 187 must take MATH 501.	
Choose ONE of the following options: HIGH SCHOOL OPTION MATH Content Courses Courses with a MATH prefix less than 500 require the 'G' option 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 Algebra2 or MATHED 524 The Teaching of Geometry2	8

	••		
—co	ntını	Jed	_

Master of Science in Mathematics Education (continued)	
Free Electives:	6
MATHED, Education, or another area (MATH 'G'	
option permitted)	
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** 

MATH 414G ADVANCED CALCULUS (4-0-4)(S)(Offered on demand odd-numbered years). 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 436G PARTIAL DIFFERENTIAL EQUATIONS (3-0-3) (F) (Offered on demand even-numbered 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.

MATH 456G LINEAR PROGRAMMING (4-0-4)(S)(Offered on demand even-numbered years). Simplex algorithm, two-phase method, simplex algorithm for problems with bounded variables, duality theory, postoptimality analysis, network simplex method, and the transportation and assignment problems. PREREO: MATH 301.

MATH 465G NUMERICAL ANALYSIS (4-0-4)(S) (Offered on demand odd-numbered years). The application of numerical methods to the interpretation and analysis of data, solution of equations, general iterative methods, approximation of functions, and error analysis. PREREQ: MATH 301 or MATH 333 or PERM/INST.

MATH 490G MATHEMATICS IN SECONDARY SCHOOLS (3-0-3) (F). Objective, content, and methods of secondary school mathematics programs. PREREQ: Six hours of mathematics completed at or above the 300-level.

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. Propositional and predicate logic; elementary set theory; introduction to proof techniques including mathematical induction; functions and relations; and basic principles of elementary number theory, combinatorial enumeration, and graph theory. PREREQ: MATH 143, MATH 147 or MATH 257.

MATH 505 ABSTRACT ALGEBRA (4-0-4) (F) (Offered on demand odd-numbered years). Sylow theorems, solvable groups, rings and ideals, rings of polynomials, factorization, fields and extensions, Galois Theory. PREREQ: MATH 301 and MATH 305.

MATH 511 INTRODUCTION TO TOPOLOGY (3-0-3)(S) (Offered on demand even-numbered years). Sets, metric spaces, topological spaces, continuous mappings, connectedness, compactness. PREREQ: MATH 314.

**MATH 547 HISTORY OF MATHEMATICS (3-0-3).** 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

## Master of Science in Mathematics Education

the developments in mathematics during the last century. PREREQ: PERM/INST.

#### MATH 564 MATHEMATICAL MODELING (3-0-3)(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. PREREQ: MATH 361 or PERM/INST.

**MATH 591 PROJECT (May be taken for 3 to 6 credits).** A project may include, but is not limited to, a library research paper, educational research or written curriculum with teaching materials. PREREQ: The student must be admitted to candidacy.

**MATH 593 THESIS (May be taken for 3 to 6 credits).** Original mathematical research or a new interpretation or novel exposition of existing mathematics. Course is arranged with supervising faculty member. PREREO: Admission to candidacy.

**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 FOR INSTRUCTION**

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 501 SURVEY OF PURE MATHEMATICS FOR

**TEACHERS (2-0-2) (SU).** The nature of mathematical knowledge, its history, meaning, methodology, and use. Generally topics will be selected from material in set theory, logic, number theory, algebra, geometry, or graph theory. PREREQ: Possession of a teaching certificate.

#### MATHED 502 SURVEY OF APPLIED MATHEMATICS FOR

**TEACHERS (2-0-2) (SU).** The nature of contemporary applied mathematics and its use in decision making in modern society. The emphasis will be on conceptual understanding and appreciation of the vast variety of problems which can be solved by mathematics. Generally topics will be selected from material in management science, statistics, social choice, or geometry of size and shape. PREREQ: Possession of a teaching certificate.

#### 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 564 MATHEMATICAL MODELING FOR TEACHERS

(1-0-1)(SU). The modeling process, its relation to the scientific method and problem solving, laboratory activities and examples appropriate to the middle school. PREREQ: One year experience teaching.

## 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 591 PROJECT (May be taken for 3 to 6 credits).** A project is a library research paper on some mathematics education topic new to the student. Weekly progress meetings are held with the instructor. PREREQ: Admission to candidacy.

#### MATHED 593 THESIS (May be taken for 3 to 6 credits).

Original mathematics education research or a new interpretation or novel exposition of existing research results. Course is arranged with supervising faculty member. PREREQ: Admission to candidacy.

#### 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.

## Master of Music

## Master of Music

Department of Music Morrison Center for the Performing Arts, Room C-100 Telephone 208 426-1596 FAX 208 426-1771 http://www.boisestate.edu e-mail: jbelfy@boisestate.edu

 $\textbf{Graduate Program Coordinator:} \ \textbf{Jeanne Belfy}$ 

Department Chair: James Cook

**Full Graduate Faculty:** Joe Baldassarre, John B. Baldwin, Jeanne M. Belfy, Lynn Berg, Marcellus Brown, James Cook, Elizabeth Gould, David Mathie, Del Parkinson, Craig Purdy, Laura Rushing-Raynes, Michael Samball, Liana Tyson, Giselle Wyers

**Associate Graduate Faculty:** J. Wallis Bratt, Michael Fischer, James Jirak, Linda Kline-Lamar, Ritchard Maynard, David Saunders.

Adjunct Graduate Faculty: John Bostron, Peggy Jo Wilhelm

## **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, current trends, history, and philosophy in music education and general 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 of Music is housed in the Morrison Center for the Performing Arts, with state-of-the-art performance, rehearsal, and recording facilities, including a 2,000-seat concert hall and a 200-seat recital hall. Several Steinway pianos, including a 7' and a 9' grand, are the generous gifts of Mr. and Mrs. William K. Dunkley and Dunkley Music of Boise. The J.W. Cunningham Memorial Organ, a three-manual Austin organ of 46 ranks and 59 registers, is housed in the Hemingway Western Studies Center. The Department also owns a double-manual Flemish harpsichord and a Rodgers practice organ. A full-time faculty of twenty services an undergraduate program of about 250 music majors, and offers a full range of vocal and instrumental expertise, with the assistance of many professional adjunct instructors.

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.

## **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. It is expected that students seeking Music Education Emphasis will meet basic undergraduate requirements for public school certification. 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.	
Core Courses:     MUS 503 Intro to Music Research	9
2. Non-Music Education Courses:  Music Theory*	12

-continued -

Master of Music, Music Education (continued	d)
Music Electives:     A. 6 credits in the student's area of emphasis:     elementary general music, choral music, or     instrumental music     B. 3 credits additional approved electives in music	6
C. No more than four (4) workshop elective credits, of which one may be a music conference credit, may be applied towards the degree.	1-4
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 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 Music Theory and Music History credits earned may include but not be limited to Special Topics.	
TOTAL	33-36

Master of Music, Performance	
Course Number and Title	Credits
<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 Intro to Music Research	12
Performance Courses:  MUS 563, 564 Pedagogy I, II, or additional Music History* and/or Music Theory*	17-18

—continued —

Master of Music, Performance (continued)	
Performance Culminating Project:	3
MUS-APL 546 Graduate Solo Performance Recital	
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 Music Theory and Music History credits earned	
may include but not be limited to Special Topics.	
**Required of all vocal performance majors.	
TOTAL	32

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 Intro to Music Research	12
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 Music Theory and Music History credits earned may include but not be limited to Special Topics.	
TOTAL	31

## Master of Music

## **Course Offerings**

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

 $\begin{tabular}{ll} MUS-APL-MUSIC APPLIED-PERFORMANCE CLASSES, \\ RECITALS \end{tabular}$ 

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 MU103 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. PREREQ: PERM/INST/ CHAIR. Graded Pass/Fail.

**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. PREREQ: PERM/INST/CHAIR. Graded Pass/Fail.

## $\begin{tabular}{ll} MUS-PRV-MUSIC PRIVATE LESSONS PERFORMANCE \\ STUDIES \end{tabular}$

Students will be assigned on the basis of an audition. Performance, Technical Study, Musical Interpretation, Literature, and Teaching Technique will be stressed.

All 500 level MC 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 350G ORCHESTRA (0-5-1) (F/S). The Boise State University Orchestra is composed of students and experienced

musicians and prepares several concerts each season from the standard repertoire. An elective for non-music majors. Graduate music students will be expected to assume leadership roles or will be assigned extra duties within the orchestra and/or its organization. Audition is required for new students.

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. No 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. 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 INSTRUMENTAL ENSEMBLE (0-V-1) (F/S). Used for concert band, percussion ensemble, keyboard ensemble, and whatever else needed, by section number.

MUS - MUSIC, GENERAL

MUS 355G ROCK MUSIC: ITS PERFORMANCE AND HISTORY (3-0-3) (F/S) (Odd-numbered 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. PREREQ: MUS 220 and PERM/INST. History elective.

MUS 423G SIXTEENTH-CENTURY COUNTERPOINT (3-0-3) (F) (Odd-numbered 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. PREREQ: MUS 220 or equivalent. Theory elective.

MUS 424G COUNTERPOINT SINCE 1600 (3-0-3)(F) (Evennumbered 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. PREREQ: MUS 220 or equivalent. Theory elective.

MUS 454G SECONDARY GENERAL MUSIC METHODS (2-0-2) (S) (Offered alternate, odd-numbered 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) (Evennumbered 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 studies.

MUS 466G DICTION FOR SINGERS II (2-0-2) (S) (Evennumbered 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) (Offered alternate even-numbered 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)(S). 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. PREREQ: MUS 100 or MUS 101. History elective.

#### 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-numbered years). This course considers the role of music in society and culture, and examines several musical traditions beyond the scope of Western art music. PREREQ: Admission to Master of Music program or PERM/INST. History elective.

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 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,

## Master of Public Administration

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.

**MUS 591 PROJECT (0-V-3).** Details for the culminating project can be found in requirements for Master's degree in secondary education, music emphasis.

**MUS 593 THESIS (0-V-6).** A scholarly paper embodying results of original research which are used to substantiate a specific view.

MUS 596 DIRECTED RESEARCH.

## **Master of Public Administration**

Department of Public Policy and Administration Public Affairs and Art West Building, Room 127 Telephone 208 426-1476 FAX 208 426-4370 http://ppa.boisestate.edu e-mail: mpa@boisestate.edu

Department Chair: James B. Weatherby
Director of Graduate Studies: Les Alm
Full Graduate Faculty: Les Alm, Patricia Fredericksen,
John Freemuth, Richard Kinney, Janet Mills, Gary Moncrief,
James Weatherby, Stephanie Witt
Adjunct Graduate Faculty: Daniel Chadwick,

**Adjunct Graduate Faculty:** Daniel Chadwick Kenneth McClure, Charles Moss, Jeffrey Youtz

## **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, BSU 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 six in the six states surrounding Idaho.

The MPA is designed to prepare pre-service students and inservice 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 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 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*.

### Master of Public Administration

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 eight 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 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 BSU. 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 an advisor in the Department 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.
- 4. Submit official transcripts from all previous academic institutions to the Graduate Admissions Office.
- 5. Submit three letters of reference, in which the applicant's academic potential is evaluated, to the 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 March 1 for Fall admission and October 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.

## **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.	
<b>Course Selection:</b> Selection of courses is to be made in consultation with the student's academic advisor.	
Core Requirements:	21
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 Sector3 PUBADM 501 Public Policy Process	
PUBADM 503 Research Methods in Public Administration3	
PUBADM 504 Public Budgeting and Financial Administration3	
PUBADM 505 Public Personnel Administration3 PUBADM 600 Assessment3	
Area of Emphasis Requirements:	12
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.	
1. <b>General Public Administration:</b> 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.	
2. Environmental and Natural Resource Policy and Administration:	
PUBADM 540 Contemporary Issues in Natural	
Resource and Environmental Policy and Administration3	
PUBADM 541 Environmental and Regulatory Policy and Administration3	
PUBADM 542 Science, Democracy and the Environment	
PUBADM 543 Public Land and Resource Policy and Administration3	

-continued

## Master of Public Administration

Master of Dublic Administration (continued)

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 Administration3	
Nine credits chosen from the following courses	
or approved Selected or Special Topics courses:	
PUBADM 520 Community and Regional	
Planning3 PUBADM 521 Intergovernmental Relations3	
PUBADM 540 Contemporary Issues in Natural	
Resource and Environmental Policy and	
Administration <b>or</b> PUBADM 541	
Environmental and Regulatory Policy and	
Administration3	
PUBADM 550 The Executive and the	
Administrative Process3	
Selected or Special Topics courses will be offered to	
supplement area of emphasis requirements.	
Electives: Students must complete 6 elective	6
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 596) which relates to their area of emphasis.	
TOTAL	39
<b>Transfer of Graduate Courses:</b> Because of a	
cooperative agreement made with Idaho State	
University and the University of Idaho, the MPA	
University and the University of Idaho, the MPA credits earned at those institutions can, with approval,	
University and the University of Idaho, the MPA credits earned at those institutions can, with approval, be accepted into the Boise State University program.	
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	
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.	
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.  Public Service Internship: Those MPA students	6
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.  Public Service Internship: Those MPA students without significant administrative experience in a	6
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.  Public Service Internship: Those MPA students without significant administrative experience in a public sector or other public affairs agency are to	6
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.  Public Service Internship: Those MPA students without significant administrative experience in a public sector or other public affairs agency are to complete a public service internship. The internship	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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.	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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.	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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	6
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.  Public Service Internship: Those MPA students without significant 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.	6
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.  Public Service Internship: Those MPA students without significant 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	6

## **Course Offerings**

identified.

#### 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. PREREO: 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

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 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 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

## **Master of Public Administration**

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 596 DIRECTED RESEARCH (3-6 credits).** Students work with a single professor in completing a research project that includes original research.

**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.

# Master of Science in Raptor Biology

Department of Biology Science/Nursing Building, Room 223 Telephone 208 426-4033 FAX 208 426-4267 http://www.boisestate.edu/biology e-mail: jbeltho@boisestate.edu

**Graduate Program Coordinator:** James Belthoff **Department Chair:** James Munger

Full Graduate Faculty: Marc Bechard, James Belthoff, Russell Centanni, Alfred Dufty, Cheryl Jorcyk, Peter Koetsier, James Long, Richard McCloskey, James Munger, Stephen Novak, Julia Thom Oxford, Ian Robertson, Troy Rohn, Robert Rychert, Marcelo Serpe, James Smith, Marcia Wicklow-Howard

Adjunct Graduate Faculty: Charles Baker (Emeritus),
Jonathan Bart, Kenneth Brewer, William Burnham, Tom Cade
(Emeritus), Dorothy Douglas (Emerita), Susan Earnst,
David Eldridge, Mark Fuller, Nicholas Hadjokas,
Stuart Hardegree, Charles Harris, Cynthia Keller-Peck,
Lloyd Kiff, Steven Knick, Michael Kochert, Daniel Leavell,
Yongsheng Ma, Carl Marti, Jr., Bill Mattox, Rosemary Mazaika,
Richard Olson, Rebecca Pullen, Bruce Rieman, Gary Roloff,
Roger Rosentreter, Randall Ryan, Victoria Saab, Rex Sallabanks,
Nancy Shaw, Michael Spence, Karen Steenhof, Dennis Stevens,
Robert Van Kirk, Richard Watson, David Whitacre,
Rick Williams, Denise Wingett, Eric Yensen

## **General Information**

The Master of Science degree program in Raptor Biology is designed for students to enhance their knowledge and understanding of raptor biology and ecology.

## **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 on 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 \$30.00 matriculation fee. Please submit the application *PRIOR* to submitting any additional items.
  - Have the Registrar(s) of ALL post-secondary institutions attended send official transcripts to the Graduate Admissions Office.
  - Have Graduate Record Exam scores forwarded to the Graduate Admissions Office.

- 2. 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 raptor biology at Boise State University. Applicants should also discuss research interests, especially as they mesh with those of faculty members. Also note any contact you have had with faculty members.
  - Three letters of recommendation.

All individuals admitted to REGULAR STATUS as graduate students in raptor biology must have:

- an undergraduate GPA of at least 3.0 on a 4-point system;
- results that average in the 50th or higher percentile in the verbal, quantitative, and analytical 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 Graduate Student Oversight Committee; final decisions on admission will depend on qualifications of the candidates and openings that exist.

Each student who has been accepted into our program 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 research, help choose appropriate graduate course work, evaluate the thesis and conduct the final defense.

#### Financial Aid

Teaching Assistantships that include a stipend, a tuition and fee waiver, and student health insurance will be available on a competitive basis. Additional support for master's research projects is available from faculty members. 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**

Students will be expected to produce a written thesis proposal and give an oral presentation of that proposal during their first year. Completion of the program requires a grade of B or better for all courses applied to the 30 credits required, an oral defense of the thesis results, and an exit seminar to present results to faculty, students, and the public. All requirements for the degree and graduation must be completed within seven years.

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 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/COREQ: 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, specialization, 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 or 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 chisquare 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 423 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.

**BIOL 505 APPLIED RAPTOR BIOLOGY (0-3-2)(F)(Offered odd-numbered 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 predator-prey 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) (Offered odd-numbered 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. PREREO: BIOL 323 and BIOL 343.

BIOL 517 SPECIES AND SPECIATION (3-0-3)(F)(Offered odd-numbered 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) (Offered odd-numbered 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. PREREO: BIOL 323.

BIOL 526 INSECT ECOLOGY (3-0-3) (S) (Offered evennumbered years). An in-depth exploration of insect ecology,

evolution and behavior. Topics include life history evolution, insectplant 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) (Offered odd-numbered 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 BIOL 323G 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) (Offered odd-numbered 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) (F) (Offered odd-numbered 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. PREREO: BIOL 323 or BIOL 323G 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) (Offered odd-numbered 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)(Offered odd-numbered 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 in aquatic biology. Topics vary, and may include community dynamics of algae, fish zooplankton, and benthic invertebrates; trophic relationships; stream and reservoir management; primary and secondary 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

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 579 RESEARCH IN THE 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**

PERM/INST.

**BOT 302G PLANT ANATOMY AND MICROTECHNIQUE (3-3-4) (F) (Offered odd-numbered 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)(Offered odd-numbered years).** 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)(Offered even-numbered 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. PREREQ: BIOL 323 or BIOL 323G or PERM/INST.

BOT 541 PLANT DEVELOPMENTAL BIOLOGY (3-3-4)(S) (Offered even-numbered 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: BIOL 202 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)(Offered odd-numbered years).** Birds as examples of biological principles: classification, identification, ecology, behavior, life histories, distribution, and adaptations of birds. Two weekend field trips. PREREQ: BIOL 191-192 or PERM/INST.

**ZOOL 400G VERTEBRATE HISTOLOGY (2-6-4)(S)(Offered even-numbered 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 421 G 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: BIOL 202, CHEM 317, PERM/INST.

**ZOOL 515 AVIAN PHYSIOLOGY (3-0-3)(F)(Offered odd-numbered 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).** 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) (Offered evennumbered 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 BIOL 323G or PERM/INST.

**ZOOL 535 BEHAVIORAL ENDOCRINOLOGY (3-0-3)(F)** (Offered even-numbered 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.

# Master of Arts in School Counseling

Department of Counselor Education Education Building, Room 612 Telephone 208 426-1219 or 426-1821 e-mail: kcoll@boisestate.edu

**Department Chair:** Kenneth Coll

**School Counseling Program Coordinator:** 

Bobbie Birdsall

Addiction Studies Coordinator: Ken Coll

Full Graduate Faculty: Bobbie Birdsall, Kenneth Coll,

Sara LaRiviere, Margaret Miller, Jim Nicholson **Adjunct Graduate Faculty:** Mary L. Ensley,

Brenda Freeman, Susan Reuling Furness, Tim Furness, Nancy Kobe, Steven Lanzet, Phyllis Nodler, Jim Schmidt,

Barry Watts

#### **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. 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 as an additions counselor.

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):

- a letter of application describing your professional experiences <u>as they support your desire to be a school</u> <u>counselor</u>, specific career goals, and reasons for your <u>interest in this program</u>. Include in the letter your <u>vision</u> about the role of a school counselor in the public schools;
- <u>up-to-date resume</u>;

- <u>complete</u> post-secondary transcripts (noncertified copies accepted); and
- three current, sealed letters of reference <u>supporting your</u> <u>qualifications for a school counseling program and for</u> graduate work.

Students applying for the Addiction Studies emphasis will have an additional interview and must certify two years substance free.

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.

## **Degree Requirements**

The Master of Arts in School Counseling degree consists of a minimum of sixty (60) semester hours of course work designed to prepare professionals to counsel with youth in school 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).

Master of Arts in School Counseling	
Course Number and Title	Credits
Professional Identity	6
COUN 501 Foundations in Counseling3	
COUN 568 Seminar1	
COUN 519 Elementary School Counseling2	
or	
COUN 520 Secondary School Counseling2	
or	
COUN 529 Middle School Counseling2	
Social and Cultural Diversity	7
COUN 508 Special Needs, Ethics and Legal	
Issues in Counseling3	
COUN 509 Culturally Aware Counseling3	
COUN 566 Seminar1	
Human Growth and Development	7
COUN 511 Family Systems3	
COUN 506 Lifespan Development2	
COUN 530 Managing Developmental School	
Programs2	

—continued—

Master of Arts in School Counseling (continued)	
Career Development	3
COUN 507 Career Development and Vocational	
Counseling3	
Helping Relationships	6
COUN 502 Counseling Theories and	
Applications I3	
COUN 505 Counseling Theories and	
Applications II3	
Group Work	3
COUN 513 Group Counseling3	
Assessment	6
COUN 504 Measurement and Evaluation in School	
Counseling3	
COUN 547 Chemical Addiction and Violence	
Prevention3	
Research and Program Evaluation	3
COUN 512 Statistics and Research Design3	
Practica	4
COUN 514 Counseling Practicum I2	
COUN 516 Counseling Practicum II2	
Internships	6
COUN 526 Internship in Counseling I3	
COUN 528 Internship in Counseling II3	
Electives	9
TOTAL	60

## **Addiction Studies Requirements**

The 60-credit Master of Arts in School 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 Studies 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

met professional addictions standards and promote the master level addictions counselors' professional identity, visibility, and accountability. This emphasis 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).

#### Master of Arts in School Counseling, Addiction Studies

Course Number and Title	Credits
CORE REQUIREMENTS	51
COUN 519	
COUN 520	
COUN 529	
COUN 547	
EMPHASIS REQUIREMENTS	8
COUN 545 Foundations of Chemical	
Dependency3	
COUN 548 Assessing and Managing Adolescent	
Substance Abuse and Mental Health Risks3	

-continued

Master of Arts in School Counseling (continued)	
COUN 550 Diagnoses, Assessment,	
and Treatment Planning2	
ADDITIONAL CREDENTIAL REQUIREMENTS	3-6
For MAC add:	
COUN 544 Assessment of Alcohol and	
Drug Problems, Part I3	
For CADC add:	
COUN 546 Assessment of Alcohol and	
Drug Problems, Part II3	
TOTAL	62-65

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 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 Counselor Education Department Chair. 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 personal individual or group counseling sessions with a licensed counselor not involved in Program instruction.

## Counseling Program Sequence (Suggestion only)

See the course descriptions for prerequisites.

Fall: Year 16 credits
COUN 501 Foundations in Counseling (3)
COUN 502 Counseling Theories and Applications I (3)
Spring: Year 1
COUN 505 Counseling Theories and Applications II (3)
COUN 509 *Culturally Aware Counseling (3)
COUN 547 *Chemical Addiction and Violence Prevention
(3) (offered even years)
Summer: Year 1
COUN 506 *Lifespan Development (2)
COUN 512 *Statistics and Research Design (3)
COUN 530 *Managing Developmental School Programs (2)
Fall: Year 28-10 credits
COUN 508 *Special Needs, Ethics and Legal Issues in
Counseling (3)
COUN 511 *Family Systems (3)
COUN 514 Counseling Practicum I (2)
Electives (2)

Spring: Year 25-11 credits
COUN 507 *Career Development and Vocational Counseling (3)
COUN 516 Counseling Practicum II (2)
Electives (2-6)
Summer: Year 26 credits
COUN 504 *Measurement and Evaluation in School
Counseling (3)
COUN 513 Group Counseling (3)
Fall: Year 34-8 credits
COUN 526 Internship in Counseling I (3)
COUN 566 Seminar (1)
Electives (2-4)
Spring: Year 34-8 credits
COUN 528 Internship in Counseling II (3)
COUN 568 Seminar (1)
Electives (2-4)
Program Minimum Total60 credits

Offered fall of odd numbered years.
COUN 520 \*Secondary School Counseling (2 cr.)
Offered spring of even numbered years.

Note: Students must take at <u>least one</u> course from the following: COUN 519 \*Elementary School Counseling (2 cr.)

COUN 529 \*Middle School Counseling (2 cr.) Offered fall of even numbered years.

See current *Boise State University Schedule of Classes* for additional elective opportunities.

\*Courses available to non-program counselors and graduate students.

# Addiction Studies Emphasis Program Sequence (Suggestion only)

See the course descriptions for prerequisites.

Fall: Year 1
COUN 502 Counseling Theories and Applications I (3)
COUN 545 *Foundations of Chemical Dependency (3)+ ++
Spring: Year 1
COUN 505 Counseling Theories and Applications II (3)
COUN 509 *Culturally Aware Counseling (3)
COUN 547 *Chemical Addictions and Violence
Prevention (3)+ ++
Summer: Year 1
COUN 506 *Lifespan Development (2)
COUN 512 *Statistics and Research Design (3)
COUN 530 *Managing Developmental School Programs (2)
Fall: Year 211 credits
COUN 508 *Special Needs, Ethics and Legal Issues in
Counseling (3)
COUN 511 *Family Systems (3)
COUN 514 Counseling Practicum I (2)
COUN 544 Assessment of Alcohol and Drug Problems,
Part I (3)+++
Spring: Year 28 credits
COUN 507 *Career Development and Vocational
Counseling (3)
counseling (b)

COUN 516 Counseling Practicum II (2) COUN 548 *Assessing and Managing Adolescent Substance Abuse and Mental Health Risks (3) Summer: Year 2
Fall: Year 3
COUN 566 Seminar (1)
COUN 550 DSM IV: Diagnoses, Assessment, and Treatment
Planning (3) + ++
Electives (2-4)
Spring: Year 34 credits
COUN 528 Internship in Counseling II (3)
COUN 568 Seminar (1)
Electives (2-4)
Total66-70 credits

+ Required for Master Addictions Counselor (MAC) Credential

(10-16 credits in addictions)

++ Required for State of Idaho Credential of Advanced Certified Alcohol and Drug Counselor (CADC/ISAS)

Note: Students must take at <u>least one</u> course from the following: COUN 519 Elementary School Counseling (2 cr.)

Offered fall of odd numbered years.

COUN 520 Secondary School Counseling (2 cr.)
Offered spring of even numbered years.

COUN 529 Middle School Counseling (2 cr.)
Offered fall of even numbered years.

## **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

<sup>\*</sup>courses available to non-program counselors and graduate students.

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.

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)(S).

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 506 with a 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 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 521 OUTREACH THROUGH PARENT EDUCATION**

COUN 530 or Masters in Counseling.

(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 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 sources 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: Permission of Department Chair and faculty.

COUN 541 ALCOHOL/DRUG ABUSE AND THE FAMILY (MHLTHSCI 544) (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. This course may be taken for MHLTHSCI or COUN credit, but not both.

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. PREREQ: Graduate or Senior standing.

COUN 544 ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART I (MHLTHSCI 564) (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. This course may be taken for MHLTHSCI or COUN credit, but not both.

**COUN 545 FOUNDATIONS OF CHEMICAL DEPENDENCY** (MHLTHSCI 545) (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. This course may be taken for MHLTHSCI or COUN credit, but not both. PREREQ: PERM/INST.

COUN 546 ASSESSMENT OF ALCOHOL AND DRUG PROBLEMS, PART II (MHLTHSCI 565) (3-0-3) (S). Clinical application of concepts and principles presented in Part I. Special emphasis is placed on case management techniques. Legal, social, ethical, and health implications will be investigated. This course may be taken for MHLTHSCI or COUN credit, but not both. PREREQ: MHLTHSCI 564 or COUN 544 or PERM/INST.

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 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. PREREQ: Graduate or Senior standing.

COUN 549 COUNSELING TECHNIQUES FOR CHEMICAL DEPENDENCY (MHLTHSCI 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. This course may only be taken for either MHLTHSCI or COUN credit, but not both. PREREQ: COUN 505 or Masters in Counseling.

COUN 550 DIAGNOSES, ASSESSMENT, AND TREATMENT PLANNING (3-0-3) (F) (Odd years). Examination of the concepts of "mental disorders," DSM classification systems, and the diagnostic benefits & 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). Development of the assessment—diagnostic—treatment links, including treatment planning. PREREQ: Graduate or Senior standing.

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 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.

## Master of Social Work

School of Social Work Education Building, Room 716 Telephone 208 426-1568 FAX 208 426-4291

e-mail: wwhitak@boisestate.edu

School of Social Work Director: Martha Wilson Graduate Program Coordinator: William Whitaker Full Graduate Faculty: Gretchen Cotrell, Daniel Harkness, Juanita Hepler, Daniel Huff, William Whitaker, Martha Wilson Associate Graduate Faculty: Robin Allen,

Associate Graduate Faculty: Robin Allen Denice Goodrich Liley, Douglas Yunker Adjunct Graduate Faculty: James Knapp

#### **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 beginning September 1. Applications for both programs are processed and reviewed starting January 1 on a continuous basis until program closing dates. 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 (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:

- Completion of the BSU 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 course work 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.

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 Skills2	
SOCWRK 512 Human Development Through the	
Life Cycle3	
SOCWRK 514 Ethnicity, Gender and Class1	
SOCWRK 530 Foundation Research I3	
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	

-continued

#### Master of Social Work

Master of Social Wo	ork (continued)	
SOCWRK 575 Advanced Practicum Total Credits	n6	15
Spring Semester SOCWRK 525 Advanced Clinical P Individuals and Families SOCWRK 526 Mental Disorders SOCWRK 576 Advanced Practicum *2 Electives - 2 Credits Each Total Credits	3 3 n II6 4	16
*SPECIALIZATION ELECTIVES-	M	61
Selected Topics	ar to year, ertinent issues.) School Social Work Women's Issues Aids Issues Family Therapy Health Issues Group Therapy Political Social Work	

	Master of Social Work Advanced Standing	
	Course Number and Title	Credits
bac adi sta in . 514 sch	plicants who are graduates of a CSWE accredited ccalaureate program in Social Work may request mission to the advanced program. The advanced inding option is an eleven-month program beginning July of each year. Students will complete SOCWRK 1, SOCWRK 521, and SOCWRK 530 in summer thool and enter the second year of the two-year ogram that fall.	
int	iteria for admission for Advanced Standing study 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 additional equivalent content.  3. 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	

—continued—

Master of Social Work Advanced Standing (continued)	
All other requirements equivalent to regular admissions.	
Note: Applicants may not receive academic credit for work experience in the field.	
TOTAL ADVANCED STANDING	38

## **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.

#### **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.

#### 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.

SOCWRK 505 SOCIAL POLICY ANALYSIS (3-0-3) (S). SOCWRK 505 critically 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.

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.

**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.

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.

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: 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 wellbeing 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.

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.

**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.

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.

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.

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.

**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.

**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 503.

**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. PREREO: SOCWRK 503.

SOCWRK 580 SELECTED TOPICS
SOCWRK 580 SOCIAL WORK WITH PEOPLE OF COLOR.
SOCWRK 581 VIOLENCE IN THE FAMILY.
SOCWRK 582 SOCIAL WORK WITH THE ELDERLY.
SOCWRK 583 ALCOHOLISM AND SUBSTANCE ABUSE.

### Master of Arts in Technical Communication

SOCWRK 584 SOCIAL WORK PRACTICE WITH HISPANIC POPULATIONS.

**SOCWRK 585 ADVANCED SOCIAL WORK PRACTICE IN** ORGANIZATION AND COMMUNITIES.

SOCWRK 586 GROUP THERAPY.

SOCWRK 587 SOCIAL WORK SUPERVISION.

## Master of Arts in **Technical Communication**

Department of English Liberal Arts Building, Room 208 Telephone 208 426-3088 or 426-1246 FAX 208 426-4373

http://www.boisestate.edu/techcomm e-mail: mmarkel@boisestate.edu

**Director of Technical Communication:** Mike Markel

**Department Chair:** Bruce Ballenger

Full Graduate Faculty: Bruce Ballenger, John Battalio, Jon Dayley, Richard Leahy, Mike Markel, Roger Munger, Michelle Payne, Bruce Robbins, Mary Ellen Ryder,

Karen Uehling

Adjunct Graduate Faculty: James Frost, Kevin Wilson

### **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 hightechnology 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 constituenciesfrom 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 onscreen production. Finally, students take a course in oral communication skills, because 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**

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.)

Course Number and Title	Credits
ENGL 511 Introductory Seminar in Technical	
Communication	3
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	
Communicators	3
ENGL 521 Topics in On-screen Document	
Production	3
ENGL 590 Internship	3
ENGL 591 Project	3
or	
ENGL 593 Thesis	
Electives (no more than 3 credits from outside	
technical communication)	3
TOTAL	33

## Master of Arts in Technical Communication

# Master of Arts in Technical Communication Alternative Program 2

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 advisor may permit you to substitute three additional elective credits for the internship.)

Course Number and Title	Credits
ENGL 511 Introductory Seminar in Technical	
Communication	3
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	
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.)

## **Course Offerings**

ENGL - ENGLISH

REQUIRED COURSES

**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 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. PREREQ: 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. PREREQ: 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 clients, group discussion, and technical presentations that incorporate presentation software. PREREQ: ENGL 515 or PERM/INST.

**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 cognitive science, software psychology, and human factors. This course may be taken twice for credit. PREREQ: ENGL 515 or PERM/INST.

**ENGL 590 INTERNSHIP (0-10-3) (F/S).** 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.

#### **ELECTIVE COURSES**

**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 manuals. PREREQ: ENGL 402 or PERM/INST.

**ENGL 415G ON-SCREEN DOCUMENT PRODUCTION (3-0-3) (F/S).** An advanced study and application of the principles involved in designing, creating, and managing information on the screen. Topics include the relationship between screen layout and readability;

## **Advanced Certificate in Technical Communication**

techniques for integrating text, graphics, and multimedia; principles of writing and indexing on-screen instructional materials; and the use of online help and Web-authoring software. Students will practice effective hypertext and screen-design techniques in producing basic electronic documents, such as online help and Web sites. PREREQ: ENGL 402 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: ENGL 500 and LING 305 or equivalent or PERM/CHAIR.

#### ENGL 518 WRITING FOR THE COMPUTER INDUSTRY (3-0-3)

(F/S). The study and application of principles for creating effective print and online documentation within the computer industry. 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 in the computer industry. 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 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.

## **Advanced Certificate** in Technical Communication

Department of English Liberal Arts Building, Room 208 Telephone 208 426-3088 or 426-1246 FAX 208 426-4373 http://www.boisestate.edu/techcomm e-mail: mmarkel@boisestate.edu

**Director of Technical Communication:** Mike Markel

**Department Chair:** Bruce Ballenger

Full Graduate Faculty: Bruce Ballenger, John Battalio, Devan Cook, Jon Dayley, Richard Leahy, Mike Markel, Roger Munger, Michelle Payne, Bruce Robbins,

Mary Ellen Ryder, Karen Uehling

Adjunct Graduate Faculty: James Frost, Kevin Wilson

### **General Information**

The Advanced Certificate in Technical Communication is intended for advanced undergraduate and graduate students. A student in geophysics might wish to earn the Advanced Certificate because he knows that he will be making

presentations at professional conferences and writing journal articles. An accountant in the Boise area might wish to improve her technical communication skills to enhance her performance on the job.

The Advanced 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.

Students who wish to substitute an alternative course for one of the two listed electives may petition the Director of Technical Communication.

## **Application and Admission Requirements**

There are no application and admission requirements. You must fulfill the prerequisites of each course you choose. After completing the five courses with a grade of at least C in each, see the Director of Technical Communication.

## **Certificate Requirements**

Advanced Certificate in Technical Communica	tion
Course Number and Title	Credits
ENGL 512 Technical Rhetoric and Applications	3
ENGL 513 Technical Editing	3
ENGL 514 Technical Communication Ethics	3
Two of the following:	6-7
ART 333 Computer Graphics for Artists4	
COMM 307 Interviewing3	
COMM 361 Organizational Communication3	
COMM 478 Public Relations3	
COMM 481 Studies in Interpersonal Communication3	
CIS 310 Introduction to Management Systems3	
ENGL 511 Introductory Seminar in Technical	
Communication3	
ENGL 515 Visual Rhetoric and Information Design3	
ENGL 516 Topics in Print Document Production3	
ENGL 517 Oral Communication for Technical	
Communicators3	
ENGL 518 Writing for the Computer Industry3	
ENGL 519 Technical Publications Management3	
ENGL 521 Topics in On-screen Document	
Production3	
IPT 537 Instructional Design3	
LING 305 Introduction to Language Studies3	
MGMT 401 Organizational Behavior3	
MGMT 405 Management of Continuous Learning3	
MKTG 306 Promotion Management3	
SOC 390 Conflict Management3	
SOC 487 Organizational Theory and	
Bureaucratic Structure3	
EDUC 574 Instructional Courseware Design3	
TOTAL	15-16

## **Advanced Certificate in Technical Communication**

## **Course Offerings**

### ART 333 COMPUTER GRAPHICS FOR ARTISTS (2-4-4)(F/S).

This course will familiarize the student with current programs for publication design, electronic prepress methods, illustration, fine art, photo manipulation and interactive programming. Available software includes the latest in illustration, graphic design, three dimensional applications, animation, paint and interactive programs. PREREQ: PERM/INST.

**COMM 307 INTERVIEWING (3-0-3) (F/S).** Communication behavior in two-person situations. Practical experience in various types of interviews as confronted in business, in education, and in the professions.

#### COMM 361 ORGANIZATIONAL COMMUNICATION (3-0-3) (F/S).

The application of communication theory and methodology to the study of communication within the formal organization. Theories and problems of human communication within and between organizations.

**COMM 478 PUBLIC RELATIONS (3-0-3)(S).** Analysis of public relations media and methods. Public relations as a management tool. Identifying and reaching the various publics. Practice in writing publicity releases.

**COMM 481 STUDIES IN INTERPERSONAL COMMUNICATION (3-0-3) (F/S).** The examination of issues, contexts, and particulars of interpersonal communication. Content varies from semester to semester. Subjects may include: Conflict Management, General Semantics, Male-Female Communication, etc. PREREQ: PERM/INST.

CIS 310 INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS (3-0-3) (F/S). An introduction to the fundamental concepts of management information systems in business organizations. Management information is the framework tying together business decision makers in an organization. This course includes information systems concepts and planning; end-user computing; hardware, software, data-base systems; systems analysis, design, implementation; computer-human interface; data communications and networks; international, social, political, legal, behavioral and ethical issues of MIS. PREREQ: Upper Division Business standing. Not required for CIS majors.

#### **EDUC 574 INSTRUCTIONAL COURSEWARE DESIGN**

(3-0-3)(S). Students will design instruction with the assistance of a microcomputer and link the instruction with video technology. Students will investigate several authoring languages to facilitate the development and delivery of instruction. PREREQ: IPT 537.

**IPT 537 INSTRUCTIONAL DESIGN (3-0-3) (F).** This course gives an overview of several models for instructional systems design and examines the processes involved in designing instructional

interventions, such as analyzing instructional needs, determining and organizing content and process, selecting appropriate media, evaluating, and revising. PREREQ: IPT 535 and IPT 536 or PERM/INST.

**LING 305 INTRODUCTION TO LANGUAGE STUDIES (3-0-3).** A general survey of contemporary language study as it is carried on in the fields of linguistics, anthropology and psychology, with emphasis on meaning, sounds, words, and sentence formation in English. PREREQ: ENGL 102 or PERM/CHAIR.

#### MGMT 401 ORGANIZATIONAL BEHAVIOR (3-0-3)(F/S).

Emphasis on action skills useful for managers. Topics include managing of self-communicating, motivating, innovating, managing a group, use of formal and social power, persuading, and dealing with uncertainty. PREREQ: Upper-division business standing and MGMT 301.

#### MGMT 405 MANAGEMENT OF CONTINUOUS LEARNING

(3-0-3) (F/S). This course examines how managers can facilitate organizational, team, and individual learning. It reviews the organizational and managerial innovations needed to support quality management and customer satisfaction. It will draw upon a variety of disciplines, including: learning theory, Japanese management, sociotechnical systems theory, and social psychology of group problemsolving. Special emphasis will be placed on skills in developing effective teams. PREREQ: Upper-division business standing and MGMT 301.

#### MKTG 306 PROMOTION MANAGEMENT (3-0-3) (F/S). A

comprehensive approach to creating and implementing advertising and promotional activities. New issues of consumer research are emphasized and integrated with the promotional mix. The economic and social criticisms of advertising are stressed to insure that managers are aware of the ethical responsibilities inherent in the job. PREREQ: Upper-division business standing and MKTG 301.

SOC 390 CONFLICT MANAGEMENT (3-0-3) (F). Examination of the cause of conflict, conflict management theory, and conflict management techniques applied in interpersonal, intergroup, organizational, and community settings. Discussion and skill development through experiential learning will focus on such conflict management techniques as interpersonal management, mediation, arbitration, negotiation, and reconciliation. Students may not receive credit for both SOC 390 and COMM 390. PREREQ: SOC 101 or COMM 111.

SOC 487 ORGANIZATIONAL THEORY AND BUREAUCRATIC STRUCTURE (3-0-3) (F/S). An examination of complex formal organizations, bureaucracy and human interaction, theory, research, and findings are covered. May be taken for sociology or political science credit (PO 487) but not for both. PREREQ: Senior standing, PERM/INST.

## 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.

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

#### **CHEM — CHEMISTRY**

#### CHEM 401 G 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 non-transition metal chemistry. PREREQ: CHEM 322 or PERM/INST.

**CHEM 411G 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 317.

#### CHEM 432G BIOCHEMISTRY LABORATORY (0-3-1)(S).

Identification, isolation and reactions of biologically important compounds. PREREQ/COREQ: 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 501 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. Offered on demand.

**CHEM 503 SPECTROSCOPY (3-0-3).** Concepts and practical usage of ultra-violet, infrared, nuclear magnetic, mass spectroscopy. Emphasis will be placed on use of instruments and interpretation of spectra. Prior knowledge of spectroscopy not required. PREREQ: Eight hours of general chemistry and six hours of organic chemistry. Offered on demand.

#### 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 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 322 and CHEM 212. 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 522 ADVANCED TOPICS IN CHEMISTRY (3-0-3).** Selected advanced topics from Chemistry such as mass spectrometry, nuclear magnetic resonance spectroscopy, radiochemistry, environmental chemistry and polymer chemistry. PREREQ: CHEM 322 or PERM/INST. Offered on demand.

#### DISPUT — DISPUTE RESOLUTION

**DISPUT 500 BASIC MEDIATION SKILLS (3-0-3)(F/S).** Students learn the theoretical foundations of negotiation and mediation, types of mediation, mediation models, mediation case work skills, building the mediation plan, interpersonal communication skills for mediation, and various resolution techniques. Students will mediate several simulated and/or actual practice cases.

**DISPUT 501 HUMAN FACTORS IN CONFLICT MANAGEMENT (1-0-1)(F/S).** This course presents communication theories to assist managers in understanding, analyzing, and managing conflict. The course focuses on the causes of conflict, and includes the influence of gender and culture. This course is pragmatic as well as theoretical.

#### DISPUT 502 NEGOTIATION THEORY AND PRACTICE (1-0-1)

**(F/S).** The successful manager in professional settings is involved in a variety of negotiation activities. The tactics, strategies, and operations of effective and ineffective bargaining/negotiating behaviors will be presented. The course develops negotiator skills and knowledge leading to collaborative based actions and solutions.

#### **DISPUT 503 CONFLICT INTERVENTION METHODS (1-0-1)**

**(F/S).** This course overviews the various contexts of third party intervention into conflicts: facilitation, public involvement processes, mediation, and arbitration and develops skills at first level supervisor/manager intervention into employee conflicts.

#### DISPUT 546 MEDIATION COMPETENCY BOARDS (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 related to mediation within their specialty area. (Pass/Fail). PREREQ: PERM/PROGRAM DIRECTOR.

#### **GENDER - GENDER STUDIES**

#### **GENDER 580 SELECTED TOPICS IN GENDER STUDIES (3-0-3)**

 $(\mathbf{F}/\mathbf{S})$ . Graduate-level studies of a particular topic relating to the field of gender studies.

#### 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. PREREQ: PHYS 309.

PHYS 515 SOLID STATE PHYSICS (3-0-3) (F/S). Quantum physics applied to understanding the properties of materials, including semiconductors, diffraction, lasers, and holography. 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. Prerequisite: PHYS 309 or permission of instructor.

**PHYS 530 OPTICS (3-0-3).** Geometrical and physical optics, including lenses, fiber optics, Fourier optics, polarization, interference,

### Additional Graduate Courses

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 in Engineering 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 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. Offered on demand.

#### 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. Offered on demand.

#### 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 321.

#### 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: 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

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 systems.

**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 Graduate Faculty as of April 2003

NOTE: The date in parentheses is the year of first appointment.

A	Belfy, Jeanne Marie(1983
Affleck, Stephen B(1981)	Graduate Program Coordinator and Professor, Music; Ph.D., University of
Chair and Professor, Civil Engineering: Ph.D., Iowa State University	Kentucky Bell, Kenneth(1997
Ahmed-Zaid, Said(1996)	Assistant Professor, Kinesiology; Ph.D., Virginia Polytechnic Institute and
Associate Professor, Electrical Engineering; Ph.D., University of Illinois at	State College
Urbana-Champaign	Belthoff, James(1993
Allen, Robin(1997)	Graduate Program Coordinator and Associate Professor, Biology; Ph.D.,
Assistant Professor, Social Work; Ph.D., University of Illinois-Urbana-	Clemson University
Champaign Alm, Leslie(1991)	Berg, Lynn R(1984
Chair, Director of Graduate Programs, and Professor, Political Science;	Professor, Music; D.M.A., University of Wisconsin, Madison
Public Policy and Administration; Ph.D., Colorado State University	Bigelow, John D
Andersen, Rudy A(1992)	Professor, Management; Ph.D., Case Western Reserve University Birdsall, Bobbie A(1995)
Associate Professor, Health Studies; D.D.S, Washington University	Associate Professor and School Counseling Program Coordinator,
Andersen, Timothy(2001)	Counselor Education, Ph.D., Oregon State University
Assistant Professor, Computer Science; Ph.D., Brigham Young University	Bixby, Michael B(1981
Anderson, Holly L	Professor, Management; J.D., University of Michigan
Professor, Curriculum, Instruction and Foundational Studies; Ph.D., Utah State University	Blain, Michael(1982
Anooshian, Linda James(1988)	Chair and Professor, Sociology; Ph.D., University of Colorado
Professor, Psychology; Ph.D., University of California, Riverside	Blakeslee, Laurie
Anson, Robert(1990)	Assistant Professor, Art; M.F.A., University of Arizona Blankenship, Jim(1977)
Professor, Networking, Operations, and Information Systems; Ph.D.,	Professor, Art; M.F.A., Otis Art Institute
Indiana University	Blankenship, Michael
Armstrong, James(1992)	Dean, College of Social Sciences and Public Affairs and Professor, Criminal
Professor, Curriculum, Instruction and Foundational Studies; Ph.D.,	Justice Administration; Ph.D., Sam Houston State University
University of Illinois Atlakson, Philip(1985)	Boucher, Teresa(1997
Professor, Theatre Arts; M.A., State University of New York, Binghamton	Chair and Assistant Professor, Modern Languages and Literatures, Ph.D.,
B	Princeton University Bratt, J. Wallis(1970
<del>-</del>	Associate Professor, Music; M.M., University of Utah
Bacon, Stephanie(1998)	Brendefur, Jonathan(2000
Associate Professor, Art; M.F.A., Brooklyn College Bahnson, Paul R(1999)	Assistant Professor, Elementary Education and Specialized Studies; Ph.D.,
Associate Professor, Accountancy; Ph.D., University of Utah	University of Wisconsin, Madison
Bahruth, Robert(1988)	Brill, Stephen H(1998
Professor, Elementary Education and Specialized Studies; Ph.D., University	Assistant Professor, Mathematics; Ph.D., University of Vermont
of Texas, Austin	Brown, Marcellus(1989
Baker, R. Jacob(2000)	Associate Professor, Music; M.M., University of Michigan
Associate Professor, Electrical Engineering; Ph.D., University of Nevada	Browning, William B(1996 Associate Professor, Modern Languages and Literatures, D.M.L., Middlebur
Baker, Richard P(1973)	College
Professor, Sociology; Ph.D., Washington State University Baldassarre, Joseph A(1975)	Buchanan, Mark A(1996
Professor, Music; D.M.A., Case Western Reserve University	Director of International Business Program and Associate Professor,
Baldwin, John B(1971)	Management; LL.M., University of Illinois at Urbana-Champaign
Professor, Music; Ph.D., Michigan State University	Budde, James(1997
Ballenger, Bruce(1995)	Associate Professor, Art; M.F.A., California State University
Chair and Associate Professor, English; Ph.D., University of New Hampshire	Buffenbarger, James(1991 Associate Professor, Computer Science; Ph.D., University of California-Davis
Baltzell, Michael(1995)	Buhler, Peter(1977
Associate Professor, Theatre Arts; M.F.A., Idaho State University  Bammel, Brad P(1988)	Chair and Professor, History; Ph.D., University of California, San Diego
Associate Professor, Chemistry; Ph.D., University of New Orleans	Bullock, Douglas(1996
Barbour, Barton(2001)	Associate Professor, Mathematics and Computer Science; Ph.D., University
Assistant Professor, History; Ph.D., University of New Mexico	of Iowa
Barney, Lloyd Dwayne(1986)	Bunnell, David(1996
Professor, Marketing and Finance; Ph.D., Texas A & M	Assistant Professor, Mechanical Engineering; Ph.D., University of Texas at
Barrash, Warren(1995)	Austin
Research Professor, Geosciences Department; Ph.D., University of Idaho	C
Barr, Robert(1991) Professor, Curriculum, Instruction and Foundational Studies; Ph.D., Purdue	Centanni, Russell(1973
University	Professor, Biology; Ph.D., University of Montana
Bartoszynski, Tomek(1996)	Charlier, Henry A
Professor, Mathematics; Ph.D., Warsaw University, Poland	Assistant Professor, Chemistry; Ph.D., Medical College of Wisconsin Chavez, Carolyn(2000
Battalio, John T(1995)	Assistant Professor, Management; Ph.D., State University of New York
Associate Professor, English; Ph.D., Texas A & M University	Christensen, Steve
Baughn, C. Christopher(1998)	Associate Professor, Curriculum, Instruction and Foundational Studies;
Associate Professor, Management; Ph.D., Wayne State University	Ph.D., University of Idaho
Beach, John(2003) Associate Professor, Elementary Education and Specialized Studies; Ph.D.,	Coll, Kenneth M(1998
Associate Professor, Elementary Education and Specialized Studies; Ph.D., State University of New York-Albany	Chair, Professor and Addictions Studies Coordinator, Counselor Education
Bechard, Marc Joseph(1983)	Ph.D., Oregon State University Constant Joshalla
Professor, Biology; Ph.D., Washington State University	Constant, Isabelle(1998 Associate Professor, Modern Languages and Literatures; Ph.D., University of
~·····································	Associate Froiessor, wodern Languages and Literatures, Fil.D., University C Arizona

	boise state offiversity ordanate ractify
Cook, Devan(1997)	Freemuth, John C(1986)
Assistant Director, Writing Program and Assistant Professor, English; Ph.D.,	Professor, Public Policy and Administration; Political Science; Ph.D.,
Florida State University	Colorado State University
Cook, James(1992)	French, Judith(1976)
Chair and Professor, Music; D.M.A., University of Southern California	Professor, Elementary Education and Specialized Studies; Ph.D., Florida
Corless-Smith, Martin(2000)	State University
Assistant Professor, English; Ph.D., University of Utah	Fry, Phillip C(1987)
Cotrell, Gretchen(1991) Associate Professor, Social Work; Ph.D., University of California, Berkeley	Director of Graduate Studies and Associate Professor, Networking, Operations, and Information Systems; Ph.D., Louisiana State University
Cox, David(1992)	Fuhriman, Jay R(1982)
Chair, Graduate Program Coordinator and Associate Professor,	Professor, Bilingual Education, Elementary Education and Specialized
Instructional & Performance Technology; Ph.D., University of Minnesota	Studies; Ed.D., Texas A & M University
Cox, Marvin(1977)	
Chair, Graduate Program Coordinator, and Professor, Communication;	G
Ph.D., University of Kansas	Gallup, V Lyman(1977)
Craner, G. Dawn(1973)	Associate Professor, Networking, Operations, and Information Systems;
Associate Professor, Communication; M.A., Purdue University	Ph.D., University of Oregon Gardner, John F(2000)
D	Chair and Professor, Mechanical Engineering; Ph.D., Ohio State University
Darling, Sharon(2003)	Garrett, Joyce Lynn(2000)
Assistant Professor, Elementary Education and Specialized Studies; Ph.D.,	Dean, College of Education and Professor, Elementary Education and
Georgia State University	Specialized Studies; Ph.D., University of Oregon
Dawson, Paul(2000) Professor, Mechanical Engineering; Ph.D., Washington State University	Garza, Maria Alicia(1997)
Dayley, Jon Philip(1982)	Associate Professor, Modern Languages and Literatures, Ph.D., University of
Professor, English; Ph.D., University of California, Berkeley	Arizona Gehrke, Pamela(1998)
DeBeliso, Mark(2000)	Associate Professor, Health Science; M.S., University of Portland
Assistant Professor, Kinesiology; Ph.D., Oregon State University	Giacomazzi, Andrew(1998)
Donaldson, Paul R(1975)	Graduate Program Coordinator and Assistant Professor, Criminal Justice
Director of CGISS and Professor, Geosciences; Ph.D., Colorado School of	Administration; Ph.D., Washington State University
Mines Dubert, LeeAnn(1992)	Gibson, Terry-Ann Spitzer(2003)
Associate Professor, Curriculum, Instruction and Foundational Studies;	Assistant Professor, Kinesiology; Ph.D., University of Idaho
Ph.D., University of Wisconsin, Madison	Gill, Jill K(2000)
Dufty, Alfred M(1988)	Assistant Professor, History; Ph.D., University of Pennsylvania, Philadelphia Girvan, James(2000)
Associate Chair and Professor, Biology; Ph.D., State University of New York,	Dean, and Professor, College of Health Sciences; Ph.D., University of
Binghamton	Oregon
Dykstra, Dewey I, Jr(1981)	Glen, Roy(1982)
Professor, Physics; Ph.D., University of Texas Austin	Associate Professor, Management; Ph.D., Case Western Reserve University
E	Gough, Newell "Sandy"(1989)
Eastman, Phillip(1977)	Chair and Associate Professor, Management; Ph.D., University of Utah
Dean, College of Arts and Sciences; Professor, Mathematics; Ph.D.,	Gould, Elizabeth(1999) Associate Professor, Music; D.M.A., University of Oregon
University of Texas	Grantham, Stephen B(1982)
Eggert, Rudolph(1996)	Associate Professor, Mathematics; Manager, Enrollment Information
Professor, Mechanical Engineering; Ph.D., State University of New York,	Systems: Ph.D. University of Colorado
Buffalo Fieler: Morte	Gregory, Anne E(2002)
Eisley, Mark(1990) Associate Professor, Instructional & Performance Technology; Ph.D.	Assistant Professor, Elementary Education and Specialized Studies; Ph.D.,
Brigham Young University	Purdue University
Elison, Pat(1986)	Green, Gary I
Administrative Director, Legal Assistant Program: Associate Professor,	Professor, Networking, Operations, and Information Systems; Ph.D., University of Washington
Health Studies; Ph.D., University of Idaho	Gribb, Molly M(2000)
Ellis, Robert W(1971)	Associate Professor, Civil Engineering; Ph.D., University of Wisconsin,
Professor, Chemistry; Ph.D., Oregon State University	Milwaukee
English, Thomas J(1996) Chair and Professor, Accountancy; Ph.D., Arizona State University	Griffin, John(1983)
Erickson, Gary(1996)	Chair and Associate Professor, Computer Science; Ph.D., Washington State
Professor, Electrical and Computer Engineering; Ph.D., University of	University Crookpar, David F
Wyoming	Groebner, David F(1973) Professor, Networking, Operations, and Information Systems; Ph.D.,
F	University of Utah
Feldman, Alex(1988)	Guarino, Joseph(2000)
Graduate Program Coordinator and Associate Professor, Computer Science	Professor, Mechanical Engineering; Ph.D., University of Idaho.
and Associate Professor, Mathematics; Ph.D., University of Wisconsin	Guilford, Charles(1981)
Madison	Associate Professor, English; Ph.D., Northwestern University
Ferguson, James(2000)	Н
Associate Professor, Mechanical Engineering; Ph.D., Washington State	Hadden, James E(1997)
University Figebox Michael A (2002)	Assistant Professor, English; M.A., University of Washington
Fischer, Michael A(2002) Assistant Professor, Music; DMA, University of North Texas	Hamilton, Robert W(2000)
Foster, Thomas(1997)	Associate Professor, Civil Engineering, Ph.D., University of Maine
Professor, Networking, Operations, and Information Systems; Ph.D.,	Hanlon, Heather(1991)
University of Missouri-Columbia	Professor, Art; Ed.D., University of Oregon
Fox, Francis(1999)	Hanna, Charles B(1996)
Assistant Professor, Art; M.F.A., University of Wyoming	Associate Professor, Physics; Ph.D., Stanford University
Francis, John(2002)	Hanson, Marla(1991) Associate Professor, Theatre Arts; M.F.A., University of Utah
Assistant Professor, Art; M.F.A., University of Wyoming	Harbison Warren (1977)
Assistant Professor, Art; M.F.A., University of Wyoming Frankle, Alan(1984)	Harbison, Warren(1977) Professor, Philosophy; Ph.D., Syracuse University
Assistant Professor, Art; M.F.A., University of Wyoming Frankle, Alan(1984) Professor, Marketing and Finance; Ph.D., University of Arizona	Professor, Philosophy; Ph.D., Syracuse University Harkness, Daniel(1993)
Assistant Professor, Art; M.F.A., University of Wyoming Frankle, Alan(1984)	Professor, Philosophy; Ph.D., Syracuse University

Harris, Chad	(1995)	Khanal, Mandar(2	
Associate Professor, Kinesiology; Ph.D., Oregon State University	(1007)	Associate Professor, Civil Engineering; Ph.D., University of California, Ir	
Harrison, Teresa DelgadilloGraduate Program Coordinator and Assistant Professor, Curriculum	(1997) 1	Kinney, Richard(1 Professor, Public Policy and Administration; Political Science; Ph.D.,	976)
Instruction and Foundational Studies; Ed.D., University of Nevada, I	Las	University of Notre Dame	
Vegas	(2000)	Kinzel, Margaret N	(000)
Hartman, Joseph A Associate Professor, Electrical and Computer Engineering; Ph.D., C		Assistant Professor, Mathematics, Ph.D., Pennsylvania State University Klaustch, Richard(1	992)
Institute of Technology	Ü	Chair and Associate Professor, Theatre Arts; Ph.D., Wayne State Univer	
Harvey, Keith		Klein, Joanne(2	
Assistant Professor, Marketing and Finance; Ph.D., University of Te Knoxville	nnessee,	Assistant Professor, History; Ph.D., Rice University Kline-Lamar, Linda(2	2002)
Hausrath, Alan R	(1977)	Assistant Professor, Music; D.A., University of Memphis	1002)
Chair and Professor, Mathematics; Ph.D., Brown University		Knoll, Michael(1	
Haws, David RAssociate Professor, Civil Engineering; Ph.D., Brigham Young Unive	(2000) ersity	Research Professor, Geosciences, Ph.D., University of British Columbia Knowlton, William B(2	
Heikkinen, Michael	(2003)	Assistant Professor, Electrical and Computer Engineering; Ph.D., Univer	
Chair and Professor, Curriculum, Instruction and Foundational Stud	lies;	of California, Berkeley	000
Ph.D., Utah State University Hemmens, Craig	(1996)	Koeppen, David R(1 Associate Professor, Accountancy: Ph.D., University of Wisconsin-Madi	.996)
Chair and Associate Professor, Criminal Justice Administration and	l	Koetsier, Peter(1	
Academic Director, Legal Assistant Program; J.D., North Carolina C	Central	Associate Professor, Biology, Ph.D., Idaho State University	000
University; Ph.D., Sam Houston State University Henderson, Heike	(1008)	Kosasa, Karen K(1 Assistant Professor; A.B.D. M.F.A., M.A., University of Rochester	998)
Associate Professor, Modern Languages and Literatures; Ph.D., Uni		Kozar, Bill(1	989)
California-Davis	•	Professor, Health, Kinesiology; Ph.D., University of Iowa	
Hepler, Juanita Professor, Social Work; Ph.D., University of Wisconsin, Madison	(1991)	L	
Hoeger, Werner W K	(1986)	La Cava, Gerald(1	982)
Director, Human Performance Laboratory; Professor, Kinesiology;	Ed.D.,	Professor, Networking, Operations, and Information Systems; Ph.D.,	
Brigham Young University Holmes, Janet	(1999)	University of Kansas Lamelas, Francisco J(2	2000
Director of Creative Writing and Associate Professor, English; M.F.A	1(1333) A.,	Assistant Professor, Physics; Ph.D., University of Michigan	.000)
Warren Wilson College		Lamet, Daniel G(1	
Holmes, M. Randall		Professor, Mathematics and Computer Science; Ph.D., University of Ore Landrum, R. Eric(1	
Binghamton	ork at	Professor, Psychology; Ph.D., Southern Illinois University at Carbondale	
Honts, Charles R	(1995)	LaRiviere, Sara(1	
Professor, Psychology; Ph.D., University of Utah Hoste, Ann	(1000)	Associate Professor, Health Studies; Ed.D., University of LaVerne	004)
Professor, Theatre Arts; M.F.A., University of Texas at Austin	(1990)	Lathen, William(1  Dean, College of Business and Economics; Professor, Accountancy; Ph	
Hourcade, Jack Joseph	(1987)	Arizona State University	
Professor, Elementary Education and Specialized Studies; Ph.D., Ur of Missouri, Columbia	niversity	LeMaster, Clifford(1 Professor, Chemistry; Ph.D., University of California, Davis	990)
Huff, Daniel D	(1970)	Lichtenstein, Peter M(1	975)
Professor, Social Work; M.S.W., University of Kansas		Professor, Economics; Ph.D., University of Colorado	
Husting, Virginia		Liley, Denise Goodrich(1 Assistant Professor, Social Work; Ph.D., University of Utah	997)
Champlaign.		Lincoln, Douglas J(1	980)
. °		Professor, Marketing and Finance; Ph.D., Virginia Polytechnic Institute	
Jain, Amit	(1996)	State University Lindsey, Melinda(1	987)
Associate Professor, Computer Science; Ph.D., University of Centra		Professor, Elementary Education and Specialized Studies; Ph.D., Univer	rsity
Jessing, Jeff		of Oregon	
A&M University	CAGS	Lojek, Helen(1 Professor, English; Ph.D., University of Denver	979)
Jirak, James	(1994)	Long, Elaine M(1	975)
Associate Professor, Music; D.A., University of Colorado Johnson, Richard	(2001)	Chair and Professor, Health Studies; Ph.D., University of Idaho	
Educational Technology; Ph.D., Kansas State University		Long, James A(1 Associate Professor, Biology; Ph.D., Iowa State University	974)
Jones, Daryl E		Loucks, Christine(1	989)
Provost and Vice President for Academic Affairs; Professor, English Michigan State University	1; Ph.D.,	Professor, Economics; Ph.D., Washington State University	071
Jones, Errol D	(1982)	Luke, Robert A(1 Chair and Professor, Physics; Ph.D., Utah State University	971)
Professor, History; Ph.D., Texas Christian University	(1000)	Lubamersky, Lynn(2	2001)
Jorcyk, Cheryl Assistant Professor, Biology; Ph.D., Johns Hopkins University	(1998)	Assistant Professor, History; Ph.D., Indiana University	1001
K		Lucas, Shelley Marie(2 Assistant Professor, Kinesiology; Ph.D., University of Iowa	:001)
	(1000)	Lutze, Peter C(1	990)
Kania-Bartoszynska, Joanna Associate Professor, Mathematics; Ph.D., University of California, B		Assistant Professor, Communication; Ph.D., University of Wisconsin	005
Kelley, Lorrie Lynn	(1991)	Lyle, Mitchell(1 Research Professor, Geosciences; Ph.D., Oregon State University	995)
CT/MRI Program Director and Associate Professor, Radiologic Science		Lyons, Lamont S(1	977)
M.S., Boise State University Kelly, Philip P	(2001)	Professor, Curriculum, Instruction and Foundational Studies; Ed.D.,	-
Assistant Professor; Curriculum, Instruction and Foundational Studi		University of Massachusetts	
Ph.D., Michigan State University	(1070)	MacDanald Isaan B	0000>
Kenny, G Otis	(1910)	MacDonald, Jason B(2 Assistant Professor, Marketing and Finance; Ph.D., University of Texas-	.uuu) Pan
Kerr, Charles R.	(1969)	American	
Professor, Mathematics; Ph.D., University of British Columbia		Maguire, James H(1 Professor, English; Ph.D., Indiana University	970)
		r 1010301, English, r n.D., mulana University	

M-k M (1000)	M
Maher, Matthew(1989) Associate Professor, Marketing and Finance; Ph.D., University of Illinois	Munger, Roger(2001) Assistant Professor, English; Ph.D., Rensselaer Polytechnic Institute
Markel, Michael(1990)	Murgel, George A(2000)
Director of Technical Communication and Professor, English; Ph.D.,	Associate Professor, Civil Engineering; Ph.D., Cornell University
Pennsylvania State University	N
Marsh, Robert L(1974)	- •
Associate Professor, Criminal Justice Administration; Ph.D., Sam Houston State University	Nagasundaram, Murli(1996) Associate Professor, Networking, Operations, and Information Systems;
Martin, Carol A(1972)	Ph.D., University of Georgia
Director of Graduate Studies and Professor, English; Ph.D., Catholic	Napier, Nancy K(1986)
University of America	Director of International Business Consortium and Programs, College of
Mathie, David(1992) Professor, Music; D.M.A., University of Georgia	Business and Economics; Professor, Management; Ph.D., Ohio State
Maxson, Emerson(1997)	University Newman, Marcy J. Knopf(2001)
Associate Professor, Networking, Operations, and Information Systems,	Assistant Professor, English, Ph.D., Miami University
	Nicholson, James A(1986)
Ph.D., Texas Tech University  Maynard, Ritchard(1990)	Director, Counseling and Testing Center; Counseling Psychologist;
Assistant Professor, Music; M.A., University of Iowa McCain, Gary(1979)	Professor, Counseling; Ph.D., University of Missouri, Columbia
Professor, Marketing; Ph.D., University of Oregon	Northrup, Clyde J(1998) Chair and Assistant Professor, Geosciences; Ph.D., Massachusetts Institute
McCarl, Robert S III(1994)	of Technology
Associate Professor, Anthropology, Ph.D., Memorial University of	Novak, E. Shawn(1996)
Newfoundland	Associate Professor, Accountancy; Ph.D., University of Houston
McChesney, John W(1997)	Novak, Stephan
Associate Professor, Kinesiology, Ph.D., University of Oregon McCloskey, Richard(1976)	Associate Professor, Biology; Ph.D., Washington State University
Professor, Biology; Ph.D., Iowa State University	0
McCorkle, Suzanne(1978)	O'Connor, Jacqueline(2001)
Director, Conflict Management Services and Professor, Communication;	Assistant Professor, English; Ph.D., University of California at Davis
Ph.D., University of Colorado	Odahl, Charles M(1975)
McClain, Lisa(2001) Assistant Professor, History; Ph.D., University of Texas	Professor, History; Ph.D., University of California, San Diego Olsen-Smith, Steven(2000)
McLuskie, C Ed Jr(1981)	Assistant Professor, English; Ph.D., University of Delaware
Professor, Communication; Ph.D., University of Iowa	Orr, Martin(2000)
McNamara, James P(1997)	Associate Professor, Sociology; Ph.D., University of Oregon
Assistant Professor, Geosciences; M.S., Syracuse University	Oxford, Julia Thom(2000)
McNeil, Larry(1999) Assistant Professor, Art, M.F.A., University of New Mexico	Assistant Professor, Biology; Ph.D., Washington State University, Pullman
Mead, Jodi L(2000)	P
Assistant Professor, Mathematics; Ph.D., Arizona State University	Palmer, Rosemary(1998)
Mercer, Gary D(1975)	Assistant Professor, Elementary Education and Specialized Studies; Ph.D.,
Professor, Chemistry; Ph.D., Cornell University	University of Wyoming
Michaels, Paul(1994) Graduate Program Coordinator Geophysics; Associate Professor,	Parke, Stephen A(1996) Associate Professor, Electrical Engineering; Ph.D., University of California,
Geosciences, Ph.D., University of Utah	Associate Professor, Electrical Engineering, Ph.D., University of California, Berkeley
Miller, Margaret(1994)	Parker, Ben L(1977)
Professor, Counselor Education; Ph.D., University of Idaho	Professor, Communication; Ph.D., Southern Illinois University, Carbondale
Miller, Nicholas(1993)	Parkinson, Del R(1985)
Director of Graduate Studies and Associate Professor, History; Ph.D., University of Indiana	Professor, Music; D.M., Indiana University Parks, Donald J(1973)
Miller, Rickie(1992)	Professor, Mechanical Engineering; Ph.D., University of Minnesota
Associate Chair and Associate Professor, Elementary Education and	Parrett, William H(1996)
Specialized Studies; Ph.D., New Mexico State University	Professor, Curriculum, Instruction and Foundational Studies; Ph.D., Indiana
Mills, Janet Lee(1989)	University
Professor, Public Policy and Administration; Communication; Ph.D.,	Patrick, Steven(1991) Associate Professor, Sociology; Ph.D., University of California-Riverside
University of Kansas Minch, Robert P(1986)	Pavesic, Max G(1973)
Professor, Networking, Operations and Information Systems; Ph.D., Texas	Professor, Anthropology; Ph.D., University of Colorado, Boulder
Tech University	Payne, Michelle M(1997)
Moll, Amy J(2000)	Director, Writing Program and Associate Professor, English; Ph.D.,
Assistant Professor, Mechanical Engineering; Ph.D., University of California,	University of New Hampshire
Berkeley Moncrief, Gary F(1976)	Payne, Richard D(1970) Professor, Economics; Ph.D., University of Southern California
Professor, Political Science; Ph.D., University of Kentucky	Pelton, John R(1981)
Moore, Rick Clifton(1994)	Dean, Graduate College and Professor, Geosciences; Ph.D., University of
Associate Professor, Communication; Ph.D., University of Oregon	Utah
Moorhead-Rosenberg, Florence J(1993)	Penry, Tara(2000) Assistant Professor, English; Ph.D., Fordham University
Associate Professor, Modern Languages and Literatures; Ph.D., University of California, Davis	Petlichkoff, Linda M(1987)
Mori, Carrie L(2003)	Graduate Program Coordinator and Professor, Kinesiology; Ph.D.,
Assistant Professor, Elementary Education and Specialized Studies; Ph.D.,	University of Illinois
University of Idaho	Pfeiffer, Ronald(1979)
Morris, Daniel N(1986)	Professor, Kinesiology; Ed.D., Brigham Young University
Assistant Professor, Communication; Ph.D., University of Missouri Most, Marshall(1995)	Plew, Mark G(1984) Chair and Professor, Anthropology; Ph.D., Indiana University, Bloomington
Assistant Professor, Communication; M.A., Boise State University	Pollard, Constance(1993)
Mueller, David G(2001)	Professor, Educational Technology; Ph.D., University of Nebraska, Lincoln
Assistant Professor, Criminal Justice Administration; Ph.D., Washington	Punnoose, Alex(2003)
State University	Assistant Professor, Physics; Ph.D., Aligarah Muslim University of India
Munger, James C(1988) Chair and Professor, Biology; Ph.D., University of Arizona	Purdy, Craig A(1987) Assistant Professor, Music; M.M., New England Conservatory
Chair and Froicssor, biology, Fri.D., Offiversity Of Affzoria	rasistant i folessor, widsic, wi.w., new England Conservatory

R	
Rafla, Nader(1: Associate Professor, Electrical and Computer Engineering; Ph.D., Case Western Reserve University	996)
Ray, Nina Marie(1: Professor, Marketing and Finance; Ph.D., Texas Tech University	986)
Raymond, Gregory A(1' Honors Program Director and Professor, Political Science; Ph.D., Unive	974) rsity
of South Carolina Reeder, Heidi M(2	000)
Assistant Professor, Communication; Ph.D., Arizona State University Reischl, Uwe	002)
Director, Center for Health Policy and Professor of Health Studies; Ph.D University of California, Berkeley	١.,
Reynolds, R Larry(1 Professor, Economics; Ph.D., Washington State University	
Robbins, Bruce(1  Associate Professor, English; Ph.D., Indiana University  Robertson, Ian C(2	990)
Robertson, Ian C(2 Assistant Professor, Biology; Ph.D., Simon Fraser University, Burnaby B. Canada	000) C.,
Rogien, Lawrence(1  Assistant Professor, Curriculum, Instruction and Foundational Studies; Ph.D., Indiana University	
Rohlfing, Mary E(1 Associate Professor, Communication; Ph.D., University of Iowa	992)
Rohn, Troy(2 Assistant Professor, Biology; Ph.D., University of Washington	000)
Rohrig, Kathleen L Ayers	983) y of
Rosine, Gary(1 Professor, Art; Ph.D., School of Visual Arts, Pennsylvania State Universit	ty
Routh, Partha(2 Assistant Professor, Geosciences; Ph.D., University of British Columbia	,
Rudd, Robert A(1 Associate Professor, Communication; Ph.D., University of Oregon	985)
Rushing-Raynes, Laura(1 Assistant Professor, Music; D.M.A., University of Arizona	999)
Russell, Dale D	995)
Russell, Lynn Darnell	(000
Ruud, William(1	997)
Professor, Management; Ph.D., University of Nebraska Rychert, Robert C(1	975)
Professor, Biology; Ph.D., Utah State University Ryder, Mary Ellen(1	988)
Associate Professor, English; Ph.D., University of California, San Diego	
Sabick, Michelle(2	003)
Assistant Professor, Mechanical Engineering; Ph.D., University of Iowa Sadler, Norma J(1	
Professor, Elementary Education and Specialized Studies; Ph.D., Univer of Wisconsin, Madison	sity
Samball, Michael(1 Associate Professor, Music; D.M.A., North Texas State University	
Sanderson, Irene (Rena)(1 Associate Professor, English; Ph.D., University of Colorado, Boulder	994)
Sanderson, Richard Ken	971)
Sarin, Shikhar	002)
Austin	
Saunders, David(1 Assistant Professor, Music; DMA, State University of New York at Stonybrook	997)
Schackel, Sandra K(1 Associate Professor, History; Ph.D., University of New Mexico	989)
Scheepers, Marion	988)
Schimpf, Martin E(19	990)
Associate Dean and Graduate Program Coordinator, Interdisciplinary Studies, College of Arts and Sciences and Professor, Chemistry; Ph.D., University of Utah	
Schooley-Pettis, Diane(1 Associate Dean, College of Business and Economics and Professor,	989)
Marketing and Finance; Ph.D., University of Colorado, Boulder	

Sego, Trina(2002)
Associate Professor, Marketing and Finance; Ph.D., University of Texas at Austin
Seibert, Pennie S(1990)
Chair and Professor, Psychology; Ph.D., University of New Mexico
Sener, Joseph(1996)
Associate Professor, Civil Engineering; Ph.D., Northwestern University
Serpe, Marcelo(1998) Associate Professor, Biology; Ph.D., University of California, Davis
Shadle, Susan(1997)
Associate Professor, Chemistry, Ph.D., Stanford University
Shallat, Todd A(1985)
Professor, History; Ph.D., Carnegie-Mellon University
Shannon, Patrick
Chair and Professor, Networking, Operations, and Information Systems; Ph.D., University of Oregon
Shimon, Jane(2001)
Assistant Professor, Kinesiology; Ed.D., University of Northern Colorado
Shuck, Gail(2001)
Assistant Professor, English; Ph.D., University of Arizona
Shurtleff-Young, Cheryl(1978) Graduate Program Coordinator and Professor, Art; M.A., University of
Oregon
Silva, Charlotte(2000)
Assistant Professor, Elementary Education and Specialized Studies; Ph.D.,
University of New Mexico
Simon, Louis P
Assistant Professor, English; Ph.D., Loyola University Singletary, Ted J(1989)
Professor, Elementary Education and Specialized Studies; Ph.D., University
of Illinois, Urbana-Champaign
Smith, Brent(1980)
Professor, Art; M.F.A., Utah State University
Smith, Elisa Barney(1999)
Assistant Professor, Electrical and Computer Engineering; Ph.D., Rensselaer Polytechnic Institute
Smith, James F(1992)
Associate Professor, Biology; Ph.D., University of Wisconsin, Madison
Smith, Kirk(1993)
Chair and Professor, Marketing and Finance; Ph.D., University of Houston
Smith, Mary Jarratt(1987) Associate Professor, Mathematics; Ph.D., Montana State University
Smith, William S(1973)
Smith, William S

Traynowicz, Laurel Hetherington(2000)
Associate Professor, Communication; Ph.D., University of Iowa
Trusky, Tom(1970)
Professor, English; M.A., Northwestern University
Turner, Lee Ann(1996)
Associate Professor, Art; Ph.D., University of Pennsylvania
Turrisi, Robert
Professor, Psychology; Ph.D., State University of New York at Albany Twight, Charlotte(1986)
Professor, Economics; Ph.D., University of Washington
Tyson, Liana L(1998)
Assistant Professor, Music; D.M.A., Eastman School of Music
U
Uehling, Karen S(1981)
Associate Professor, English; M.A., University of California, Davis
Uh, Gang-Ryung(2003)
Assistant Professor, Computer Science; Ph.D., Florida State University
V
Vaughn Ross E (1973)
Vaughn, Ross E(1973) Chair and Professor, Kinesiology; Ph.D., Washington State University
W
Waite, Wenden W(1976)
Director, Office of College and School Partnerships and Field Experience
and Professor, Elementary Education and Specialized Studies; Ph.D., Utah
State University
Walen, Sharon(1996)
Graduate Program Coordinator and Associate Professor, Mathematics;
Ph.D., Washington State University
Walsh, Anthony(1984)
Professor, Criminal Justice Administration; Ph.D., Bowling Green State
University
Wanek, James E(1997)
Associate Professor, Management, Ph.D., University of Minnesota Ward, Frederick R(1969)
Professor, Mathematics and Computer Science; Ph.D., Virginia Polytechnic
Institute State University
Ward, Keith(1999)
Assistant Professor, Management; Ph.D., Ohio State University
Weatherby, James B(1989)
Chair and Associate Professor, Public Policy and Administration; Political
Science; Ph.D., University of Idaho
White, Craig(1980)
Professor, Geosciences: Ph.D., University of Oregon
White, Harry(1988)
Professor, Marketing and Finance; Ph.D., Texas A & M University
Wicklow-Howard, Marcia(1975)
Professor, Biology; Ph.D., Oregon State University
Widmayer, Jan(1978) Professor, English; Ph.D., University of Michigan
Froiessor, English, Fil.D., University of Michigan

Wieland, Mitchell(1996)
Assistant Professor, English; M.F.A., University of Alabama
Wilkins, David E(2000)
Graduate Program Coordinator, Earth Science and Assistant Professor,
Geosciences; Ph.D., University of Utah
Willison, Scott(1997)
Director, Center for Multicultural & Educational Opportunities and Associate
Professor, Curriculum, Instruction and Foundational Studies; Ph.D., Indiana
University
Wilson, Martha K(1994)
Interim Director, and Associate Professor, Social Work; Ph.D., University of
Alabama
Winiecki, Donald J(1996)
Assistant Professor, Instructional & Performance Technology; Ed.D., Texas
Tech University
Witt, Stephanie L(1989) Associate Vice President for Academic Affairs and Professor, Political
Science; Public Policy and Administration; Ph.D., Washington State
University
Wojtkowski, W. Gregory(1997)
Professor, Networking, Operations, and Information Systems, Ph.D., Case
Western Reserve University Wojtkowski, Wita(1997)
Wojtkowski, Wita(1997)
Professor, Networking, Operations, and Information Systems, Ph.D., Case
Western Reserve University Wollheim, Peter(1989)
Wollheim, Peter(1989)
Associate Professor, Communication; Ph.D., McGill University
Wood, Spencer H(1977)
Professor, Geosciences; Ph.D., California Institute of Technology
Woods, L. Shelton(1994) Associate Dean, College of Social Sciences and Public Affairs and
Associate Professor, History; Ph.D., University of California, Los Angeles
Wyers, Giselle(2000)
Assistant Professor, Music; D.M.A., University of Arizona
Assistant Floiessor, Music, D.M.A., University of Arizona
Υ
Yeh, Jyh-haw(2000)
Assistant Professor, Computer Science; Ph.D., University of Florida
Young, Richard A(1994)
Gallery Director, Chair and Associate Professor, Art; M.F.A., Washington
State University
Yunker, Douglas(1976)
Associate Professor, Social Work; M.S.W., Indiana University
•
Z
Zaerr, Linda Marie(1987) Professor, English; Ph.D., Washington State University Zirinsky, Michael P(1973)
Professor, English; Ph.D., Washington State University
Zirinsky, Michael P(1973)
Professor History: Ph.D. University of North Carolina Chapel Hill

# Adjunct Graduate Faculty Part Time Faculty, Faculty from Other Universities,

## Part Time Faculty, Faculty from Other Universities, and Personnel from Affiliated Agencies as of April 2003

NOTE: The date in parentheses is the year of first graduate appointment.

Δ		Gillerman, Virginia, Ph.D., Geosciences	
	(0001)	Glaser, Deb, Ed.D., Education	
Aksamit, Pat, Ph.D., Health Science		Gomez, Luis Eduardo, LL.M., Modern Languages	(2003)
Albright, Laura, M.H.S., Health Science	(1998)	H	
Allaire, Bobbie M., M.S., Instructional Technology			
Andersen, Rudy, D.D.S., Health Sciences Emeritus	(2003)	Hadjokas, Nicholas, Ph.D., Biology	
В		Hahn, Christine, M.D., Health Science	
Baehr, Paul, M.D., Kinesiology	(2002)	Hale, Judith Ann, Ph.D., Instructional Technology	
Baker, Edward, Ph.D., Health Sciences		Hambelton, Ben M.Ed., Instructional Technology	
Bart, Jonathan, Ph.D., Biology		Hannah, Elizabeth, D.V.M., Health Sciences	
Basom, Marnie, M.P.H., Health Sciences	(2002)	Hardegree, Stuart, Ph.D., Biology	
Beecham, John J., Ph.D., Biology		Harris, Charles, Ph.D., Biology	. ,
Belcheir, Marcia J., Ph.D., Instructional Technology		Hawkins, Nina, M.L.S., Education	
		Hemphill-Haley, Mark Allen, Ph.D., Geosciences	
Bentley, Elton D., Ph.D., Geosciences Emeritus		Henbest, Margaret, M.S., Health Science	
Blacklock, Karen, Ed.D., Education		Hill, Lyla, M.S., Health Science	
Bond, Laura, M.S., Biology	. ,	Hoff, Kathleen Jody, M.B.A., Education	(2001)
Bostron, John, M.M., Music		Hoffman, Rebecca, Theatre Arts	
Boyer, Dale, Ph.D., English (Emeritus)		Hollenbaugh, Kenneth M., Ph.D., Geosciences (Emeritus)	(1968)
Breithaupt, David L., Educational Technology		Holmes, Robina, M.Ed., Education	(1992)
Brewer, Kenneth, ABD/Ph.D., Biology			
Burnham, William, Ph.D., Biology		l l	
Burns, Richard V., B.A., Public Policy and Administration	(1996)	Ilett, Frank Jr., M.B.A., Accountancy	(1996)
C		Itkonan, Liisa, Ph.D., Sociology	(1998)
•	(1000)		
Cade, Tom, Ph.D., Biology Emeritus		J	
Chadwick, Daniel G., J.D., Public Policy and Administration		Jaeger. Michael, Ed.D., Education	(2001)
Christensen, Fred, M.B.A., C.P.A., C.G.F.M., Accountancy		Jarocki, William L., M.P.A., Public Policy and Administration	
Chyung, Seung Youn, Ed.D., Instructional Technology		Jenkins, Susan, Ph.D., Education	(2001)
Clement, William P., Ph.D., Geosciences		K	
Clemo, Thomas M., Ph.D., Geosciences	(1998)		
Corbin, Robert, M.A., Sociology		Keller-Peck, Cynthia, Ph.D., Biology	
Crookham, Larry K., M.S., Instructional Technology		Kerns-Blain, Angeline, M.A., Sociology	
Cusack, Barry Justin, M.D., Kinesiology	(2003)	Kidder, Brenton A., Ed.D., Education	
D		Kiff, Lloyd Francis, M.A., Biology	(1995)
D D	(9009)	Knapp, James M.S.W., Social Work	(1993)
Dare, Matthew, Ph.D., Biology		Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology	(1993)
Dare, Matthew, Ph.D., Biology	(1999)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education	(1993) (1990) (2001)
Dare, Matthew, Ph.D., Biology	(1999)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History	(1993) (1990) (2001) (1990)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education	(1993) (1990) (2001) (1990) (1998)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History	(1993) (1990) (2001) (1990) (1998)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education	(1993) (1990) (2001) (1990) (1998)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (1987)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology	(1993) (1990) (2001) (1990) (1988) (1987)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  E  Eldridge, David, Ph.D., Biology	(1999) (2002) (1996) (1987)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita)	(1993) (1990) (2001) (1990) (1987) (1976)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (1987) (2001) (2001)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education	(1993)(1990)(2001)(1990)(1998)(1987)(1976)(2000)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (1987) (2001) (2001) (2001)	Knapp, James M.S.W., Social Work	(1993)(1990)(2001)(1990)(1998)(1976)(2000)(1998)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (1987) (2001) (2001) (1997) (1996)	Knapp, James M.S.W., Social Work	(1993)(1990)(2001)(1990)(1998)(1976)(2000)(1998)(2002)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (1987) (2001) (2001) (1997) (1996) (1995)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology	(1993)(1990)(1990)(1990)(1998)(1987)(2000)(1998)(2002)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (1987) (2001) (2001) (1997) (1996) (1995) (1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(2000)(1998)(2002)(2002)(2002)(2001)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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.	(1999) (2002) (1996) (2001) (2001) (1997) (1996) (1995) (1998)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science	(1993)(1990)(1990)(1990)(1998)(1976)(2000)(1998)(2002)(2002)(2001)(1996)
Dare, Matthew, Ph.D., Biology	(1999) (2002) (1996) (2001) (2001) (1997) (1996) (1995) (1998)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences	(1993)(1990)(1990)(1990)(1998)(1976)(2000)(1998)(2002)(2002)(2001)(1996)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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.	(1999) (2002) (1996) (2001) (2001) (1997) (1996) (1995) (1998)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus	(1993)(1990)(1990)(1990)(1998)(1976)(2000)(1998)(2002)(2002)(2001)(1996)
Dare, Matthew, Ph.D., Biology	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1996)(1998)(1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(2000)(1998)(2002)(2001)(1996)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 F Feldman, Murray, J.D., Public Policy and Administration	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1996)(1998)(1998)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M Ma, Yongsheng, Ph.D., Biology	(1993)(1990)(1990)(1990)(1990)(1998)(1976)(2000)(1998)(2002)(2001)(1996)(1998)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History	(1993)(1990)(1990)(1990)(1990)(1998)(1976)(2000)(1998)(2002)(2001)(1996)(1998)(1998)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 Erickson, Robert, Instructional Technology Ertmer, Peggy, Ph.D., Instructional Technology F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(1998)(1994)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Marti, Jr. Carl D., Ph.D., Biology Marti, Jr. Carl D., Ph.D., Biology	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(2000)(1998)(2002)(2001)(1996)(1997)(1998)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 Erickson, Robert, Instructional Technology Ertmer, Peggy, Ph.D., Instructional Technology F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1996)(1998)(1998)(1998)(1998)(1998)(1994)(2002)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education	(1993)(1990)(1990)(1990)(1998)(1976)(1976)(2000)(1998)(2002)(2001)(1996)(19971)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)
Dare, Matthew, Ph.D., Biology	(1999)(2002)(1996)(2001)(2001)(2001)(1997)(1996)(1998)(1998)(1998)(1998)(1994)(2002)(2002)(1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History	(1993)(1990)(1990)(1990)(1998)(1976)(2000)(1998)(2002)(2001)(1996)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1900)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management	(1999)(2002)(1996)(2001)(2001)(2001)(1997)(1996)(1998)(1998)(1998)(1994)(2002)(2002)(2002)(2001)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Marzluff, John M., Ph.D., Biology Marzluff, John M., Ph.D., Biology	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(2000)(1998)(2002)(2001)(1996)(1998)(1998)(1987)(1988)(1987)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 F  F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(1994)(2002)(2002)(1996)(1996)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., Biology Marzluff, John M., Ph.D., Biology Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology Mazaika, Rosemary, M.S., Biology	(1993)(1990)(1990)(1990)(1990)(1998)(2000)(1998)(2002)(2001)(1998)(1998)(1998)(1998)(1987)(2000)(2002)(2002)(2002)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  E  Eldridge, David, Ph.D., Biology Emerson, Mark, M.Div., ABD/Ph.D. Earnst, Susan, Ph.D., Biology Estemond, 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 FF  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education	(1999)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(1994)(2002)(1996)(1996)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration.	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(2000)(2001)(2001)(1991)(1998)(1998)(1998)(1998)(1998)(1998)(1991)(1994)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 F  F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education	(1999)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(1994)(2002)(1996)(1996)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MardGregor, Carol, Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Martluff, John M., Ph.D., Biology Marzluff, John M., Ph.D., Biology Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration McGavran, Patricia, Ph.D., Health Sciences	(1993)(1990)(1990)(1990)(1998)(1976)(1987)(1976)(2000)(1998)(2002)(2001)(1998)(1998)(1998)(1998)(1998)(1998)(2000)(2002)(1991)(1994)(1997)(2001)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  E  Eldridge, David, Ph.D., Biology Emerson, Mark, M.Div., ABD/Ph.D. Earnst, Susan, Ph.D., Biology Estemond, 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 FF  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education	(1999)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(1994)(2002)(1996)(1996)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L  Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MardGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration McGavran, Patricia, Ph.D., History McCler, Steven C., Ph.D., History	(1993)(1990)(1990)(1990)(1998)(1976)(1987)(1976)(2000)(1998)(2002)(2001)(1998)(1998)(1998)(1998)(1998)(1998)(2000)(2001)(1991)(1994)(2001)(2001)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  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 Ertmer, Peggy, Ph.D., Instructional Technology F  F Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education	(1999)(1996)(2001)(2001)(2001)(1997)(1996)(1998)(1998)(1998)(1998)(2002)(2002)(2001)(1992)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration McGavran, Patricia, Ph.D., History Melquist, Wayne, Ph.D., Biology Melquist, Wayne, Ph.D., Biology	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(2000)(1998)(2002)(2001)(1996)(1998)(1987)(2000)(2000)(2002)(1999)(1997)(2003)(1997)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  E  Eldridge, David, Ph.D., Biology Emerson, Mark, M.Div., ABD/Ph.D. Earnst, Susan, Ph.D., Biology Essele, Theodore A., B.S., 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 F  F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(2002)(2002)(2002)(1997)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration McGavran, Patricia, Ph.D., History Melquist, Wayne, Ph.D., Biology Merritt, Sherawn, Ed.D., Educational Technology	(1993)(1990)(1990)(1990)(1998)(1987)(1976)(1988)(2002)(2001)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(2000)(2002)(2002)(1999)(1999)(2003)(2003)(1988)(2003)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  E  Eldridge, David, Ph.D., Biology Emerson, Mark, M.Div., ABD/Ph.D. Earnst, Susan, Ph.D., Biology Esstmond, 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 F  F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education G  Gambliel, Herve Albert, Ph.D., Biology Gayeski, Diane, Ph.D., Instructional Technology	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(1994)(2002)(1996)(2001)(1997)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., Biology Mazziluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration McGavran, Patricia, Ph.D., History Melquist, Wayne, Ph.D., Biology Merritt, Sherawn, Ed.D., Educational Technology Miller, Alison, M.A., Health Science	(1993)(1990)(1990)(1990)(1990)(1998)(1987)(2000)(2002)(2001)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1999)(2000)(2002)(1991)(1994)(1997)(2003)(2003)(2003)(2003)(2003)(2000)
Dare, Matthew, Ph.D., Biology Davydov, Vladimir I., Ph.D., Geosciences DeMuelle, Lisa, Ph.D., Educational Technology Donato, Mary M., Ph.D., Geosciences Douglas, Dorothy, Ph.D., Biology Emeritus  E  Eldridge, David, Ph.D., Biology Emerson, Mark, M.Div., ABD/Ph.D. Earnst, Susan, Ph.D., Biology Essele, Theodore A., B.S., 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 F  F  Feldman, Murray, J.D., Public Policy and Administration Fenner, JoAnn O'Brien, M.S., Instructional Technology Fischer, Michael, D.M.A., Music Fletcher, Andrea, M.P.H., Health Sciences Freeman, Brenda, Ph.D., Counselor Education Fulcher, Russell M., M.B.A., Management Fuller, Mark R., Ph.D., Biology Furness, Susan Reuling, M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education Furness, Timothy J., M.Ed., Counselor Education	(1999)(2002)(1996)(2001)(2001)(1997)(1996)(1995)(1996)(1998)(1998)(1998)(2002)(2002)(2001)(1997)(1997)(1997)	Knapp, James M.S.W., Social Work Knick, Steven T. Ph.D., Biology Knowles, Todd Allen, Ed.D., Education Knox, Ellis (Skip) Ph.D., History Kobe, Nancy, M.Ed., Counselor Education Kochert, Michael, M.S., Biology  L Lambert, Carroll, Ed.D., Education (Emerita) Langenfeld, Mary, Ph.D., Education Lanzet, Steven, M.Ed., Counselor Education Leavell, Daniel, Ph.D., Biology Leu, Matthias, Ph.D., Biology Lind, Bonnie, M.S., Health Sciences Louis, Galen, M.S., Health Science Lovin, Hugh, Ph.D., History Emeritus  M  Ma, Yongsheng, Ph.D., Biology MacGregor, Carol, Ph.D., History Marti, Jr. Carl D., Ph.D., Biology Martini, MaryAnn, M.A., Education Marsh, Kevin R., Ph.D., History Marzluff, John M., Ph.D., Biology Mazaika, Rosemary, M.S., Biology McClure, Kenneth R., J.D., Public Policy and Administration McGavran, Patricia, Ph.D., History Melquist, Wayne, Ph.D., Biology Merritt, Sherawn, Ed.D., Educational Technology	(1993)(1990)(1990)(1990)(1990)(1998)(1987)(2000)(2002)(2001)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1998)(1999)(2000)(2002)(1991)(1994)(1997)(2003)(2003)(2003)(2003)(2003)(2000)

Mitten, Joanne, M.S., Health Science	(1999)	Shannon, Susan, M.B.A., C.P.A., Accountancy	(2003
Mondin, Gregory, Ph.D., Kinesiology		Shea, Kevin, M.D., Kinesiology	
Monfort, Stephen, Ph.D., Biology		Small, Milton, M.A., History	
Moore, Heber G., Ph.D., Instructional Technology		Smith, Scott, Ph.D., Economics	
Moore, James R., M.S., Kinesiology		Spence, Michael J. Ph.D., Biology	
Moss, Charles W., M.P.A., Public Policy and Administration		Squires, Edward, M.S., Geology	
•	(=++=)	Stamm, Beth, Ph.D., Health Science	
N		Steenhof, Karen, M.S., Biology	
Newby, Timothy, Ph.D., Instructional Technology	(1997)	Stepich, Donald, Ph.D., Instructional Technology	
Nodler, Phyllis, M.S., Counselor Education		Sterling, Robert, B.S., Health Science	
Noonan, Elizabeth (Bonnie), M.S., Education		Stevens, Dennis L., Ph.D., M.D., Biology	
	()	Stevenson, Kurt Brown, M.D., Health Science	
0		Stokes, Lee, Ph.D., Health Science Emeritus	
Oberbeck, Verne, Ph.D., Geosciences	(1994)	Stroebel, Helen, R.N., M.P.H., Health Sciences	
Olsen, Thomas H., Ed.D., C & I Foundational Studies	(2001)	Sutton, Nancy Jo, D.V.M. Biology	
Olson, Richard D., Ph.D., Biology		$\omega$	(1000)
Olson, Richard, Ph.D., Health Science		Ţ	
Othberg, Kurt L., Ph.D., Geosciences		Tengelsen, Leslie Ann, Ph.D., D.V.M., Health Sciences	(2002)
Ourada, Patricia K., Ph.D., History Emeritus		Thiagarajan, Sivasailam, Ph.D., Instructional Technology	
ourada, radicia i.i., rinsory Emericas	(1010)	Thompson, Randy, Ph.D. Health Sciences	
P		Toney, Patricia N. MA., Education	
Paris, Anthony, J., Ph.D., Mechanical Engineering	(2001)	Turk, Blossom M., Ed.D., Education	
Park, Susan, J.D., Management		Tydeman, William, Ph.D., History	
Pearson, Thel, Ph.D., Education Emeritus			(1994
Perry, Terrell, Ed.D., Instructional Technology		V	
Peterson, Dave, M.A., History		Vakili, Donna, M.S., Educational Technology	(1996)
Peterson, Neil, M.S.S., Geosciences		Van Maren, Nancy, M.A., M.S.W., Health Sciences	
Peterson, Polly, Ph.D., Counselor Education		Virta, Alan, M.L.S., History	
Phelps, Ruth, Ph.D., Education		•	(1303
Pitman, Jeffrey, M.S., Kinesiology		W	
Plasket, Donna, Ph.D., Education		Waag, Charles J., Ph.D., Geosciences Emeritus	(1981)
Powell, Linda, M.S., Health Science		Watson, Richard T., Ph.D., Biology	
Pullen, Rebecca, Ph.D., Biology		Watts, Barry, Ph.D., Counselor Education	
	(1001)	Weathers, Lynne Koch, M.A., Education	
R		Weinberg, Pamela, Ph.D., Health Sciences	
Reynolds, Timothy, Ph.D., Biology	(1999)	West, Stephen, M.H.S., Health Sciences	
Rieman, Bruce, Ph.D., Biology		Whitacre, David, Ph.D., Biology	
Ripley, David E., M.B.A., Instructional Technology		White, Courtney Reynolds, M.B.A., Business & Economics	
Rodgers, David W., Ph.D., Geosciences		Wilhelm, Peggy Jo, M.S.M., Music	
Roloff, Gary John, Ph.D., Biology		Williams, Rick, Ph.D., Biology	
Rood, Christine, M.S., Education		Wilson, Kevin, M.A., English	
Rosentreter, Roger, Ph.D., Biology		Wilson, Monte, Ph.D., Geosciences Emeritus	
Roy, Baishali, Ph.D., Geosciences		Wilson, Stephen K., M.P.A., Public Policy and Administration	
Rucker, Jack P., B.A., Economic Education		Wingett, Denise, Ph.D., Biology	
Rush, Mike, Ed.D., Education			(1333
Ryan, Randall, Ph.D., Biology	(1998)	Υ	
Ryan, Ted, M.B.A., Health Sciences		Yarrington, Diane, M.H.S.A., Health Sciences	(2003)
	(2001)	Yense, A. Eric, Ph.D., Biology	
S		Youngerman, Stephanie, E.D., Education	
Saab, Victoria, Ph.D., Biology	(1998)	Yopp, Martha, Ed.D., Education	
Safaii, SeAnne, M.S., Health Sciences		Young, Katherine, Ed.D. Education (Emerita)	
Sallabanks, Rex, Ph.D., Biology		Young, Virgil M., Ph.D., Education (Emerita)	
Salo, Lucinda F., Ph.D., Biology			
Schamp, Cindy, M.A.		Youtz, D. Jeffrey, B. A., Public Policy and Administration	(1999
		Z	
	[ [ [ [ ] ] ] ]	<del>-</del>	
Schlag Coppi Ph.D. Flomontary Education		Zollword James F. M.S. Goosgienees	(100E)
Schiappa, Tamra, Ph.D., Geosciences	(2002)	Zollweg, James E., M.S., Geosciences	(1995)

# **At-Large Graduate Faculty**

Participants in multi-university programs.

Anderson, Jay E., Ph.D., Biology	(1986)
Anderson, Robert C., Ph.D., Biology	(1986)
Chandler, David, Ph.D., Geosciences	(2003)
Farrell, Larry D., Ph.D., Biology	(1986)
Goodwin, Peter, Ph.D., Engineering	(2000)
Griffith, John S., Ph.D., Biology	(1986)
Hackett, William R., Ph.D., Geosciences	(1987)
Holte, Karl E., Ph.D., Biology	(1986)
House, Edwin W., Ph.D., Biology	(1986)
Keller, Barry L., Ph.D., Biology	(1986)
Likins, Marilyn, Ph.D., Education	(2003)
Link, Paul Karl, Ph.D., Geosciences	(1987)
McCune, Mary Joan H., Ph.D., Biology	(1986)
McCune, Ron, Ph.D., Biology	

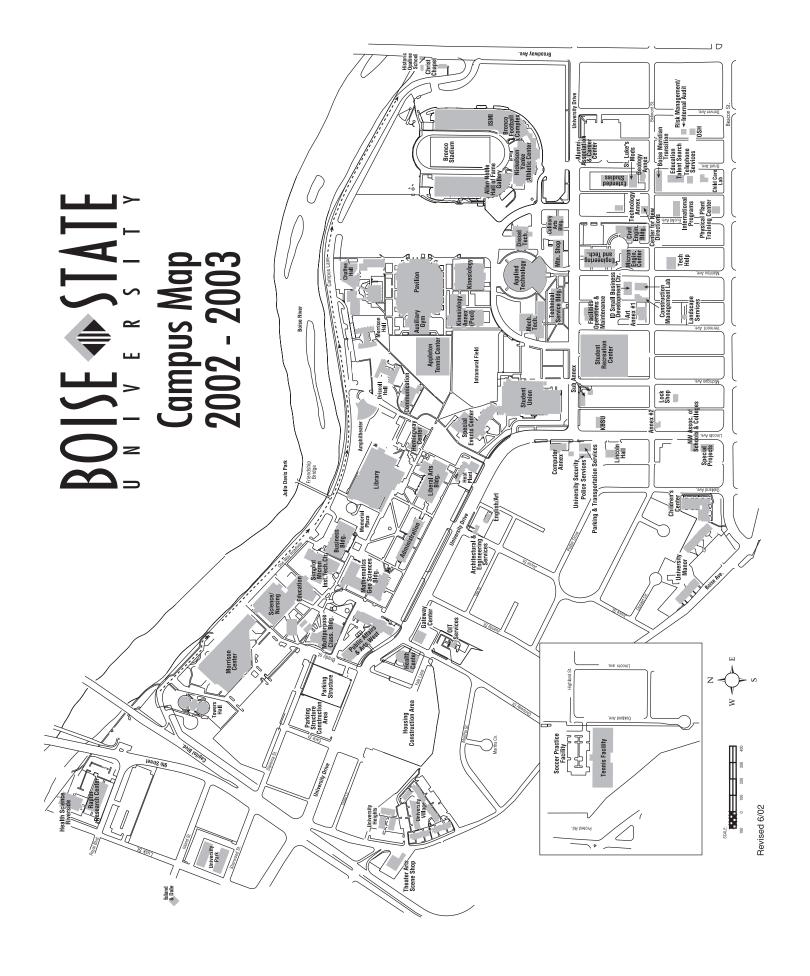
Minshall, Wayne G., Ph.D., Biology	(1986)
Osiensky, James, Ph.D., Geosciences	
Rodgers, David W., Ph.D., Geosciences	(1987)
Scalarone, Gene M., Ph.D., Biology	(1986)
Scott, J. Michael, Ph.D., Biology	(1987)
Seeley, Rodney R., Ph.D., Biology	(1986)
Spall, Richard D., Ph.D., Biology	(1986)
Stauber, Erik H., Ph.D., Biology	(1987)
Stephens, Trent D., Ph.D., Biology	(1986)
Streubel, Donald P., Ph.D., Biology	(1986)
Urfer, Alexander G., Ph.D., Biology	(1986)
Van Kirk, Robert, Ph.D., Biology	(2002)
Winston, Vern D., Ph.D., Biology	(1986)

## Index

A	Communication, Master of Arts in 61-63	Electrical Engineering Graduate Courses 86,
Academic Adjustment 24	Complete Withdrawal 28, 32, 38	89-90
Academic Honesty & Dismissal 17, 18	Computer Engineering 86, 88	Engineering, Master of Science 84-92
Academic Performance 18, 38	Computer Resources 9 Computer Science, Master of Science in 63-65	English, Master of Arts 92-95 English Program, Intensive 45
Academic Policies 23	Confidentiality and Privacy 16	Enrollment Requirement at Culmination of
Accountancy, Master of Science 46-49	Continuous Enrollment 26	Degree 26
Accreditation of Programs 7-8	Coordinators, Graduate Program 14-15	Enrollment Status, Number of Credits Determine
Addiction Studies, Master of Health Science 115	Corporate Relations Program 44	17, 38
Addiction Studies, Master of Arts in School	Counseling, Master of Arts in School 148-152	Enrollment, Student Numbers 8
Counseling 149	Counseling Center 11, 42	Boise State 8
Adding and Dropping Classes 27	Course Numbering System 12	Graduate 7
Address, Change of 17	Course Numbers, University-Wide 13	Environmental Health, Master of Health Science
Addresses, Administration 11	Course Repeat Policy 18	114
Adjunct Graduate Faculty 168	Creative Writing, MFA in 100-101	ESL 45, 76
Administrative Information 11	Credit Limits 23	Evening Programs 44
Administrative Withdrawal 19	Directed Research 23	Examination, Requirements for Final 26
Administration, Boise State University 11	Internship 23	Exercise and Sport Studies, Master of Science
Admission to a Graduate Program 24	Pass/Fail 23	96-98
Admission Policies 20-22	Practicum 23	Experiential Learning 23
Degree-Seeking Student 20-21 Non-Degree-Seeking Student 21-22	Transfer 23	Extended Studies 11, 44-45
International Student 22	Undergraduate "G" Courses for Graduate	Extension of Time 24-25
Admission Requirements 20-22	Credit 23	F
Admission to Candidacy 25	Workshops 23	F Grade, D or 18, 29-30
Advanced Certificate in Technical	Credits, Number of Determine Enrollment Status	Faculty, Graduate 8, 162-167
Communication 158	17	Faculty-Initiated Withdrawal 28
Albertsons Library 9, 11	Credits Required for Financial Aid Eligibility 17	Federal Loans 36
Apartments, University 38-41	Credits Required for Graduate Degree 25	Fee Refund Policy 32
Appeal, Right of 19, 38	Criminal Justice Administration, Master of Arts in	Fees 31-33
Application Deadlines 4-6, 20	66-68	Fellowships 35
Application Fee 20-22, 31-32	Curriculum and Instruction, Doctor of Education	Final Examination Requirement 26
Application for Admission 20-22	71-73	Financial Aid 35-38
Application for Graduate Degree 26	Curriculum and Instruction, Master of Arts in	Appeal of Ineligibility 37
Art, Master of Arts in 49-52	Education 75-76	Credits Required for Eligibility 17, 36
Art, Visual Arts, Master of Fine 102-103	Cultural Center 43	Deadlines for Applying 35-37
Assessment 13	D	Disbursement of Funds 38
Assistantships 35	D or F Grade 18, 29-30	Repayment After Withdrawal 38
Athletics and Recreation 10	Deadlines for Paying Tuition and Fees 31	Satisfactory Academic Progress 38
At-Large Graduate Faculty 169	Defense of Project, Thesis, or Dissertation 25	Fine Arts in Creative Writing, Master of 100-101
Attendance in Class 28-29	Deferred Payments 31	Fine Arts, Visual Arts, Master of 102-103
Audit Courses 27	Degrees Offered 15	Foreign Language Requirement 25
В	Degree Programs 14-15, 46-159	Foreign Student Admissions (see International
Bilingual Education 75	Directed Research 13	Student Admissions) 22
Biology, Master of Arts or Science in 53-57	Credit Limit 23	G
Biology, Raptor 144-147	Disabilities, Services for Students with 43	"G" Undergraduate Courses for Graduate Credit
Board and Room Charges 39-40	Dismissal from Boise State 17-19	12, 23
Boise, Introduction to 7-10	Dispute Resolution Graduate Courses 160	for Undergraduate Credit 23
Boise State University Administration 11	Dissertation Requirements 13, 25	Number Allowed Toward Degree 12
Boise State University Calendar 4-6	Distance Education Degree Program 44, 81, 123	Gem Scholarship 37
Bookstore 11	Doctor of Education in Curriculum and	General Information 11
Business Administration, Master of 57-61	Instruction 71-73	General Policies 16-19
C	Doctor of Philosophy in Geophysics 107-110 Dropping and Adding Classes 27	General Research, Master of Health Science 115
Calculate GPA 29-30	Dropping and Adding Classes 21	Geology, Master of Science 104-107
Calculate Tuition and Fees 31	E	Geophysics, Doctor of Philosophy 107-110
Calendar, Boise State University Academic 4-6	Early Childhood, Master of Arts in Education 79	Geophysics, Master of Science 110-113
Campus Setting 8-10	Earth Science, Master of Science in Education	GMAT 20-22, 42, 46, 58
Candidacy, Admission to 25	68-70	GPA, How to Calculate 29-30
Career Center 11, 42	Education in Curriculum and Instruction, Doctor	Grade Point Average Computation 30
Cashier (See Payment and Disbursement Center)	of 71-73	Grades 18, 27-30
11, 31-33	Education, Master of Arts or Science 74-84	IP useage of 29-30
Catalog year, Choosing a 25	Bilingual/ESL Option 76	Grading System 29
Catalog, How to Use 12	Curriculum and Instruction 75 Early Childhood 79	Graduate Admissions 11, 20-23 Graduate Assistantships 35
Certification 76-78	Reading 79	Graduate College 11
CEU's and Certificate Programs 44	Special Education 80	Graduate College II  Graduate Courses as a Senior for Graduate Credit
Challenge Courses 23	Educational Technology 44, 81	23
Change of Name or Address 17	Physical Education Pedagogy Option 76	For Undergraduate Credit 23
Chemistry Graduate Courses 160	Secondary Certification Option 76	Number of G Credits Allowed Toward Degree
Child Care 42	Educational Technology, Master of Science in	12
Civil Engineering 85, 88	Education 44, 81	Graduate Dean 11, 18
Colloquium 13		Graduate Dean II, 16 Graduate Degree Program General Requirements
Committee, Graduate Student Supervisory 24		24.9¢

Graduate Degree Programs 14-15, 46-159 Master of Public Administration 140-143 Residency Requirements 25, 33-34 Graduate Degrees Offered 14-15 Master of Science in Accountancy, Taxation Rights and Responsibilities 16 Graduate Faculty 8, 162-169 Graduate Program Coordinators 14-15 Master of Science in Computer Science 63-65 Scholarships 37 Graduate Student Supervisory Committee 24 Master of Science in Earth Science 68-70 School Counseling, Master of Arts in 148-152 Grievance, Right of Appeal 19 Master of Science in Education, Educational Second Master's Degree 25 GRE 20-22, 42 Technology 44, 81 Selected Topics 13 Master of Science in Engineering 84-92 Seminar 13 Master of Science in Exercise and Sport Studies Health Insurance, Student 32 Senior Citizen Fee Rate 32 96-98 Health & Wellness Center, Student 42 Senior Permit to Take Graduate Courses 22 Master of Science in Geology 104-107 Health Promotion, Master of Health Science 115 Short-Term Loans 37 Master of Science in Geophysics 110-113 Health Policy, Master of Health Science 115 Special Topics 13 Master of Science in Instructional & Performance Health Services Leadership, Master of Health Social Work, Master of 153-156 Technology 44, 123-127 Science 115 Sociology Graduate Courses 161 Master of Science in Management Information History of Boise State University 7 Special Education, Master of Arts in Education Systems 129-131 History, Master of Arts 119-122 Master of Science in Materials Science & Housing 38-41 Sports 10 Engineering 131-133 Payment and Disbursement Office 11, 31-33 Student Employment 37 Master of Science in Mathematics Education Off-Campus 41 Student Enrollment 8 133-135 How to Use This Catalog 12 Student Handbook 16 Master of Science in Raptor Biology 144-147 Student Health Services 11, 32, 42 Master of Social Work 153-156 Student Housing 11, 38-41 IP grade, useage of 29-30 MAT 114 Student Insurance 32 I-PAY Installment Plan 31 Materials Science & Engineering, Master of Student Records 16 Idaho Residency Requirements for Fee Purposes Science in 131-133 Student Residential Life 11, 39-41 32-34 Mechanical Engineering Graduate Courses 87, Student Rights 16 Idaho State Board of Education Members 11 91-92 Student Services 42 Incompletes 30 Mission Statement, University 7 Studies Abroad Programs 45 Information Resources 11 Music, Education, Master of 136 Summer Programs 11, 44 In-residence Requirements for Credit Purposes Music, Pedagogy, Master of 137 Music, Performance, Master of 137 In-service Program for Teachers 44 Table of Contents 3 Instructional & Performance Technology, M.S. Taxation 46 Name, Change of 17 Teacher Certification 76-78 123-127 New Student Information Center 11 Insurance 32 Teacher Education 74-84 Interdisciplinary Studies, Master of Arts or Teacher In-Service Program 44 Open Registration 27 Science 127-128 Credit restriction 77 International Programs 45 Oral Defense for Project, Thesis, or Dissertation Technical Communication, Master of Arts International Student 20, 22, 45 26 156-158 Internet Courses 44 Advanced Certificate 158-159 Internship 13, 23 Television Courses 44 Part-Time Enrollment Credit Requirement 17, 38 Test of English as a Foreign Language Exam 20, K Pass/Fail Course Credit Limit 23 Knowledge Network 45 Payment and Disbursement Center 11, 31-34 Testing Center 20 Permanent Records 16 Thesis Requirements 13, 25 Physical Education 76, 99 Latin Graduate Courses 122 Time Limit for Completion of Degree 24 Physics Graduate Courses 160-161 Library Resources 9 TOEFL 21, 22 Plagiarism 17-18 Limits for Completion of Degree Requirements, Transcript Records 16 **Policies** Time 24 Transcripts, Submission of 20-22 General Graduate 16-19 Loans 36-37 Transfer Credits 23 Graduate Admission 20-23 Tuition 31-32 Registration 27-30 Tuition and Fees Deferred Payment 31 Mailing Address, University 11 Policy Statement Concerning Catalog Contents 2 Management Information Systems, M.S. 129-131 Practicum 13, 23 Master of Arts in Art 49-52 Prerequisites 12 University Children's Center 42 Privacy 16 Master of Arts in Communication 61-63 University Mailing Address 11 Master of Arts in English 92-95 Program Coordinators, Graduate 14-15 University-Wide Course Numbers 13 Master of Arts in History 119-122 Program Development Form 24 Master of Arts in School Counseling 148-152 Project Requirements 13, 25 Veterans' Services 43 Master of Arts or Science in Biology 53-57 Psychology Graduate Courses 161 Visual Arts, MFA in 102-103 Master of Arts or Science in Education 74-84 Public Administration, Master of 140-143 Master of Arts or Science in Interdisciplinary Waiver, Fee 37 Studies 127-128 Raptor Biology, Master of Science 144-147 Weekend University Courses 44 Master of Arts in Technical Communication Reading, Master of Arts in Education 79 Withdrawal 156-158 Readings and Conference 13 Administrative 18-19 Advanced Certificate 158-159 Recreation and Athletics 10 Complete 28, 38 Master of Business Administration 57-61 Refund Policy 32 Faculty-Initiated 38 Master of Fine Arts in Creative Writing 100-101 Registrar 11 Financial Aid Repayment 38 Master of Fine Arts, Visual Arts 102-103 Registration Policies, Procedures, and Grades Women's Center 43 Master of Health Science 113-119 Workshop Credits 13, 23 Master of Music 136-140 Repeat Course Policy 18 Master of Physical Education, Athletic Writing Center 42 Research Assistantships 35 Written Exam for Graduate Degree 26 Administration 99

Residence Halls 39





Boise State University Graduate Admissions 1910 University Drive Boise, ID 83725-1110 276A100001

Non-Profit Org. U.S. Postage PAID Boise, Idaho Permit No. 170