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University of Montana Catalog

University of Montana Catalog 2014 - 2015

The University of Montana capitalizes on its unique strengths to create knowledge, provide an active learning environment for students, and offer programs and services responsive to the needs of Montanans. The University delivers education and training on its four campuses and through telecommunications to sites inside and outside of Montana. With public expectations on the rise, the University asks its students, faculty, and staff to do and accomplish even more than they have in the past. The University has a commitment to education defined in the broadest sense as personal development and citizen preparation, workforce development and training, graduate education and research, service learning, and community building on and off the campuses. The University enhances its programs through continuous quality review for improvement and remains fully accountable to the citizenry through annual audits and performance evaluations.

The Montana University System - Mission

The following Strategic Plan was adopted by the Board of Regents in July 2006, and updated in January 2010. More information is available on the [Office of the Provost website](#).

Mission

The Mission of the Montana University System is to serve students through the delivery of high quality, accessible postsecondary educational opportunities, while actively participating in the preservation and advancement of Montana's economy and society.

Vision

We will prepare students for success by creating an environment of ideas and excellence that nurtures intellectual, social, economic, and cultural development. We will hold academic quality to be the prime attribute of our institutions, allocating human, physical, and financial resources appropriate to our educational mission. We will encourage scientific development and technology transfer, interactive information systems, economic development and lifelong learning. We will protect academic freedom, practice collegiality, encourage diversity, foster economic prosperity, and be accountable, responsive, and accessible to the people of Montana.

Introduction

The Montana University System Strategic Plan is the primary planning document of the Board of Regents. The Plan sets forth an agenda for higher education in Montana by delineating the strategic directions, goals, and objectives that guide the Montana University System (MUS).

History

In July 2006, after several years of study, public dialogue, and internal deliberations, the Board of Regents approved the Strategic Plan. Since then, updates have occurred annually, including revisions to strategic initiatives as well as a refreshing of the data within each goal. The development of the Strategic Plan began with two primary initiatives.

The first was to work more closely with the interim legislature to develop a set of mutually agreed upon accountability measures that would guide the MUS and evaluate progress. Working with the Postsecondary Education Policy and Budget (PEPB) subcommittee of the 57th Legislature, the Board of Regents did develop this

set of accountability measures in July 2002. Subsequently, the PEPB subcommittee has updated the accountability measures. This latest set of agreed-upon measures evolved into "shared policy goals" and work to form one base for this strategic plan.

The second initiative was to work with the PEPB Subcommittee to explore new ways for the MUS take a more direct leadership role in the state's economic development. This overall effort, called "Shared Leadership for a Stronger Montana Economy", engaged a broad range of Montanans to prioritize specific initiatives that would help establish a new role for the MUS in strengthening the state's economy. The Governor's Office and several legislative interim committees were included in the effort.

In July 2004, the Board of Regents and the PEPB subcommittee met jointly and agreed on three priority initiatives for immediate implementation:

Develop stronger business-university system partnerships for workforce training;

Remove barriers to access for postsecondary education; and

Expand distance learning programs and training.

Goals

The Strategic Plan is comprised of three primary goals that contain a series of sub-goal statements and objectives within each area.

Goal 1: Access & Affordability

Increase the overall educational attainment of Montanans through increased participation, retention and completion rates in the Montana University System.

Goal 2: Workforce & Economic Development

Assist in the expansion and improvement of the state's economy through the development of high value jobs and the diversification of the economic base.

Goal 3: Efficiency & Effectiveness

Improve institutional and system efficiency and effectiveness Maintaining the high quality of our institutions and the education provided to our students is not listed as an explicit goal. This is because it is THE MOST IMPORTANT consideration for every goal and initiative of the Montana University System and is considered to be an integral part of every component of this strategic plan.

University of Montana - Mission

Mission

The University of Montana capitalizes on its unique strengths to create knowledge, provide an active learning environment for students, and offer programs and services responsive to the needs of Montanans. The University delivers education and training on its four campuses and through telecommunications to sites inside and outside of Montana. With public expectations on the rise, the University asks its students, faculty, and staff to do and accomplish even more than they have in the past. The University has a commitment to education defined in the broadest sense as personal development and citizen preparation, workforce development and training, graduate education and research, service learning, and community building on and off the campuses. The University enhances its programs through continuous quality review for improvement and remains fully accountable to the citizenry through annual audits and performance evaluations.

University of Montana Missoula - Mission

Mission

University of Montana-Missoula pursues academic excellence as demonstrated by the quality of curriculum and instruction, student performance, and faculty professional accomplishments. The University accomplishes this mission, in part, by providing unique educational experiences through the integration of the liberal arts, graduate study, and professional training with international and interdisciplinary emphases. The University also educates competent and humane professionals and informed, ethical, and engaged citizens of local and global communities; and provides basic and applied research, technology transfer, cultural outreach, and service benefiting the local community, region, State, nation and the world.

Vision Statements

In pursuit of its mission, University of Montana-Missoula will:

1. Educate students to become ethical persons of character and values, engaged citizens, competent professionals, and informed members of a global and technological society.
2. Increase the diversity of the students, faculty, and staff for an enriched campus culture.
3. Attain the Carnegie Commission status of Doctoral Research-Extensive University (50 or more doctorates in at least 15 fields annually) and increase funded research to \$100,000,000 annually by 2011.
4. Pursue more partnerships—especially with local communities, businesses and industries, public schools, community and tribal colleges, state and local governments and universities abroad—and expand the training and technology transfer programs to promote community and economic development.
5. Develop the capability and infrastructure for use of information technology to increase the efficiency and productivity of the campus and the state; and
6. Involve and engage the faculty, staff, students, alumni, partners, and friends of the University in institutional governance.

Equal Opportunity

University of Montana is committed to a program of equal opportunity for education, employment and participation in University activities without regard to race, color, gender, age, religion, creed, political ideas, marital or family status, physical or mental disability, national origin or ancestry, gender identity, or sexual orientation.

Accreditation

The University of Montana-Missoula is accredited by the Northwest Commission on Colleges and Universities (NWCCU).

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future.

Institutional integrity is also addressed through accreditation. Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution.

Individuals may also contact:

Northwest Commission on Colleges and Universities

8060 165th Avenue N.E., Suite 100

Redmond, WA 98052

(425) 558-4224

www.nwccu.org

Accreditation documents may be reviewed in the Provost's Office, located in University Hall Room 126.

Many of the professional schools and departments have special accreditation as well.

The following table provides detailed information on these special accreditations:

College or School	Department	Degrees	Accrediting Institution
College of Humanities and Sciences	Chemistry	BS, MS, PhD	American Chemical Society (ACS)
College of Humanities and Sciences	Computer Science	BS	Computing Accreditation Commission of ABET
College of Humanities and Sciences	Psychology, Clinical	PhD	American Psychological Association
College of Humanities and Sciences	School Psychology	EdS, PhD	National Association of School Psychologists and American Psychological Association
School of Business Administration	Accounting	BS, MAcct	Association to Advance Collegiate Schools of Business (AACSB-International)
School of Business Administration	Business	BS, MBA	Association to Advance Collegiate Schools of Business (AACSB-International)
Missoula College	Food Service Management	AAS	American Culinary Federation Educational Institute (ACFEI)
Missoula College	Nursing	AAS, AS	Montana State Board of Nursing
Missoula College	Paralegal Studies	AAS	American Bar Association (ABA)
Missoula College	Pharmacy Technology	Certificate	

			American Society of Health System Pharmacists (ASHSP)
Missoula College	Respiratory Care	AAS	Committee for Accreditation of Respiratory Care (CoARC w/CAAHEP)
Missoula College	Surgical Technology	AAS	Commission on Accreditation of Allied Health Education Programs (CAAHEP)
Phyllis J. Washington College of Education and Human Sciences	Athletic Training	BS	Commission on Accreditation of Allied Health Education (CAATE)
Phyllis J. Washington College of Education and Human Sciences	Counselor Education	MA, Mental Health Counseling; and School Counseling	Council for Accreditation of Counseling and Related Educational Programs (CACREP)
Phyllis J. Washington College of Education and Human Sciences	Communication Science and Disorders	MS in Speech-Language Pathology	American Speech Language Association-Council on Academic Accreditation (ASHA)
Phyllis J. Washington College of Education and Human Sciences	Education	BA, MEd, EdS,	National Council for Accreditation of Teacher Education (NCATE); Montana Board of Public Education
Phyllis J. Washington College of Education and Human Sciences	Co-Teach Preschool, Institute for Educational Research and Service	n/a	National Association for the Education of Young Children (NAEYC)
College of Visual and Performing Arts	Art & Media Arts	BA, BFA, MA, MFA	National Association of Schools of Art and Design (NASAD)
College of Visual and Performing Arts	Theater & Dance	BA, BFA, MA, MFA	National Association of Schools of Theater (NAST)
College of Visual and Performing Arts	Music	BA, BM, BME, MM	National Association of Schools of Music (NASM)
College of Forestry and Conservation	Forest Resources Management	BS	Society of American Foresters (SAF)

College of Forestry and Conservation	Recreation Management	BS	National Recreation and Park Association/American Association for Leisure and Recreation (NRPA/AALR)
School of Journalism	Journalism	BA	Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)
School of Law	Law	JD	American Bar Association (ABA) American Association of Law Schools (AALS)
College of Health Professions and Biomedical Sciences	Pharmacy	PharmD	Accreditation Council for Pharmacy Education (ACPE)
College of Health Professions and Biomedical Sciences	Public Health	MPH	Council on Education for Public Health (CEPH)
College of Health Professions and Biomedical Sciences	Physical Therapy	DPT	Commission on Accreditation in Physical Therapy Education (CAPTE)
College of Health Professions and Biomedical Sciences	Social Work	BA	Council on Social Work Education (CSWE)
College of Health Professions and Biomedical Sciences	Social Work	MSW	Council on Social Work Education (CSWE)
The University of Montana	Department of Laboratory Animal Resources	n/a	Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC)

University Officers

June 2014

Montana Board of Regents of Higher Education

- Paul Tuss (Chair) - Havre
- Major Robinson (Vice Chair) - Billings
- Fran Albrecht - Missoula

- William Johnstone - Great Falls
- Jeffrey Krauss - Bozeman
- Martha Sheehy - Billings
- Mariah Williams (Student Regent) - Missoula
- Clayton Christian, Commissioner of Higher Education (ex-officio)
- Denise Juneau, Superintendent of Public Instruction (ex-officio)
- Steve Bullock, Governor (ex-officio)

Administrators

- Royce C. Engstrom, Ph.D. – President
- Perry J. Brown, Ph.D. – Provost and Vice President for Academic Affairs
- Peggy Kuhr, M.A. – Vice President for Integrated Communication
- Teresa Branch, Ph.D. – Vice President for Student Affairs
- Michael Reid, M.B.A. – Vice President for Administration and Finance
- Scott Wittenburg, Ph.D. – Vice President for Research and Creative Scholarship
- Shane Giese, M.B.A. – President/CEO, University of Montana Foundation
- William Johnston, M.P.A. – President/CEO, University of Montana Alumni Association
- Lucy France, J.D. – Legal Counsel
- Matt Riley, M.B.A. – Chief Information Officer
- Jessica Weltman, J.D. – Director, Equal Opportunity and Affirmative Action Office
- Kent Haslam, M.Ed. – Athletic Director

Academic Officers

- James Burchfield, Ph.D. - Dean, College of Forestry and Conservation
- Christopher Comer, Ph.D. - Dean, College of Humanities and Sciences
- Larry Abramson, M.A. - Interim Dean, School of Journalism
- Roberta Evans, Ph.D. - Dean, Phyllis J. Washington College of Education and Human Sciences
- Reed Humphrey, Ph.D. - Dean, College of Health Professions and Biomedical Sciences
- Larry Gianchetta, Ph.D. - Dean, School of Business Administration
- Barry Good, Ph.D. - Dean, Missoula College
- Joseph Hickman, M.A. - Interim Registrar
- Nathan Lindsay, Ph.D. - Associate Provost for Dynamic Learning
- Stephen Kalm, D.M.A. - Dean, College of Visual and Performing Arts
- Roger Maclean, Ed.D. - Dean, School of Extended and Lifelong Learning
- James McKusick, Ph.D. - Dean, Davidson Honors College
- Sharon O'Hare, M.A. - Assistant Vice President for Student Success
- J. B. Alexander Ross, Ph.D. - Dean, Graduate School
- Gregory Munro, J.D. - Interim Dean, School of Law
- Shali Zhang, Ph.D. - Dean, Mansfield Library

Contacts, Calendar and Reserved Rights - University of Montana - Missoula

Contacts

University of Montana website (<http://www.umt.edu/>)

Department	Phone Number

Enrollment Services/Orientation	(406) 243 6266
Business Services	(406) 243 2223
Missoula College	(406) 243 7882 (In Montana, 1 800 542 6882)
Disability Services TDD	(406) 243 2243
University Villages	(406) 243 6030
Financial Aid	(406) 243 5373
Graduate School	(406) 243 2572
Registrar	(406) 243 2995
Residence Halls	(406) 243 2611
University Switchboard	(406) 243 0211

Reserved Rights

The right is reserved to change any of the rules and regulations of the University at any time including those relating to admission, instruction and graduation. The right to withdraw curricula and specific courses, alter course content, change the calendar, and to impose or increase fees similarly is reserved. All such changes are effective at such times as the proper authorities determine and may apply not only to prospective students but also to those who already are enrolled in the University.

The 2014-2015 Calendar

The 2014-2015 Academic Calendar (as well as previous and future calendars) may be viewed on the [Provost Office web page](#).

A Listing of Important Dates and Deadlines may be viewed on the [Registrar's Office Calendar web page](#).

University of Montana - Missoula Strategic Goals

The planning context for the University of Montana is framed by the Montana Board of Regents Strategic Plan. The UM Strategic Plan is also known as Core Themes. It is updated annually and its progress is continuously monitored through the compilation and analysis of key outcomes data.

The following five strategic issues form the foundation of the new UM Strategic Plan. The degree to which the University of Montana attends and adheres to these goals will ultimately determine its continued success and value.

PARTNERING FOR STUDENT SUCCESS

The University will help its students succeed academically and personally so they graduate well-prepared for their careers or further education. The Partnering for Student Success plan identifies six key objectives critical to student success and sets forth actions to promote a successful first year for entering freshmen and to address the needs of returning students. UM seeks to improve students' success by addressing their preparedness for

college-level work, improving their transition to college, providing an integrated early curriculum, increasing student engagement and support, and emphasizing faculty and staff development. As part of the plan, UM created the Office for Student Success, which is charged with developing, implementing, and coordinating initiatives to increase students' persistence toward graduation.

EDUCATION FOR THE GLOBAL CENTURY

UM will offer an educational experience at all degree levels that provides graduates the foundation to make positive impacts on a world that is increasingly interconnected. The University's Academic Strategic Plan, endorsed by the Faculty Senate in 2009, identified the need to create a gateway-to-discovery experience focused on the challenges of the global century for all incoming students at each level of postsecondary education. At the same time, the University recognizes the need to support and strengthen foundational academic programs. For all students, curricula will focus on producing workers and leaders who make a difference in the cultural and economic fabric of Montana and the world.

DISCOVERY AND CREATIVITY TO SERVE MONTANA AND THE WORLD

The University will transform discovery and creativity into knowledge, applications and experiences in ways that benefit the state, region, nation and world. Scholarship, research, and creative work are central to the lives of faculty, students, and staff, and to academic programming at the University of Montana. Therefore, UM supports research, scholarship, and creative work across the natural and physical sciences, social and behavioral sciences, arts, and humanities, and works to enhance opportunities for interdisciplinary connections. By fostering an entrepreneurial spirit in the community of research and technology, UM transforms discovery into application.

DYNAMIC LEARNING ENVIRONMENT

UM will enhance its character as a place where people are passionate about learning, discovery and growth. The University of Montana is consistently recognized as one of the most attractive and enticing campuses in the nation. Community and campus engagement literally means that the lives of the students, faculty, staff, alumni, and friends of the University are centered on the campus. Examples range from sold-out athletic events that feature perennial championship teams, to galleries, campus theaters, and arenas filled to capacity for performances featuring local and world famous artists. UM builds a vibrant and dynamic learning environment, where the natural surroundings are integrated into the curriculum.

PLANNING-ASSESSMENT CONTINUUM

The University will model transparency, systematic communication and sound decision-making to ensure that resources are marshaled to achieve UM's mission. The Planning-Assessment Continuum characterizes a cultural orientation of the University of Montana designed to facilitate desired outcomes, clarify the University's vision and mission, and communicate and demonstrate to internal and external stakeholders that the University is making the best use of its resources. Executive leadership provides communication of mission and vision, clear and consistent processes, overarching mission-driven goals, equitably applied parameters, and rules enforcement, while faculty, staff, and students provide ideas, process improvements, work, action, and other vital contributions to the direction of the University.

Areas of Study

Name	Minor	Certificate	Associate	Bachelor
<u>Accounting</u>				<u>Requirements</u>
<u>Accounting Information Systems</u>		<u>Requirements</u>		
<u>Accounting Technology</u>			<u>Requirements</u>	

<u>Administrative Management</u>			<u>Requirements</u>	
<u>Administrative System Mgmt</u>	<u>Requirements</u>			
<u>African-American Studies</u>	<u>Requirements</u>			
<u>Anthropology</u>				<u>Requirements</u>
<u>Applied Science</u>				<u>Requirements</u>
<u>Arabic Studies</u>	<u>Requirements</u>			
<u>Art</u>				<u>Requirements</u>
<u>Art History/Criticism</u>	<u>Requirements</u>			
<u>Art Studio</u>	<u>Requirements</u>			
<u>Astronomy</u>	<u>Requirements</u>			
<u>Biochemistry</u>				<u>Requirements</u>
<u>Biology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Carpentry</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Central & Southwest Asian Stds</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Chemistry</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Chinese</u>	<u>Requirements</u>			
<u>Classical Civilization</u>	<u>Requirements</u>			
<u>Classics</u>				<u>Requirements</u>
<u>Climate Change Studies</u>	<u>Requirements</u>			
<u>Commun Sci & Disorders</u>				<u>Requirements</u>
<u>Communication Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Computer Aided Design</u>		<u>Requirements</u>		
<u>Computer Applications</u>	<u>Requirements</u>			
<u>Computer Sci-Mathematical Sci</u>				<u>Requirements</u>

<u>Computer Science</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Computer Support Specialist</u>		<u>Requirements</u>		
<u>Culinary Arts</u>		<u>Requirements</u>		
<u>Customer Relations</u>		<u>Requirements</u>		
<u>Dance</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Dance Specialization Education</u>	<u>Requirements</u>			
<u>Diesel Technology</u>			<u>Requirements</u>	
<u>Digital Marketing</u>		<u>Requirements</u>		
<u>East Asian Studies</u>				<u>Requirements</u>
<u>Ecological Restoration</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Economics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Education</u>				<u>Requirements</u>
<u>Electronics Technology</u>			<u>Requirements</u>	
<u>Energy Technology</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Engl as a Sec Lang</u>		<u>Requirements</u>		
<u>English</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Entertainment Management</u>		<u>Requirements</u>		
<u>Entrepreneurship</u>		<u>Requirements</u>		
<u>Environmental Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Film Studies</u>	<u>Requirements</u>			
<u>Finance</u>				<u>Requirements</u>
<u>Fire Sciences & Management</u>	<u>Requirements</u>			
<u>Food Service Management</u>			<u>Requirements</u>	
<u>Forensic Studies</u>		<u>Requirements</u>		

<u>Forestry</u>				<u>Requirements</u>
<u>French</u>	<u>Requirements</u>			<u>Requirements</u>
<u>General AA</u>			<u>Requirements</u>	
<u>Geographic Information Systems</u>		<u>Requirements</u>		
<u>Geography</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Geosciences</u>	<u>Requirements</u>			<u>Requirements</u>
<u>German</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Gerontology</u>	<u>Requirements</u>			
<u>Global Public Health</u>	<u>Requirements</u>			
<u>Greek</u>	<u>Requirements</u>			
<u>Health & Human Performance</u>				<u>Requirements</u>
<u>Health Information Technology</u>		<u>Requirements</u>		
<u>Heavy Equipment Operation</u>		<u>Requirements</u>		
<u>Historic Preservation</u>		<u>Requirements</u>		
<u>History</u>	<u>Requirements</u>			<u>Requirements</u>
<u>History-Political Science</u>				<u>Requirements</u>
<u>Human and Family Development</u>	<u>Requirements</u>			
<u>Information Technology</u>			<u>Requirements</u>	
<u>International Business</u>				<u>Requirements</u>
<u>International Development Stds</u>	<u>Requirements</u>			
<u>International Field Geos Dual</u>				<u>Requirements</u>
<u>International Field Geos Joint</u>				<u>Requirements</u>
<u>Irish Studies</u>	<u>Requirements</u>			
<u>Japanese</u>	<u>Requirements</u>			<u>Requirements</u>

<u>Journalism</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Language Rejuvenation & Maint</u>		<u>Requirements</u>		
<u>Latin</u>	<u>Requirements</u>			
<u>Latin American Studies</u>	<u>Requirements</u>			
<u>Liberal Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Linguistics</u>	<u>Requirements</u>			
<u>Management</u>			<u>Requirements</u>	<u>Requirements</u>
<u>Management Information Systems</u>				<u>Requirements</u>
<u>Marketing</u>				<u>Requirements</u>
<u>Mathematical Sci-Computer Sci</u>				<u>Requirements</u>
<u>Mathematics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Media Arts</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Medical Information Technology</u>			<u>Requirements</u>	
<u>Medical Reception</u>		<u>Requirements</u>		
<u>Medical Technology</u>				<u>Requirements</u>
<u>Microbiology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Military Studies</u>	<u>Requirements</u>			
<u>Mountain Studies</u>	<u>Requirements</u>			
<u>Music</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Music Education</u>				<u>Requirements</u>
<u>Native American Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Network & Info Security Prof</u>		<u>Requirements</u>		
<u>Nonprofit Administration</u>	<u>Requirements</u>			

<u>Paralegal Studies</u>			<u>Requirements</u>	
<u>Parks, Tourism & Rec Management</u>				<u>Requirements</u>
<u>Pharmacy Technology</u>		<u>Requirements</u>		
<u>Philosophy</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Physics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Political Science</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Political Science-History</u>				<u>Requirements</u>
<u>Practical Nursing</u>			<u>Requirements</u>	
<u>Psychology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Radio-Television</u>				<u>Requirements</u>
<u>Radiologic Technology</u>			<u>Requirements</u>	
<u>Recreational Power Equipment</u>		<u>Requirements</u>		
<u>Registered Nursing</u>			<u>Requirements</u>	
<u>Resource Conservation</u>				<u>Requirements</u>
<u>Respiratory Care</u>			<u>Requirements</u>	
<u>Russian</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Russian Studies</u>	<u>Requirements</u>			
<u>Sales and Marketing</u>		<u>Requirements</u>		
<u>Secondary Certification</u>				
<u>Social Work</u>				<u>Requirements</u>
<u>Sociology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>South & Southeast Asian Stds</u>	<u>Requirements</u>			
<u>Spanish</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Surgical Technology</u>			<u>Requirements</u>	

<u>Sustainable Business Strategy</u>		<u>Requirements</u>		
<u>Theatre</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Welding Technology</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Wilderness Studies</u>	<u>Requirements</u>			
<u>Wildlife Biology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Women's and Gender Studies</u>	<u>Requirements</u>			

Bachelor Degree Admission – Entering Freshmen

Academic Eligibility

The University continues to raise the academic standards required for full admission to Baccalaureate programs, and the process will continue in future years. For the current academic year both in-state and out-of-state high school graduates will be offered full admission if they meet the requirements below.

Some departments reserve the right to set higher admission standards for their undergraduate programs. Applicants to these programs will be admitted to the appropriate pre-major program by Enrollment Services-Admissions. Application to the undergraduate degree program is an additional, separate process administered by the department and arranged for by the student seeking acceptance.

1. Graduation from a state accredited high school.
2. Successful completion of the following College Preparatory program:

- Four years of English.
- Three years of math, including Algebra I, Geometry and Algebra II (or the sequential content equivalent of these courses). Students are encouraged to take a math course in their senior year.
- Three years of social studies, including one year global studies (i.e., world history or world geography), one year American history and one year of additional course work (i.e., government, psychology, economics).
- Two years of laboratory science. One year must be earth science, biology, chemistry, or physics; the other year can be one of those sciences or another approved college prep laboratory science.
- Two years chosen from the following: foreign language (preferably two years), computer science, visual and performing arts, or vocational education units.

3. Students must meet one of the following admissions requirements:

- ACT composite of 22, or
- SAT combined score of 1540, or
- a 2.50 cumulative grade point average, or
- class rank in the upper half of the graduating class.
- Students whose tests or GPA are significantly below this level may be admitted on a conditional basis.

4. Students must meet a minimum Math Proficiency score of:

- 22 on the ACT Math section or
- 520 on the SAT Math section or
- A score of 3 or above on the AP Calculus AB or BC Subject Exams. In lieu of the above requirement, students can complete a Rigorous High School Core that includes four years of math with grades of C or higher and three years of lab science or
- 4 on the International Baccalaureate Calculus Exam.

5. Students must meet a minimum Writing Proficiency score of:

- 18 on the Combined English/Writing section of the Optional Writing Test or a 7 on the Writing Subscore of the ACT; or
- 440 on the Writing Section of the SAT or a 7 on the Essay the SAT; or
- 3.5 on the Montana University System Writing Assessment; or
- 3 on the AP English Language or English Literature Examination; or
- 4 on the International Baccalaureate Language A1 Exam or
- 50 on the CLEP Subject Exam in Composition.

Home-Schooled Students

Information on admission requirements for home-schooled students or students who graduate from a non-accredited high school can be found at the [UM admissions home school web page](#).

Traditional-Age Freshmen with GED

GED freshmen are those students who have passed the GED and enter college within three years of the date they would have graduated from high school. Admission will be determined by current University of Montana criteria for GED freshmen. All GED freshmen applicants are required to take the ACT or SAT.

Non-Traditional Freshmen

Non-traditional freshmen are those students who are over 21 years old and who did not enter college for a period of at least three years from the date of high school graduation. Admission will be determined by current University of Montana criteria for non-traditional students. Non-traditional freshmen will be admitted conditionally if test scores are not posted on the high school transcript or if a student has never taken the ACT or SAT.

The following students are exempt from Standards 1, 2, 3, 4 and 5 above:

- Summer Only Students
- Part-time students taking seven or fewer college-level semester credits.

Conditional Acceptance

Students who do not meet the admission requirements may be admitted on a conditional basis if the Admissions Committee determines that a student could be successful by taking advantage of the academic support services that are available. Students will be granted full admission after completing 24 credits with a grade point average of at least 2.0. Students are expected to complete the 24 credits within two semesters but must complete them within three semesters. In cases where academic preparation falls well below the admission standards listed above, applicants will be directed to the Missoula College where courses can be taken to strengthen their preparation for success at The University of Montana.

Future trends in Admission Eligibility at UM

	SAT (ACT)	1600 (36)	1560 (35)	1510 (34)	1460 (33)	1410 (32)	1360 (31)	1320 (30)	1280 (29)	1240 (28)	1210 (27)	1170 (26)	1130 (25)	1090 (24)	1050 (23)	1020 (22)	980 (21)	940 (20)	900 (19)	860 (18)	810 (17)
GPA 4.0																					
3.9																					
3.8																					
3.7																					
3.6																					
3.5																					
3.4																					
3.3																					
3.2																					
3.1																					
3.0																					
2.9																					
2.8																					
2.7																					
2.6																					
2.5																					
2.4																					
2.3																					
2.2																					
2.1																					
2.0																					

In future years, the academic criteria for full admission to Baccalaureate programs at The University will continue to rise. Students who fail to meet these stricter admission standards may be admitted on a conditional basis (see above).

How to Apply

Applications for admission are available from Enrollment Services-Admissions by request or are available on the University Admissions website. An application for admission is complete when Enrollment Services-Admissions receives the credentials described below.

1. Application form. Applications must be complete and signed.
2. Application Fee. The fee is \$30 or \$36 when applying online. This non-refundable fee is payable once at the undergraduate level provided payment is followed by enrollment. Record of payment will remain on file for one year for students who do not enroll. Applications are not processed prior to payment of this fee. The University of Montana-Missoula waives the application fee for students who have attended an affiliate campus: Montana Tech or Highlands College (former College of Technology) in Butte , Helena College (formerly Helena College of Technology, and University of Montana-Western in Dillon.
3. Test scores. Official ACT or SAT results should be sent directly from the testing company or may be posted on the high school transcript.
4. High School Student Self-Report form. This form is part of the standard application form and is the basis for the initial admission decision.
5. Final high school transcripts. Transcripts should be submitted after graduation and must include a graduation date and final GPA. Information provided on the self-report form will be verified from this transcript.
6. Immunization Form. All students are required to submit a completed Pre-Registration Immunization Form to the Curry Health Center two weeks prior to registration. It is important that the immunization record be complete, accurate and validated by a health official.

When to Apply

Applications and all required documents submitted by the following dates will receive priority consideration:

- March 1 - Fall semester
- November 15 - Spring semester

Applications received after the priority dates are considered on a space-available basis.

Transfer Students

Academic Eligibility

Undergraduate degree applicants who have graduated from high school or have earned a GED and have attempted twelve or more college level credits must meet the academic eligibility requirements described here. Any undergraduate degree transfer applicant who has attempted fewer than twelve college level credits must meet the academic eligibility requirements for freshman mentioned in the freshman admission section.

Applicants must present a 2.00 (C) cumulative grade average (on a 0-4 scale) for all college level work attempted to be eligible for admission.

How to Apply

Applications for admission are available from Enrollment Services-Admissions by request or are available on the [University Admissions Transfer web page](#).

Receipt of the following credentials in Enrollment Services-Admissions constitutes a complete application for admission:

1. Application Form. Applications must be complete and signed.
2. Application Fee. The fee is \$30.00 or \$36 when applying on-line. This non-refundable fee is payable once at the undergraduate level provided payment is followed by enrollment. Record of payment will remain on file for one year for students who do not enroll. An application cannot be considered prior to payment of this fee. The University of Montana-Missoula waives the application fee for students who have attended an affiliate campus: Montana Tech, Montana Tech College of Technology, Helena College of Technology, and University of Montana Western.
3. Official College/University Transcripts. The student must supply a complete official transcript from each regionally accredited college or university attended, and from each college or university attended holding candidate status for regional accreditation. Applications from students who are enrolled at the transfer school while applying to UM will be considered for admission based on current official transcripts showing all academic work completed and posted to date. The final official transcript must be on file before the second registration at UM. Academic eligibility will be reviewed upon receipt of the complete transcript.
4. Immunization Form. All students are required to submit a completed Pre-Registration Immunization Form to the Curry Health Center two weeks prior to registration. It is important that the immunization record be complete and accurate and validated by a health official. Students born after December 31, 1956 must submit proof of immunization or titer against Rubella and measles (Rubeola). Students will not be allowed to register until the Curry Health Center has received proof of immunization.

When to Apply

Applications and all required documents submitted by the following dates will receive priority consideration:

- March 1 - Autumn semester
- November 15 - Spring semester

Applications received after the priority dates are considered on a space-available basis.

Writing Course Requirement Regarding Transfer Students

The Admissions Office (406-243-6266) evaluates transcripts for course equivalencies with the exception of UM's approved writing courses. If transfer students believe a transfer course meets the approved writing course requirement defined in the Faculty Senate Writing Committee guidelines they may petition for an exemption through the Writing Committee. These students must provide the following information to the Writing Committee. Appeal information should be submitted to the Faculty Senate Office, UH 221, camie.foos@mso.umt.edu, 243-5553.

1. A cover letter outlining the basis for the request. Include pertinent information such as contact information, student ID number, and how you fulfilled this requirement in a course at your previous institution.
2. A syllabus and course description. The course must include at least 16 pages of writing for assessment and at least 50% of the course grade should be based on your performance on writing assignments.
3. Three papers from any college class with original instructor comments. Original instructor comments are those grading and feedback markings on papers that are returned to the student for revision or at the end of the term. Papers without these comments will not be considered. At least one of these papers must be at least six pages long and include a bibliography or works cited. Your papers should demonstrate your ability to:
 - Use writing to learn and synthesize new concepts
 - formulate and express written ideas that are developed, logical, and organized
 - Compose written texts that are appropriate for a given audience, purpose, and context
 - Revise written work based on comments from the instructor
 - Find, evaluate, and use information effectively and ethically
 - Begin to use discipline-specific writing conventions
 - Demonstrate appropriate English language usage.

Incomplete packets will not be evaluated.

This information pertains only to the approved writing course, not the departmental upper-division writing requirement. Students should speak to their major department regarding any issues relating to the upper-division writing requirement.

Bachelor of Applied Science Admission

Academic Eligibility

Applicants must hold an Associate of Applied Science degree from an accredited institution with a minimum cumulative grade average of 2.5.

How to Apply

UM baccalaureate applications are available from Enrollment Services-Admissions or the Missoula College by request or are available on the Missoula College website. Applicants should contact the Bachelor of Applied Science advisor at Missoula College, 406-243-7801. The applicant and advisor meet to discuss application procedures as well as degree plan identification and required approval.

Receipt of the following constitutes a complete application toward completing a B.A.S. degree:

1. Application Form. Applications must be complete and signed.
2. Official college/university transcripts. The student must supply a complete official transcript from each regionally accredited college or university attended.
3. Application Fee. The fee is \$30 or \$36 when applying online (if the applicant is new to The University of Montana system).
4. Immunization Form. All students are required to submit a completed Pre-Registration Immunization Form to the Curry Health Center two weeks prior to registration if the applicant is

new or has been absent for more than 24 months from The University of Montana system.

When to Apply

Applications from students who hold an A.A.S. degree with a GPA of 2.5 are accepted on a continuing basis. Applicants in the process of completing the A.A.S. degree are encouraged to begin the application process during their final semester. Students are not, however, admitted until after the A.A.S. degree has been awarded.

Associate of Applied Science, Associate of Arts and Certificate Admission

The Associate of Applied Science and Certificate of Applied Science programs in the Missoula College are designed to lead an individual directly to employment in a specific career path. In some instances, particularly in allied health, the degree is a prerequisite for taking a licensing examination. Students may pursue a baccalaureate degree at the University of Montana after completing an AAS degree through a Bachelor of Applied Science degree plan. The Associate of Arts degree is a University of Montana transfer degree which offers students the opportunity to complete a 60 credit transfer degree toward completing a baccalaureate degree at the University of Montana or other accredited institutions of higher education.

Academic Eligibility

To be eligible for admission, students must have graduated from an accredited high school or passed the GED. Students admitted to the Missoula College who wish to enroll in courses at the mountain campus must meet the admission requirements of the main campus.

How to Apply

Applications are available from Enrollment Services-Admissions or the Missoula College by request or are available on the [Missoula College website](#).

An application for admission is complete when the Missoula College receives the credentials described below.

1. Application form. Applications must be completed and signed.
2. Application fee. The fee is \$30 or \$36 when applying on-line. This non-refundable application fee is payable once at the undergraduate level provided payment is followed by enrollment. Record of payment will remain on file for one year for students who do not enroll. The University of Montana-Missoula waives the application fee for students who have attended an affiliate campus: Montana Tech and the Missoula College, UM Helena College of Technology, and University of Montana-Western.
3. Proof of high school graduation/GED. An official high school transcript with graduation date or GED score report must be sent to the Missoula College.
4. All students are required to submit a completed Pre-Registration Immunization Form to the Curry Health Center two weeks prior to registration. It is important that the immunization record be complete and accurate and validated by a health official. Students born after December 31, 1956 must submit proof of immunization or titer against Rubella and measles (Rubeola). Students will not be allowed to register until the Curry Health Center has received proof of immunization.

Critical Information Required Prior to Advising and Completion of Registration:

All students are required to take either the ACT, SAT or Compass-E-Write test and submit scores (associated with writing) to the Admissions Office. Montana students may submit the Montana University System Writing Assessment Score (MUSWA) in lieu of these tests.

In addition to providing the required placement scores for writing courses, the academic departments of the Missoula College require course placement information for math courses. Students must provide ALEKS placement score information or transfer course approval. This information is critical to the advising process and the student registration process; neither of which will be completed without the information being supplied prior to the process.

When to Apply

Applications are considered on a first come, first-served basis. The Missoula College will notify applicants of their status once their application has been processed.

International Student Admission

The University of Montana-Missoula Enrollment Services-Admissions Office will issue the Immigration Form I-20 (necessary for obtaining an F 1 student visa) to international applicants who are academically eligible for the undergraduate degree status (see above) and who supply complete credentials as described below. In certain situations an international applicant may not need an I- 20; in these cases, Enrollment Services-Admissions should be contacted for individual advice regarding admission status, academic eligibility, and admission requirements. International students are encouraged to submit ACT or SAT scores if available, but ACT or SAT scores are not required for admission.

How to Apply

Receipt of the following credentials constitutes a complete international application for admission:

1. International application form. This form can be obtained by contacting Enrollment Services-Admissions. The form must be complete and signed. Applications are also available on the [UM Admissions International web page](#).
2. \$30.00 paper application fee or \$36.00 on-line application fee (in US dollars). This non refundable fee is payable once at the undergraduate level when payment is followed by enrollment. In all other cases record of payment will remain on file for one year. Payment of this fee is expected prior to consideration of the application. The University of Montana-Missoula waives the application fee for students who have attended an affiliate campus: Montana Tech and the Division of Technology, Helena College of Technology, and Western Montana College.
3. Academic Credentials:
 1. Official or certified copies of non-U.S. academic credentials beginning with secondary school and continuing through the highest level of achievement.
 2. U.S. transcripts. Complete official transcripts showing all U.S. high school and college/university attendance.
4. Statement of Financial Support. The applicant must submit a certified statement from a bank or sponsor verifying that adequate financial resources are available to pay for the student's estimated expenses for the first year (tuition, fees, room, board, miscellaneous expenses, student health insurance, expenses of dependents, etc.). This estimated amount is adjusted annually and is available by contacting Enrollment Services-Admissions.
5. English Language Proficiency. An official score report showing one of the following:
 - 61 IBT (173 CBT or 500 PBT) on the Test of English as a Second Language (TOEFL).
 - 5.5 on the International English Language Testing System (IELTS).
 - 69 on the Michigan English Language Assessment Battery (MELAB)
 - SAT Writing Score of 440/ACT score of 18 on the Combined English/Writing section.

Those students who are citizens of countries where English is the native tongue need not submit proof of English language proficiency, unless English is not the student's native language. Students who have test scores below the minimum requirement may be eligible for conditional admission.

Any questions concerning the evidence of proficiency in English should be directed to Enrollment Services-Admissions. When the student arranges to take the TOEFL test, he or she should request that examination results be sent directly to Enrollment Services-Admissions, The University of Montana-Missoula, Missoula, Montana 59812. (Code N. 4489 00)

Conditional Admission

International students who have not met the required test score and who meet all other admission requirements will be offered conditional admission. Conditionally admitted students study in an intensive program at the University of Montana-Missoula English Language Institute (ELI) on campus until the minimum English language proficiency is met or the student is recommended by ELI. After English proficiency is achieved, enrollment in regular university courses begins.

All students are required to submit a completed Medical History Record Immunization Form to the Curry Health Center two weeks prior to registration. It is required that the immunization record (for measles, rubella, diphtheria, tetanus and polio) be complete, accurate, and validated by a physician. Skin testing for tuberculosis will be required upon arrival through the Curry Health Center.

Visa Transfer Form. F 1 students transferring from another college or university in the U.S. must have this form completed by the foreign student advisor of the transfer school and returned to the UM Enrollment Services-Admissions Office. A new I-20 will be issued by UM once a transfer release date is entered in SEVIS (Student & Exchange Visitor Information System) by the current school.

When to Apply

Applications and all required documents must be received by the following dates:

- Autumn Semester Deadline – July 15
- Spring Semester Deadline – December 15

Applications received after the deadline will be considered for admission for the next term.

Undergraduate Nondegree Status

An applicant who wishes to pursue studies for his or her personal growth and who does not wish to work toward a formal degree at The University of Montana-Missoula may apply as an undergraduate nondegree student. This option is not available to freshmen unless they are applying to the Missoula College. Each applicant should understand that acceptance to this category does not constitute acceptance into a degree granting program. Applicants admitted as undergraduate nondegree students are not eligible for financial aid.

Academic Eligibility

Each applicant must certify on the application form that he or she has graduated from a high school that is fully accredited by its state department of education, or has passed the General Educational Development (GED) test. To be considered for nondegree status, a student must have attempted 12 or more college level credits. This category is not open to students currently on academic suspension from The University of Montana.

If a person is admitted as an undergraduate non-degree student and later wishes to change to a degree program, he or she will be required to file an application for readmission, furnish the required supporting credentials and meet the regular admissions standards for the intended program. Readmission applications are available from Enrollment Services-Admissions, the Missoula College, or the Registrar's Office.

How to Apply

Applications for admission are available from Enrollment Services-Admissions by request or are available on the [UM Admissions website](#).

Receipt of the following credentials in Enrollment Services-Admissions or the Missoula College constitutes a complete application for admission to the undergraduate nondegree status:

1. Application form. Applications must be complete and signed.
2. Application fee. The fee is \$30.00 or \$36 when applying on-line. This non-refundable fee is payable once at the undergraduate level provided payment is followed by enrollment. Record of payment will remain on file for one year for students who do not enroll. An application cannot be considered prior to payment of this fee. The University of Montana-Missoula waives the application fee for students who have attended an affiliate campus: Montana Tech and the Division of Technology, Helena College of Technology, and University of Montana-Western.
3. Immunization Form. All applicants are required to submit a completed Pre-Registration Immunization Form to the Curry Health Center two weeks prior to registration. The form must be

complete, accurate and validated by a health official.

When to Apply

Applications and all required documents submitted by the following dates will receive priority consideration:

- March 1 - Autumn semester
- November 15 - Spring semester

Applications received after the priority dates are considered on a space-available basis.

Graduate Nondegree Status

Graduate nondegree status allows students who have not been formally admitted to a graduate degree program to receive graduate credit for courses.

Up to nine semester nondegree graduate credits (or the credits earned during a single semester, whichever is greater) may be applied toward a subsequent graduate degree program, with the approval of the student's program chair and the graduate dean. Acceptance as a graduate nondegree student does not imply future admission to a degree program.

Graduate nondegree students may take U/G courses for either graduate or undergraduate credit, as defined by the university catalog. Graduate credits will be assigned automatically unless a request for undergraduate credit is submitted to the Graduate School by the fifth week of the semester. Undergraduate credits taken as a graduate nondegree student cannot be applied to a subsequent graduate degree.

Applicants admitted as graduate nondegree students are NOT ELIGIBLE for federal financial aid. Graduate nondegree students are assessed the graduate level tuition and fees at the master's level rate for all credits taken.

Applicants must have earned a baccalaureate degree (or higher degree) from a regionally accredited college or university prior to enrollment in the graduate nondegree status.

Applicants seeking graduate nondegree status must apply online at the [UM Graduate School website](#) and pay a \$60 non-refundable application fee. Deadline for submitting a graduate nondegree application is prior to the fifteenth day of classes each semester.

Graduate Nondegree Readmission

Students who previously attended The University of Montana in a graduate nondegree status and have not been enrolled for 24 months or more may use the graduate nondegree readmission form to reapply for the same status.

Graduate nondegree readmission forms can be downloaded from the Forms section of the Graduate School homepage: www.umt.edu/gradFromer graduate nondegree students applying for readmission pay a \$20 non-refundable application fee.

Graduate Degree

Graduate degree admission is for candidates seeking to complete a Master's, Specialist, or Doctoral program at UM. Program information and deadlines are listed at: www.umt.edu/grad/Programs. Each academic department conducts the initial evaluation of completed application packets and submits the packets, with recommendations for admission or denial, to the Graduate School for final decisions.

Applicants seeking graduate status must apply online at the [UM Graduate School website](#) and pay a \$60 non-refundable fee.

Distance Education

The University of Montana provides the opportunity to apply as a Distance Education only student. Students who are interested in applying for this status must meet the University's general admission requirements for freshman and transfer students. This admission status is designed for students who are registering for online courses only and do not plan to take any courses on campus. When applying for this status, students are not required to provide proof of immunization or complete a medical History Form. Since Distance Education only students have some of the mandatory fees waived, they are not eligible for health insurance, services provided by the Curry Health Center, athletic event discounts or the Campus Recreation facilities.

Currently enrolled students or former University of Montana students must change their status by completing a [Distance Learning Change of Status Form](#).

GED (General Education Development)

A person who is not a graduate from an accredited high school may be eligible for admission by earning passing scores on the GED test. Passing scores are a minimum score of 35 on each test and an average score of 45. Effective Jan 1, 2002 passing scores are a minimum score of 410 on each test and an average score of 450. GED students who have been out of high school for less than three years must also submit ACT or SAT scores. For additional information and test center locations in Montana, contact the Office of Public Instruction, Helena, MT 59601.

Former University of Montana-Missoula Students - Readmission

Students previously enrolled at The University of Montana-Missoula who have interrupted their enrollment for more than 24 months or more must submit an application for readmission. Applications for readmission may be obtained from the Registrar's Office, the Griz Central Registration Counter, Enrollment Services-Admissions, all located in the Emma B. Lommasson Center (EL), or the Missoula College Registrar's Office.

Former undergraduate degree students who do not plan to change their status and who have attended another college/university since attending The University of Montana-Missoula, even if their absence from UM has been less than two years in duration, must submit college transcripts.

Former students who are applying for readmission must comply with Immunization Requirements as listed in this catalog.

Former undergraduate students are not required to pay the undergraduate application fee unless they are changing from an undergraduate status to a graduate status or vice versa. The application fee is paid only once at the undergraduate level. For additional information, contact the Registrar's Office at 406-243-2939 or visit us on the [Registrar's readmissions web page](#).

Advising

Academic advising is critical to student success at University of Montana. All undergraduate students are required to meet with their advisor at least once each semester to review educational progress, discuss future plans and secure schedule approval prior to registration. Additional meetings are recommended for information and guidance on dropping and/or adding courses, changing/declaring majors, exploring available resources and ensuring that graduation requirements are met.

Faculty and professional advisors, as well as peer advising assistants facilitate positive academic advising experiences by:

- helping students to develop mentoring relationships with faculty and professional staff
- encouraging students to fulfill their obligation to plan in advance for advising sessions
- educating students to understand and accept their responsibilities in the advising process and for advising decisions, and

- promoting frank and productive dialogue about the student's academic goals.

Students improve their academic planning and success by fully using the advising services and by learning about the academic requirements of their major fields, and the University policies for registration and graduation. The UM catalog is the official source of information on these matters. Although advisors are available to assist students, it is important for students to realize that the ultimate responsibility for meeting all graduation requirements is their own.

Mountain Campus Students

When students indicate a major on their application form, it becomes their initial declared major.

Advisor information and assignment is done through the student's major department. If the student is undeclared, pre-Communication Studies, pre-Psychology or Freshman Business, he/she is assigned to a professional advisor at the [Undergraduate Advising Center \(www.umt.edu/uac\)](http://www.umt.edu/uac).

To change a major, a student must submit an official Change of Major form to the Registration Desk at Griz Central. Once the new major is formally declared, the student should seek advising from the department.

Students with academic advising questions or concerns may contact the Undergraduate Advising Center, Lommasson Suite 269, The University of Montana, Missoula, MT 59812, www.umt.edu/uac, or by phone at (406)243-2835.

Missoula College Students

Students are assigned an academic advisor in their major (program) upon acceptance to the Missoula College.

Academic programs are identified by the major the student declared on his/her Admissions application, or by an official change of major form filed by the student.

For questions regarding assigned advisors, or to change advisors, students can contact Student Services at 243-7882 or in the Missoula College Administration building.

For other questions or concerns about advising, students may contact their Department offices, Student Services (243-7882) or the Retention Coordinator (243-7878).

Policies and Procedures

Academic Calendar

The Academic Calendar for the current academic year, as well as past and future years, may be found on the [Academic Calendar web page](#).

Registration in Courses

Students who have no prior attendance at the University must apply for admission and be admitted before being eligible to register for courses. See the Admissions section of this catalog or the [admissions website](#).

Detailed instructions regarding registration and course offerings are available on the Registrar web pages for [registration information](#) and [course schedule information](#).

Students must complete course registration during the scheduled registration period or be subject to payment of a late registration fee, if allowed to register. Registration is not complete nor is any academic credit awarded until all course tuition and fees for the semester have been paid.

Readmission to the University After 24 Months of Non-attendance

If former students are planning to attend a summer session or an academic year semester but were not in attendance during the immediately preceding 24 months, then they must apply for readmission before being eligible to register for courses. Students should reapply by July 1 for autumn semester attendance, and by November 1 for spring semester attendance. See the Admissions section of this catalog.

Missoula College (formerly College of Technology) students must reapply for readmission at the Missoula College Registrar's Office (909 South Avenue) or online at the [UM Admissions Missoula College web page](#).

Mountain Campus students (seeking baccalaureate or higher degrees) must apply for readmission via the Enrollment Services Office in the Emma Lommasson Center or online at the [UM Admissions web page](#).

Some specific programs at the Missoula College require students who do not enroll for a semester or more (excluding summer) to apply for readmission into that program.

All students who are both in good standing and (i) currently enrolled or (ii) readmitted to the University may pre-register for the subsequent semester, unless a registration hold exists on the student's record.

Notice to Students with Disabilities

Students with disabilities may obtain assistance with the registration process and the relocation of classes (if needed) through Disability Services in Lommasson Center 154 (406) 243 2243 VOICE/TDD.

Adding and Dropping Courses or Changing Sections, Grading or Credit Status

When selecting and registering for their courses, students are expected to make informed choices and regard those choices as semester-long commitments and obligations.

Adding, Dropping and Other Course Changes – Summary Tables

Students who request to add, drop or change the grading option must have all registration holds cleared in order for the request to be honored. The following information does NOT apply to the School of Law. Law school students should see the School of Law website for information.

Autumn & Spring Semesters

Instructional Days	Day 1-7	Day 8-15	Day 16-45	Day 46 – Last Regular Class Day/ Friday Before Finals Week	After Last Regular Class Day
Add a Course	CyberBear	Course Add/Change Form with instructor signature	Course Add/Change Form with advisor* and instructor signature	Course Add/Change Form with advisor* and instructor signature	Only registration errors can be corrected; use the Course Add/Change Form with advisor* and instructor signature
Change a Section	CyberBear	Course Add/Change Form with both instructors' signatures	Course Add/Change Form with both instructors' signatures	Course Add/Change Form with both instructors' signatures	Only registration errors can be corrected; use the Course Add/Change Form with both instructors' signatures
Drop a Course	CyberBear	CyberBear	Course Drop Form with advisor* and instructor signature (W on transcript)	Course Drop Form with advisor*, instructor and Dean's signature (WP or WF on transcript)	Not permitted

Change to/from Audit	CyberBear	CyberBear	Not permitted	Not permitted	Not permitted
Change to/from CR/NCR grading, or change credits (for variable credit courses)	CyberBear	CyberBear	Course Add/Change Form with advisor* and instructor signature	Course Add/Change Form with advisor* and instructor signature	Not permitted

* Not required for Graduate & Post-Baccalaureate students

Winter Session

Instructional Days	Day 1	Day 2-3	Day 4-8	Day 9-13	Day 14 & Beyond
Add a Course	CyberBear	Course Add/Change Form with instructor signature	Course Add/Change Form with instructor signature	Course Add/Change Form with instructor signature	Only registration errors can be corrected; use the Course Add/Change Form with instructor signature
Change a Section	CyberBear	Course Add/Change Form with both instructors' signatures	Course Add/Change Form with both instructors' signatures	Course Add/Change Form with both instructors' signatures	Only registration errors can be corrected; use the Course Add/Change Form with both instructors' signatures
Drop a Course	CyberBear	Cyberbear	Course Drop Form with instructor signature (W on transcript)	Course Drop Form with instructor and Dean's signature (WP or WF on transcript)	Not permitted
Change to/from Audit	CyberBear	Cyberbear	Not permitted	Not permitted	Not permitted
Change to/from CR/NCR grading, or change credits	CyberBear	Cyberbear	Course Add/Change Form with instructor signature	Course Add/Change Form with instructor signature	Not permitted

(for variable credit courses)					
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Summer Semester: 5-week Sessions

Instructional Days	Day 1-2	Day 3-5	Day 6- 14	Day 15-23	Day 24 & Beyond
Add a Course	CyberBear	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Only registration errors can be corrected; use the Summer Override & Add/Drop Form with instructor signature
Change a Section	CyberBear	Summer Override & Add/Drop Form with both instructors' signatures	Summer Override & Add/Drop Form with both instructors' signatures	Summer Override & Add/Drop Form with both instructors' signatures	Only registration errors can be corrected; use the Summer Override & Add/Drop Form with both instructors' signatures
Drop a Course	CyberBear	CyberBear	Summer Override & Add/Drop Form with instructor signature (W on transcript)	Summer Override & Add/Drop Form with instructor and Dean's signature (WP or WF on transcript)	Not permitted
Change to/from Audit	CyberBear	CyberBear	Not permitted	Not permitted	Not permitted
Change to/from CR/NCR grading, or change credits (for variable credit courses)	CyberBear	CyberBear	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Not permitted

Summer Semester: 10-week Session

Instructional Days	Day 1-5	Day 6-10	Day 11-29	Day 30-47	Day 48 & Beyond
Add a Course	CyberBear	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Only errors can be corrected; use the Summer Override & Add/Drop Form with instructor signature
Change a Section	CyberBear	Summer Override & Add/Drop Form with both instructors' signatures	Summer Override & Add/Drop Form with both instructors' signatures	Summer Override & Add/Drop Form with both instructors' signatures	Only errors can be corrected; use the Summer Override & Add/Drop Form with both instructors' signatures
Drop a Course	CyberBear	CyberBear	Summer Override & Add/Drop Form with instructor signature (W on transcript)	Summer Override & Add/Drop Form with instructor and Dean's signature (WP or WF on transcript)	Not permitted
Change to/from Audit	CyberBear	CyberBear	Not permitted	Not permitted	Not permitted
Change to/from CR/NCR grading, or change credits (for variable credit courses)	CyberBear	CyberBear	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Not permitted

Special Sessions

Special Session courses vary from the sessions listed above. For example, a course taught over a period of five weeks is considered a "special session" course if its start and end dates are different than the published regular term dates. Please check with the Registrar's Office for specific dates related to changing registration in a special session course.

Adding, Dropping and Other Course Changes – Detailed Information

All guidelines and timelines that follow refer to the traditional autumn and spring semesters, which are generally 74-75 days in length. The timelines that apply to Summer Sessions and Winter Session are detailed in the tables above. Important Dates are listed on the Registrar's Office calendar web page. Please see the Business Services/Student Accounts website for information regarding how fees are impacted by dropping/adding courses, as well as the refund schedule for a complete withdrawal from the University of Montana.

Adding, Dropping or Other Course Changes – First Through Seventh (1 – 7) Instructional Day of the Semester

During this timeframe, students may use CyberBear to add courses, drop courses, change grading options, and/or change variable credits. Access to CyberBear for adding courses or changing sections ends at 5:00 p.m. Mountain Time on the seventh day of classes.

Adding, Dropping or Other Course Changes – Eighth Through Fifteenth (8 – 15) Instructional Day of the Semester

During this timeframe, with consent of the course instructor, students may add courses or change sections with a signed paper-Registration Override Form or an instructor-approved electronic override (via CyberBear). Fees are reassessed each night during this time period. Added courses and credits may result in additional fees.

Students may drop courses, change grading option (including audit), and/or change variable credits via CyberBear until 5:00 p.m. Mountain Time on the fifteenth day.

Adding, Dropping or Other Course Changes – Sixteenth Through Forty fifth (16 – 45) Instructional Day of the Semester

During this timeframe, students must complete a paper Course Drop Form or Course Add/Change Form as well as obtain the signature of both the course instructor and student's advisor to (i) drop/add a course and/or (ii) make changes of section, grading option, or credit. The ability to change to or from audit is no longer available at this time. Completed forms must be returned to the GrizCentral Registration Counter (or the Registrar's Office at the Missoula College Campus) no later than close of business on the forty-fifth instructional day of a semester. If students have submitted Course Drop Forms but have not cleared all holds by this deadline, then they are required to also collect a signature from the Dean of the student's major no later than the Last Regular Class Day. A \$10.00 processing fee is charged for each drop or add. Added courses and credits may result in additional fees. There are no refunds or reductions of fees for courses dropped after the 15th day (or equivalent), and a grade of W (withdrawn) is recorded for each dropped course.

Adding, Dropping, or Other Course Changes – Forty sixth Instructional Day of the Semester Through the Last Regular Class Day/Friday before Finals Week

During this timeframe, a Course Add/Change Form must be completed by the student and signed by the course instructor and the student's advisor to add a course, change the grade option, or change variable credits. Changing to or from audit is not permitted during this time. Not all requests for adds, changing grade options, or changing variable credits are approved. Advisors have the right to indicate they do not recommend approval of the request. However, it is the course instructor's decision to approve or deny the request to add/change a course.

Completed forms must be returned to the GrizCentral Registration Counter (or the Registrar's Office at the Missoula College Campus) no later than close of business on the Last Day of Regular Classes. Students who request a change in grading option must also have cleared all holds by this deadline or the request cannot be honored. A \$10.00 processing fee is charged for each add. Added courses and credits may result in additional fees.

During this timeframe, students may drop courses only by petition. Note that not all petitions are approved, and that documented justification is required. Some examples of documented circumstances that may merit approval are: accident or illness, family emergency, or other circumstances beyond the student's control. Instructors and advisors have the right to indicate they do not recommend the drop. However, it is the decision of the Dean of the student's major to approve or deny the request to drop courses.

To petition to drop a course, a Course Drop Form must be completed, with the signature of the student's advisor, the course instructor, and the Dean of the student's major. Completed forms must be returned to the GrizCentral Registration Counter (or the Registrar's Office at the Missoula College Campus) no later than close of business on the Last Regular Class Day/Friday before Finals Week. If students submit Course Drop Forms or request a change in grading option, then they must also have cleared all holds by this deadline; otherwise, the request cannot be honored. A \$10.00 processing fee is charged for each drop. There are no refunds or reductions of fees for courses dropped, and the instructor assigns a grade of WP (withdrawn/passing) if a student's course work has been passing or WF (withdrawn/failing) if failing. These grades do not affect grade averages but they are recorded on a student's transcript.

The opportunity to drop a course for the current term ends on the last day of instruction before scheduled final exams. Dropping a course taken in a previous term or altering grading option or audit status for such a course is not allowed. The only exceptions are for students who have received a grade of NF (never attended/fail).

Law School Students - See the School of Law section of this catalog for links to the School of Law website, which will list the add and drop deadlines for law courses.

»Class Attendance/Absence Policy

Students who are registered for a course but do not attend the first two class meetings may be required by the instructor to drop the course. This rule allows for early identification of class vacancies to permit other students to add classes. Students not allowed to remain must complete a drop form or drop the course through CyberBear to avoid receiving a failing grade. Students who know they will be absent should contact the instructor in advance.

Students are expected to attend all class meetings and complete all assignments for courses in which they are enrolled. Instructors may excuse brief and occasional absences for reasons of illness, injury, family emergency, religious observance or participation in a University sponsored activity. (University sponsored activities include for example, field trips, ASUM service, music or drama performances, and intercollegiate athletics.) Instructors shall excuse absences for reasons of military service or mandatory public service.

Instructors may establish absence policies to conform to the educational goals and requirements of their courses. Such policies will ordinarily be set out in the course syllabus. Customarily, course syllabi will describe the procedures for giving timely notice of absences, explain how work missed because of an excused absence may be made up, and stipulate any penalty to be assessed for absences.

The UM Faculty Senate encourages the faculty to accommodate students incurring an excused absence by allowing them to make up missed work when this can be done in a manner consistent with the educational goals of their courses. Students expecting to incur excused absences should consult with their instructors early in the term to be sure that they understand the absence policies for each of their courses.

»Withdrawal from the University

Students who withdraw from the University (withdrawing from ALL classes) while a semester is in progress must complete withdrawal forms which are obtained from the Registration Counter in Griz Central (Lommasson Center) or the Registrar's Office in the College of Technology. Drop/add forms cannot be used to withdraw from school and students are not allowed to drop all their courses on the Internet. International students must first contact the Foreign Student Advisor before withdrawing as visa status will be affected. Medical withdrawals are granted only for a student's significant health problems and must be documented by a healthcare provider.

See the Expenses section of this catalog for fee information relating to withdrawal from The University.

If a student receiving financial aid withdraws they may have to repay aid received in the current semester and it may affect eligibility in the future semesters. If a student stops attending classes without formally withdrawing they too may have to repay aid received in the current semester and may be ineligible for aid in future terms. Students who reside in a University residence hall or in family housing must notify the Residence Life Office or the Family Housing Office of the withdrawal.

Students who purchase health insurance with registration will receive a refund and lose coverage if withdrawn during the first fifteen instructional days unless a student is granted a medical withdrawal. Withdrawal after the fifteenth day will not result in a refund but coverage will continue through the remainder of the semester.

When withdrawal forms are completed in Griz Central or the Registrar's Office in the College of Technology before the last two weeks of the semester, grades of W (withdrawal) are assigned. Beginning two weeks from the end of the term, students may not withdraw from the University except for very unusual circumstances. Such late withdrawals are to be approved by the student's academic dean before the end of the semester. However, in exceptional cases, a student's academic dean may approve retroactive withdrawal for the last semester in attendance, provided the request is approved before the end of the student's next semester of enrollment.

»University Employee Registration

University employees who have applied and have been accepted for admission to the University may register with the approval of the employee's supervisor. Waivers of some fees are granted to some faculty and staff members who are at least three quarter time salaried employees on the date of registration. Additional information and the necessary forms are available in the Office of Human Resource Services in the Lommasson Center.

Grading System

The University uses two types of grading: traditional letter grades and credit/ no credit grades. At the option of the instructors some courses are offered only on the traditional letter grade basis or only on the credit/no credit basis. Other courses are open to either type of grading, at the option of the student. Courses offered on the A -F basis only or CR/NCR only will be indicated in the Class Schedule or via CyberBear. Grades preceded by an R indicate remedial courses. Grades preceded by an E indicate academic forgiveness was granted.

The instructor has the first fifteen (15) class days of the semester to change the grading option for their course. If a change does occur from the original published grading option, the students in the class and the Registrar's office must be notified of the change not later than the fifteenth (15) class day.

Traditional Letter Grading (A-F)

Traditional Letter Grades represent an assessment of the overall quality of work performed in a given course. A-Excellent; B-Good; C-Satisfactory; D-Poor, F-Failure. When assigning traditional letter grades, instructors may, at their discretion, utilize the symbols + or -. Use of the + or - will be limited to A-, B+, B-, C+, C-, D+, and D-. Other grade symbols used are: I-Incomplete; N-work on the course may be continued in later semesters (when work is completed, the final grade assigned applies to all semesters of the course); NF-no record of academic performance; W-withdrawal from a course or course dropped after the fifteenth instructional day; WP-course dropped after the forty-fifth instructional day with passing work; WF-course dropped after the forty-fifth instructional day with failing work; AUD-auditor registration. (AUD is recorded for all students who register in courses as auditors, intending to listen to the courses without earning credit or being graded. The same fees are assessed as when registering for credit. Any attendance or participation expectations are established by the instructor of the course. If attendance expectations are not met, the instructor may request a notation be placed on the student's academic record indicating attendance was not satisfactory.) Remedial courses do not count in credits earned, nor in grade point averages, nor do they count toward graduation.

Credit/No Credit Grading (CR/NCR)

Student Option: To encourage students to venture into courses where they might otherwise hesitate because of uncertainty regarding their aptitude or preparation, they may enroll in some courses on a credit/no credit basis. Freshmen and sophomores are discouraged from taking more than one course a semester on a credit/no credit basis.

No more than 18 CR credits may be counted toward graduation requirements at the baccalaureate level. Courses taken to satisfy General Education Requirements must be taken for traditional letter grade. Courses required for the student's major or minor must be taken for traditional letter grade.

A grade of CR is assigned for work deserving credit (A through D-) and a grade of NCR is assigned for work of failing quality (F). CR and NCR grades do not affect grade point averages. The grades of CR and NCR are not defined in terms of their relationship to traditional grades for graduate course work.

Election of the credit/no credit option must be indicated at registration time or within the first 15 class days on CyberBear. Between the 16th day and the last day of instruction before finals week, a student may request a change from credit/no credit enrollment to an enrollment under the A-F grade system, or the reverse, by means of a Course Add/Change Form; note that not all such requests are approved. See instructions above.

The University cautions students that many graduate and professional schools and some employers do not recognize non-traditional grades (i.e., those other than A through F) or may discriminate against students who use the credit/no credit option for many courses. Moreover, students are cautioned that some degree programs may have different requirements regarding CR/NCR credits, as stipulated in the catalog.

Faculty Option

* A faculty member may elect to grade an entire class using the traditional letter grading option (A-F).

* A faculty member may elect to grade an entire class using the credit/no credit option (CR/NCR). This method of grading is used in courses where more precise grading is inappropriate.

* A faculty member may elect to grade an entire class with the open grade mode option which allows students to choose between traditional letter grading and credit/no credit grading. When a course is offered with the open grade mode option, then the default grading at the time of registration defaults to traditional letter grading. It is the student's responsibility to make the change to credit/no credit grading if this is their preference.

* Faculty members must choose the grade mode option for their courses at the time when courses are being proposed for a particular semester or within the first 15 instructional days of the semester.

* Courses graded credit/no credit only and courses graded A-F only will be identified in the Class Schedule or via CyberBear.

No Credit Grading in Composition (NC)

Students enrolled in WRIT 095 and WRIT 101 (formerly WTS 100 and ENEX 101) are graded by the traditional letter grades of A through F or are given NC for no credit. The NC grade is awarded when exceptional progress has occurred but the student needs to repeat the course. The NC grade does not affect grade point average.

»Incomplete Grade Policy

It is assumed that students have the responsibility for completing the requirements of the courses in which they are enrolled within the time framework of the semester

A grade of Incomplete (I) may be given when, in the opinion of the instructor, there is a reasonable probability that students can complete the course without retaking it.

The incomplete is not an option to be exercised at the discretion of a student. In all cases it is given at the discretion of the instructor within the following guidelines:

1. A mark of incomplete may be assigned students when:
 - o The student has been in attendance and doing passing work up to three weeks before the end of the semester, and
 - o For reasons beyond the student's control and which are acceptable to the instructor, the student has been unable to complete the requirements of the course on time. Negligence and indifference are not acceptable reasons.
2. The instructor sets the conditions for the completion of the course work and notes these conditions on the final grade report.
3. When a student has met the conditions for making up the incomplete, the instructor will assign a grade based upon an evaluation of the total work done by the student in the course.
4. An incomplete which is not made up within one calendar year automatically will revert to the alternate grade which was assigned by the instructor at the time the incomplete was submitted.
5. An incomplete remains on the permanent record and is accompanied by the final grade, for example, IA, IB, IC, etc.

»Computation of Cumulative Grade Point Average

Quality points are assigned as follows: 4 quality points for each credit of A; 3.7 quality points for each credit of A-; 3.3 quality points for each credit of B+; 3 quality points for each credit of B; 2.7 quality points for each credit of B-; 2.3 quality points for each credit of C+; 2 quality points for each credit of C; 1.7 quality points for each credit of C-; 1.3 quality points for each credit of D+; 1 quality point for each credit of D; and 0.7 quality points for each credit of D-.

The cumulative grade average is computed by dividing the total quality points earned by the total number of credits attempted, excluding courses assigned W, WF, WP, CR, NC, NCR, I, AUD, or N grades and courses numbered under 100 (grade is preceded by an R). For repeated courses, excluding courses assigned W, WF, WP, CR, NC, NCR, I, AUD, or N grades, only the last grade earned will count toward the cumulative grade average. Grades for courses transferred from other colleges and universities are not included in the calculation of the grade average for graduation.

»Undergraduate Academic Performance

The cumulative grade average is calculated by dividing the total quality points earned by the total number of credits attempted, excluding courses assigned W, WF, WP, CR, NC, NCR, I, AUD, or N grades and courses numbered under 100 (grade is preceded by an R). Grades for courses transferred from other colleges and universities are not included in the calculation of the grade average for graduation. However, for determination of graduation honors/high honors, grades for all work transferred to this University, including failing grades are factored into the calculation.

»Undergraduate Academic Probation

An undergraduate student will be placed on academic probation if at the end of any semester his/her cumulative grade average drops below 2.00. The effect of the academic probation is to serve notice to the student that the quality of his/her work is below an acceptable level and that continuation of unsatisfactory work during their next semester of enrollment will result in academic suspension. Academic probation status is recorded on the student's academic transcript and semester grades. Students placed on probation should contact their academic advisor immediately to seek assistance and direction.

»Undergraduate Academic Suspension

An undergraduate student will be placed on academic suspension at the end of any semester if the student was on academic probation during his/her prior semester of attendance and the student's cumulative grade average remains below 2.00. Exceptions are made if the student earns at least a 2.00 grade average for the current semester without raising the cumulative grade average to the required minimum. In such cases, students remain on academic probation. A student placed on academic suspension may not re enroll at the University unless the student has been reinstated. Reinstatement will require, at minimum, one full semester of non-enrollment at any campus of the Montana university system. Academic suspensions are noted on final grades and academic transcripts. Additional information can be found on the [Office for Student Success Academic Standing web page](#).

»Reinstatement

As noted above, an undergraduate student will be academically suspended at the end of a semester if placed on academic probation during the previous semester of attendance and the student's cumulative graduate point average (CGPA) remains below the 2.00 CGPA required for good academic standing.

Students who have been suspended for academic reasons and seek reinstatement must receive the approval of the academic dean of the school or college in which they intend to enroll. [If seeking reinstatement in the Missoula College, contact the Retention and Advising Coordinator at MC.] Typically, retroactive grade changes, dropped courses or withdrawals do not reverse the academic suspension status that is recorded on the transcript, unless there was an error or grading mistake.

Academic reinstatement is not automatic. The student must provide the reasons for previous poor academic performance along with a carefully prepared plan for improvement that is completed with the help of an academic advisor. A student denied reinstatement may appeal the denial in writing to the President of the University within ten days of receiving the notice of denial. The decision to deny reinstatement normally will not be reversed unless there is evidence the decision was made arbitrarily.

If a suspended and reinstated student has not attended UM for more than two years, the student must also complete an application for readmission through the Registrar's Office. The readmission form re-activates the student's record and, along with the reinstatement form, allows the student to register for courses.

Academic Forgiveness

- A University of Montana – Missoula undergraduate, seeking their first undergraduate degree, who returns to the university after a minimum absence of three years and completes 30 credits of academic study with a minimum cumulative GPA of 2.5 is eligible for Academic Forgiveness.
- Academic Forgiveness allows a student who has met the requirements in statement #1 to select a prior semester or semesters he/she wishes to have excluded from calculation in the cumulative GPA. The semester(s) chosen must have occurred prior to his/her return to the university.
- Receiving Academic Forgiveness for a semester or semesters results in all credits and grades earned in the semester to be excluded from the student's GPA calculation. A student will not be allowed to select specific grades and credits to retain while excluding others earned within the same semester. The excluded courses and grades will remain on the transcript; however, they may not be used to fulfill any university requirements.
- Only University of Montana – Missoula grades and credits will be excluded.
- All excluded courses are still counted as attempted courses in determining if a student is meeting the Pace standard of the financial aid satisfactory academic progress (SAP) policy. If the terms being forgiven include courses a student previously passed the result could be that the student would now be out of compliance with the SAP policy and would have to do a financial aid appeal to have aid eligibility reinstated
- A student will be granted Academic Forgiveness only one time.
- Students who receive Academic Forgiveness will be bound by the University Catalog in effect at the time of their return to The University or any subsequent catalog in accordance with University policy.
- Students wishing to apply for Academic Forgiveness will contact the Registrar's Office for the

appropriate form. The Registrar's Office will be responsible for verifying eligibility and notifying the student of approval.

- Other options exist for students who have not left the university, such as course repeat, withdrawals, and other mechanisms listed under academic policies in this catalog.

Students wishing to apply for Academic Forgiveness may obtain the form at the GrizCentral registration counter, or on the [Registrar's Academic Forgiveness web page](#).

»Academic Support Services

Many programs at The University of Montana-Missoula offer services to help students who are experiencing academic difficulty. Faculty academic advisors assist in academic planning and make appropriate referrals to other services as necessary. Students with declared majors are assigned a faculty advisor by the relevant Department Chair. Students who are Undeclared, pre-Nursing, or a pre-major in Psychology, Communication Studies, or Business are assigned a professional advisor in the Undergraduate Advising Center located in the Lommasson Center.

Coursework is available to help students in specific areas. Developmental math and writing courses are delivered by the College of Technology, and include M 65 prealgebra, M 90 Introductory Algebra, M 95 Intermediate Algebra, and WRIT 95 Developmental Writing. Curriculum and Instruction 160 and AASC 101 focus on study skills, and Freshman Seminar UNC 101 and AASC 100 (Introduction to University Experience) provide an overview of university systems and processes. The Financial Aid Office, the Counseling Center, the Curry Health Center, the Career Services, and the Clinical Psychology Center provide one-to-one counseling to help with financial issues, personal concerns, and career and major choices.

Several tutoring programs are available to all students through the [Office for Student Success](#). STUDY JAM provides early evening group study tables in the UC Commons for [selected courses](#) (e.g., Chemistry, Biology, Physics, Spanish, Economics, and Statistics). The [Writing Center](#) supports students in becoming more effective writers and provides tutoring at several locations across campus; 406-243-2266). The Math Learning Centers provide tutoring at all levels of math coursework in two drop-in math tutoring centers. Math PiLOT oversees the ALEKS online placement testing for math and advises students who may be struggling in a math course. Missoula College students may receive tutoring in math, writing and a variety of other subjects through the Academic Support Center. The Counseling Center offers workshops on a variety of topics designed to enhance student academic performance.

For students who qualify, TRiO Student Support Services is a federally funded program offering academic support services, including one-on-one academic advising, career search and counseling (using a national career database), mentoring for Native American students, a two-credit study skills class, and tutoring at no cost. To qualify, a student must meet one of the following criteria: first-generation (neither parent has completed a four-year college degree), financial need based on family income (usually met if receiving a Pell grant), or a documented disability. For more information, visit TRiO at Lommasson Center 154, call 406-243-5032, or the [TRiO website](#).

The Academic Support Center (ASC) on the Missoula College campus offers a variety of services to support and enhance students' academic success. Students can receive tutoring in math, writing and numerous other areas. Skills assessments, accommodated test services and make-up testing are also offered at the ASC. Working with the Retention Coordinator students can develop study skills, participate in academic coaching and other student support activities, as well as complete the reinstatement process activities if necessary. For information related to these services, contact the ASC at 243-7826 or the Retention Coordinator at 243-7878.

»Plagiarism Warning

Plagiarism is the representing of another's work as one's own. It is a particularly intolerable offense in the academic community and is strictly forbidden. Students who plagiarize may fail the course and may be remanded to Academic Court for possible suspension or expulsion. (See Student Conduct Code that follows in this section of the catalog.)

Students must always be very careful to acknowledge any kind of borrowing that is included in their work. This means not only borrowed wording but also ideas. Acknowledgment of whatever is not one's own original work is the proper and honest use of sources. Failure to acknowledge whatever is not one's own original work is plagiarism.

Student Conduct Code

The Student Conduct Code, embodying the ideals of academic honesty, integrity, human rights and responsible citizenship, governs all student conduct at The University of Montana-Missoula. Student enrollment presupposes a commitment to the principles and policies embodied in this Code. The Student Conduct Code sets forth University jurisdiction, student rights, standards of academic and general student conduct, disciplinary sanctions for breach of the standards of student conduct and procedures to be followed in adjudicating charges of both academic and general misconduct. The Vice President for Student Affairs is responsible for procedural administration of the Student Conduct Code for all general conduct. The Provost and Vice President for Academic Affairs is responsible for all academic conduct. Copies of the Student Conduct Code can be obtained from the offices of the Vice President for Student Affairs, the Provost and Vice President for Academic Affairs, Residence Life, and Associated Students of University of Montana-Missoula (ASUM). The Student Conduct Code also can be accessed on the [Vice President for Student Affairs Conduce Code web page](#).

»General Information

»Maximum Credit Load

Generally, an undergraduate student should register for no more than 21 credits during a semester. The credit load would include physical education activity courses, and also remedial courses (those numbered below 100), credits from which do not count toward a certificate or degree.

Permission to enroll for more than the maximum credit load given above may be approved by the student's faculty advisor.

»Full-Time Student Defined

Undergraduate Students

- Full Time: 12 or more enrolled credits
- 1/2 Time: 6 -11 enrolled credits
- <1/2 Time: 5 or fewer enrolled credits
- Not Enrolled: 0 enrolled credits (withdrawn/graduated, etc.)

Graduate Students

- *Full Time: 9 or more enrolled credits
- 1/2 Time: 6 – 8 enrolled credits
- <1/2 Time: 5 or fewer enrolled credits.
- Not enrolled: 0 enrolled credits (withdrawn/graduated, etc.)

* One credit of PSYX 638 Clinical Psychology Internship per semester is equivalent to full-time enrollment for students in the Clinical Psychology Ph.D. Program.

In most baccalaureate programs a student must earn at least 15 credits per semester to graduate in a four year period. One and two year programs usually require enrollment in between 15 and 19 credits per semester.

»Classification of Undergraduate Students

The undergraduate student is classified as a freshman, sophomore, junior or senior based on the number of credits earned. The student who has earned fewer than 30 credits is a freshman. The student who has earned at least 30 credits but fewer than 60 is a sophomore, and the student who has earned at least 60 credits but fewer than 90 credits is a junior. The student who has earned 90 or more credits is classified a senior.

»Dean's List (Honor Roll)

To qualify for the Dean's List, students must be undergraduates, must earn a semester grade average of 3.50 or higher, and receive grades of A or B in at least 9 credits. No grades of C+, C, C-, D+, D, D-, F, NC or NCR are allowed.

»Repeating a Course

Effective Autumn semester 2009, the following new course repeat fee structure was implemented:

- 1st repeat - \$25.00

- 2nd repeat - \$35.00
- 3rd repeat - \$50.00

The fee is assessed when a single course is repeated. The repeat fee is assessed for all students who repeat courses, not just those wanting to replace a grade for a course they took previously. Exemptions from the fee will be allowed for individuals with disabilities or financial hardship based upon recommendations from the Office of Disability Services or the Financial Aid Office.

Initial grades will be marked as repeated and remain on the transcript, but they will not be used to in the GPA calculation. Grades of AUD, I, N, NC, NCR, NP, NF, W, WP, or WF may not be used to replace grades. An F grade will be used to replace grades. If the last grade received is an F, no credit is given for previous passing grades. All courses repeated remain on the permanent record but only the last grade received is used to determine credits earned. Only the last grade received is used in calculating the grade point average.

If students receiving federal financial aid repeat a course previously passed they can only receive financial aid to do so a second time. On a third attempt the course will not be counted in the enrollment status for determining aid eligibility.

If enrollment in a course is closed, a student who is repeating or auditing the course may be required by the instructor to drop the course. This rule grants enrollment preference to those students attempting to register for the course for the first time for credit. It is the responsibility of the student who is not allowed to remain in the course to formally drop the course to avoid a failing grade for that course.

Repeating a course in the School of Law is governed by a different policy. See the School of Law section of this catalog.

»Credit By Examination

Under certain circumstances, a currently registered student may receive credit by examination for a course in which he or she has not been regularly enrolled. The student must have a minimum cumulative grade average of 2.00 and an entering freshman must present a high school scholastic record equivalent to a 2.00 grade average to be eligible to earn credit by examination in any course.

Each school or department may determine those courses, if any, for which credit may be earned by examination. The dean of the school or the chair of the department must approve any arrangements prior to testing for such credit. On the successful completion of an examination, the department notifies the Registrar's Office. There are no fees for this type of credit by examination and grading may be credit/no credit or traditional letter grade.

Additional information can be found on the [Admissions Advanced-Credits web page](#).

»Course Numbering System

- 001-099 Courses below college level. Credit not allowed toward a degree.
- 100-199 Primarily for freshmen.
- 200-299 Primarily for sophomores.
- 300-399 Primarily for juniors.
- 400-499 Primarily for seniors.
- 500-699 Primarily for graduate students.
- Senior (5th year) courses in Pharmacy are numbered 500 to 599.
- 800 cross-listed courses, used for secondary or other listing.

Undergraduates in Graduate Courses

Post-baccalaureates and seniors holding a 3.0 (or greater) grade point average may, with consent of instructor, enroll in 500-level courses for undergraduate credit. Variance from these requirements cannot be petitioned.

»Credit

Credit is defined in terms of semester hours. In general, 1 semester hour credit is allowed for 1 hour of lecture each week of the semester, or an average of 2 hours of laboratory each week of the semester.

In determining semester hour recommendations, evaluators use the following guidelines:

1. One semester credit hour for each 15 hours of classroom contact plus 30 hours of outside preparation or the equivalent; or
2. One semester credit hour for each 30 hours of laboratory work plus necessary outside

- preparation or its equivalent, normally expected to be 15 hours; or
3. One semester credit hour for not less than 45 hours of shop instruction (contact hours) or the equivalent.

»Pre-requisites and Co-requisites

"Pre-requisite" indicates that the course(s) or requirement(s) described must have been met/satisfactorily completed (grade of C- or better, unless otherwise specified in the course description in the catalog) before the student may take the course that requires the listed pre-requisite. Failure to complete satisfactorily the pre-requisite will result in the student being dropped from the course which requires the pre-requisite. If credit for a pre-requisite was earned via the Advanced Placement (AP) Examination Program, the AP score is recorded on a student's academic record with a grade of "CR*" (prior to Autumn Semester 2012), or a score of AP3, AP4, or AP5 (Autumn Semester 2012 and thereafter). "Co-requisite" indicates the course or courses must be taken concurrently (in the same academic term) with the course described. In some cases a co-requisite may be completed prior to the semester in which the course that requires the co-requisite is taken.

»Cross-listed and Equivalent Courses

Some courses are offered jointly by two or more departments. In such cases, the course description will provide information for registration. As of Autumn Semester 2013, a select group of cross-listed courses were being offered as part of a continuing pilot study authorized by the Office of The Commissioner of Higher Education and the faculty of the university.

In certain cases, a course description indicates credit is not allowed for a particular course and for another course offered by a different department. These courses are very similar in content, although offered separately, and credit is not allowed toward a degree for both courses.

»Technical Courses

A few courses at the Missoula College are shown with a course number suffix of "T" and are primarily technical in nature. The courses will be required in a specific Certificate of Applied Science program or a specific Associated of Applied Science program or professional industry certificate offered by the College. Up to 15 credits of vocational-technical course work from regionally accredited schools are accepted as free elective in transfer toward an AA, AS, or baccalaureate program. Up to 20 credits may transfer for students completing an AAS degree. Refer to vocational technical credits in the Admissions section or Credit Maximums section.

»Cancellation of Courses

The University reserves the right to cancel any course due to low enrollment.

Common Course Numbering - Montana University System

All universities, 4-year and 2-year colleges that are part of the Montana University System are now required to use the same course numbering for undergraduate courses. With common course numbering, transfer students can be reassured that they will receive credit for undergraduate courses taken at another Montana institution, as long as the admitting institution offers that same course. This transparency will make it easier for students to continue their higher education at any state-supported campus.

Effective Autumn Semester 2009, all units of the Montana University System (MUS) began to offer classes using new subject abbreviations and new numbers that are common across all MUS units. Subject areas and numbers continue to be renumbered as of the publication of this catalog. Information regarding Common Course Numbering at the University of Montana is available at the [Common Course Numbering web page](#).

»Final Examinations

Final examinations for the semester are scheduled in two-hour segments, one for each course. The segments should be considered as class meetings to be treated by the instructor as he or she thinks educationally appropriate. The time scheduled for final examinations is the only time period during which final examinations are to be given. If an instructor elects not to give a final examination during the designated week, under no circumstances are final examinations to be given during the week preceding the scheduled final examination days.

Students may seek relief from writing more than two examinations during the same day. Students who are scheduled for more than two examinations may contact the appropriate faculty to arrange an alternate testing time during the scheduled final examination period. If satisfactory arrangements cannot be made, the student should seek the assistance of his or her dean.

»Transcript of Academic Record

A transcript of a student's academic record may be obtained from the Registrar's Office in the Lommasson Center or the Registrar's Office at the College of Technology upon the written and signed request of the student. In compliance with federal and state laws designed to protect student privacy, transcripts are not released without the student's authorizing signature.

Transcripts are usually available within two to five working days after receipt of the signed request. There is a charge of \$3.00 for each official transcript. Payment must be received before transcripts are released. Transcripts and other services are withheld if the student owes a debt to the University. Special handling requests require extra fees. Students may order an academic transcript on-line for a small additional fee. Additional information regarding ordering options and fees may be viewed via the [Registrar's Website](#).

A student who enrolled after summer semester 1991 may view his or her academic record in [CyberBear](#).

General Education

»Preamble

The University of Montana-Missoula's General Education Program provides a broad academic base that supports both undergraduate learning at the University of Montana-Missoula and continued learning following graduation. While the General Education Program offers students considerable flexibility in selecting courses, it has a set of common educational objectives for all students.

In accordance with the mission of the University of Montana- Missoula, these objectives are to develop competent and humane individuals who are informed, ethical, literate, and engaged citizens of local and global communities. Students should become acquainted with issues facing contemporary society, participate in the creative arts, develop an understanding of science and technology, cultivate an appreciation of the humanities, and examine the history of different American and global cultures. Upon completion of the general education requirements students should be able to articulate ideas orally and in writing, understand and critically evaluate tangible and abstract concepts, and employ mathematical and other related skills appropriate to a technologically focused society.

In summary, the General Education Program is designed to provide a high quality intellectual foundation that accommodates all UM students whether in liberal arts or professional programs. This foundation will be reinforced, expanded, and refined as students continue through their course of study. Students are encouraged to prepare for productive roles in their chosen fields by cultivating civic awareness vital to the greater community and a democratic society. The acquired skills will allow students to examine critically the human experience and achieve genuine confidence in their knowledge and abilities. For the General Education Program to accomplish its goals, students must assume primary responsibility for their growth and education.

»General Education Requirements

To earn a baccalaureate degree, all students must complete successfully, in addition to any other requirements, the following General Education Requirements. (Students who have completed an approved lower-division general education program at an approved Montana institution of higher education should refer to the catalog section on General Education for Transfer Students.

All General Education courses must be at least 3 credits, must be introductory and foundational, and have no more than one pre-requisite. The General Education Committee may allow exceptions for upper-division courses, courses fewer than three credits, and for courses with more than one pre-requisite, if the proposing unit can justify such an exception.

Some courses may satisfy both the "Writing Course" requirement (1.2) and one of the Groups IV through XI.

Some courses may satisfy both Group II and Group III Symbolic Systems.

Some courses may satisfy both Group IX and one of the Groups IV through VIII.

Some courses may satisfy both Group X and one of the Groups IV through VIII. No course may satisfy both Group IX and Group X.

NOTE! *All courses taken to satisfy General Education Requirements must be taken for a traditional letter grade and must be passed with a grade of C- or better***.**

Students are cautioned that approved courses may change from year to year. To be used for General Education credit, a course must be listed as approved in the Class Schedule for the semester a student registers for it.

Group Letter and Description	Credits
Group I: English Writing Skills 1. Composition course WRIT 101 or 201(ENEX 101, WTS 101, ENEX 200) or an equivalent 2. One designated Writing Course 3. Upper-Division Writing Requirement (as specified by major department)	3 1-3 3
Group II: Mathematics	3
Group III: Modern and Classical Languages or Symbolic Systems A two semester language sequence is the default option (test out provisions apply). Students may substitute a symbolic system sequence required by their major and approved by the General Education Committee. The list of programs granted exceptions and their alternative options are found in the listing of those majors.	0-10 or 3-6
Group IV: Expressive Arts	3
Group V: Literary and Artistic Studies	3
Group VI: Historical and Cultural Studies	3
Group VII: Social Sciences	3
Group VIII: Ethics and Human Values	3
Group IX: American and European Perspectives	3
Group X: Indigenous and Global Perspectives	3
Group XI: Natural Sciences One Natural Science course must include a laboratory experience.	6
Total	*28-49

*Some courses satisfy more than one group (see list at the end of this section).

Group I: English Writing Skills

The ability to write effectively is fundamental to success in academic, professional, and civic endeavors. Specifically, a student should be able to:

- Use writing to learn and synthesize new concepts;
- Produce focused writing that is developed, logical, and organized;
- Compose written documents that are appropriate for a given audience, purpose, and context;
- Revise written documents based on constructive feedback;
- Develop competence in information literacy, information technology and digital literacy;
- Use discipline-specific style and citation conventions;
- Demonstrate appropriate English language usage.

Students must satisfy the following four three requirements in order:

1. Composition course WRIT 101 or 201 (ENEX 101, WTS 101, ENEX 200) or an equivalent;
2. One approved writing course;
3. The upper-division writing requirement for the major.

Composition Course

All students must complete WRIT 101 or 201 (ENEX 101, WTS 101, ENEX 200), or an equivalent composition course with a grade of C-minus or better. Students with Language and Composition AP scores of 4 or better are exempted from this requirement.

Entering students are placed into WRIT 095, WRIT 101 or WRIT 201 (WTS 100D, WTS or ENEX 101, or ENEX 200) based on their standardized test scores. Students placed into WTS 100D are provided an opportunity to challenge their placement with specific scores. Students placing into WRIT 201 (ENEX 200) may choose to take WRIT 101 (ENEX 101) instead.

One Approved Writing Course

All students, unless exempted, must pass an approved writing course (chosen from the following list of approved courses). Students are exempted from this requirement by transferring more than 27 semester credits at the time of their initial registration at the University. Transfer students need to petition the Writing Committee to have transferred writing courses from other institutions accepted for this requirement. View details regarding this process on the [transfer student admission](#) page of the catalog.

Upper-Division Writing Requirement

All students must meet the approved upper-division writing requirements specified by their majors. Students should seek specific information about the upper-division writing requirements in their major in the section of the catalog where information about their chosen major is given.

Students cannot use the same writing course to meet both the approved writing course requirement and the upper-division writing requirement.

Approved Writing Courses

The following courses are designated as approved writing courses for 2014-2015. Students are cautioned that approved courses may change from year to year. To be used for General Education, a course must be listed as approved in the catalog and in the Class Schedule for the semester a student registers for it.

Course #	Title
AAS 347/HSTA 347	African American Religious Experience
AAS 372	African American Identity

ANTY 310	Human Variation
ANTY 336	Myth, Ritual and Religions
ARTH 250L	Introduction to Art Criticism
ARTH 434	Latin American Art
BMGT 205	Professional Business Communications
BUS 210	Critical Analysis for Business
C&I 287	Business Communication
CLAS 251L	The Epic
CLAS 252L	Greek Drama: Politics on Stage
COMX 414	Communication in Personal Relationships
CSCI 215E	Social & Ethical Issues
CSCI 216E	Robots, Genetic Engineering and Ethics
ECNS 433	Economics of the Environment
ENST 231H	Nature and Society - Missoula College
FILM 320	English Literature Shakespeare
HC 121L	Ways of Knowing
HSTA 315	Early American Republic
HSTA 347/AAS 347	African American Religious Experience
HSTA 385	Families & Children in America
HSTA 401	The Great Historians
HSTR 300	Writing For History
HSTR 315	The Early American Republic, 1787-1848
HSTR 334	Latin American: Reform and Revolution
HSTR 358	Russia Since 1881
HSTR 401	The Great Historians

JRNL 270	Reporting
LIT 110L	Introduction to Literature
LIT 120L	Poetry (Introduction to Poetry)
LIT 210L	American Literature I
LIT 211L	American Literature II
LIT 220L	British Literature: Medieval Renaissance
LIT 221L	British Literature: Enlightenment to Romanticism
LIT 222L	British Literature: Victorian to Contemporary
LSH 151L/152L	Introduction to the Humanities Bible and Medieval
MUSI 302H	Music History II
NASX 280	Native American Studies Research Theories Methods
NASX 235X	Oral and Written Traditions of Native America
NRSM 200	Natural Resources Professional Writing
PHL 210E	Moral Philosophy
THTR 330H	Theatre History I
WRIT 110	Introduction to Literature
WRIT 121	Introduction to Technical Writing
WRIT 201	Advanced Composition
WRIT 221	Intermediate Technical Writing
WRIT 240E	Ethics and Rhetoric: Writing Arguments on Contemporary Issues
WRIT 325	Writing in the Sciences

Upper-Division Writing Courses

The following courses are approved as meeting the criteria for the upper-division writing requirement. Students should consult with their advisor regarding the requirement specified by their major.

Course #	Title

AHAT 342	Rehab of Athletic Injuries
ANTY 314	Principles of Forensic Anthropology
ANTY 400	History of Anthropology
ANTY 402	Quantitative Ethnographic Methods
ANTY 403E	Ethics and Anthropology
ANTY 408	Advanced Anthropological Statistics
ANTY 450	Archaeological Theory
ANTY 451	Cultural Resource Management
ANTY 455	Artifact Analysis
ARTH 350	Contemporary Art and Art Criticism
ARTH 434H	Latin American Art
BIOE 371	General Ecology Lab
BIOE 428	Freshwater Ecology
BIOO 470	Ornithology
BIOO 475	Mammalogy
BMGT 447	Management Game
BMGT 486	Strategic Venture Management
CHMY 302E	Chemical Literature and Scientific Writing
COMX 347	Rhetoric, Nature, Environmentalism
COMX 413	Communication and Conflict-Writing
COMX 414	Communication in Personal Relationships
COMX 421	Communication in Nonprofit Organization
COMX 422	Communication and Technology
COMX 424	Risk, Crisis and Communication
COMX 445	Rhetorical Criticism and Theory

COMX 447	The Rhetorical Construction of Woman
COMX 449	The Rhetoric of U.S. Women's Activism, 1960 - present
CSCI 315E	Computer Ethics and Society
CSCI 499	Senior Thesis/Project
CSD 430	Senior Capstone I
DANC 494	Seminar/Workshop (Junior/Senior Dance Seminar)
ECNS 488-489	Research Method & Thesis Design / Senior Thesis capstone
EDU 397	Methods: PK-8 Language Arts
ENST 382	Environmental Law
ENST 335L	The Environmental Vision
ENST 367	Environmental Politics and Policy
ENST 487	Globalization, Justice and the Environment
GEO 320	Global Water Cycle
GEO 499	Senior Thesis/Capstone
GPHY 433	Cultural Ecology
GPHY 335	Water Policy
GPHY 499	Senior Thesis/Capstone
GRMN 351H	German Culture to 1900
GRMN 352H	German Culture from 1900 to the Present
HEE 301	Methods of Secondary HE
HSTA 415/AAS 415	The Black Radical Tradition
HSTA 417/AAS 417	Prayer and Civil Rights
HSTA 418	Women and Slavery
HSTA 419	Southern Women in Black and White
HSTA 422	Research: U.S. After WWII

HSTA 461	Research in Montana History
HSTA 469	Research & Writing Early America & the Atlantic World
HSTA 471	Writing Women's Lives
HSTR 400	Historical Research Seminar
HSTR 418	Research Seminar: Britain in the Long Eighteenth Century
HSTR 437	U.S. Latin American Relations
JRNL 362	Feature Writing
JPNS 311	Classical Japanese Literature in English Translation
JPNS 312	Japanese Literature from Medieval to Modern Times
JRNL 340	Intermediate Audio
JRNL 352	Int. Video Reporting and Production
JRNL 362	Feature Writing
JRNL 370	Public Affairs Reporting
JRNL 474	Magazine Freelance Writing
JRNL 494	Senior Seminar
KIN 447	Analytical and Communication Techniques
LING 473	Language and Culture
LING 484	North American Indigenous Languages and Linguistics
LIT 300	Literary Criticism
LIT 304	U.S. Writers of Color
LIT 314	The American Novel
LIT 316	Topics in Postcolonial Studies
LIT 327	Shakespeare
LIT 342L	Montana Writers

LIT 343	African American Literature
LIT 353	Milton
LIT 376	Literature and Other Disciplines
LIT 494	Seminar: Literature Capstone
LSH 484	Novel Ancient and Modern
M 499	Senior Thesis
M 429	History of Mathematics
MART 450	Topics in Film and Media
MCLG 315	Major Hispanic Authors
MCLG 494/RUSS 494	Seminar in Russian Studies
MUSI 415	Music of the 20th Century to the Present
MUSI 416	Topics in Music History
MUSI 417	Cultural Studies in Music
NASX 494	Reading Seminar in Native American Studies
PHAR 550	Drug Literature Evaluation
PHL 499	Senior Seminar
PHSX 330	Methods of Communicating Physics
PSCI 400	Advanced Writing in Political Sciences
PSYX 400	History and Systems of Psychology
PSYX 320	Research Methods III
PTRM 451	Tourism and Sustainability
PTRM 482	Wilderness and Protected Area Management
RUSS 494	Seminar in Russian Studies
SOCI 438	Seminar in Crime and Deviance
SOCI 441	Capstone: Inequality and Social Justice

SOCI 460	Capstone in Rural & Environmental Change
SOCI 488	Writing for Sociology
SW 300	Human Behavior in the Social Environment
SW 310	Social Welfare Policies and Services
THTR 331Y	Theatre History II
WGSS 363	Feminist Theory and Methods
WILD 408	Advanced Fisheries Science
WILD 470	Conservation of Wildlife Populations
WILD 497	Senior Thesis

Group II Mathematics

Mathematical literacy implies an appreciation of the beauty of mathematics, an ability to apply mathematical reasoning, and an understanding of how mathematics and statistics are used in many arenas. Mathematical literacy may be attained through the study of the properties of numbers, mathematical modeling, geometry, data analysis and probability, with the overarching goal of learning mathematical reasoning and problem solving.

Mathematical literacy cannot be achieved in a single course. However, for the purposes of general education, the mathematical literacy requirement can be met by any one of the following:

1. achieving a grade of C-or better in one of the following courses which address different aspects of mathematical literacy: M 104, 105, 115, 118, 121, 122, 135, 151, 162; or a mathematics course of 3 or more credits for which one of these is a prerequisite. M 191 Fairness and Social Justice:Quantifying the Unquantifiable - (one time only GLI designation for autumn 2014)
2. achieving a score of 50 or better on the CLEP College Algebra Test, the CLEP College Precalculus Test, or the CLEP College Mathematics Test.
3. passing the Mathematical Literacy Examination administered by the Department of Mathematical Sciences. To qualify to take the Mathematical Literacy Examination, a student must have achieved a score of 630 or better on the SAT Math exam or a score of 28 or better on the ACT Math exam. A student may take the Mathematical Literacy Examination only once. Further details are available from the Department of Mathematical Sciences.

Students must complete the mathematical literacy requirement by the time they have earned 30 credits; if not, they must register for a mathematical sciences course every semester until they have completed the requirement. Because many other courses at the university assume some mathematical literacy, it is strongly recommended that all students complete their mathematical literacy requirement as soon as possible.

Upon completion of the mathematical literacy requirement, a student will be able to effectively apply mathematical or statistical reasoning to a variety of applied or theoretical problems.

Group III: Modern and Classical Language

Students must complete successfully the second semester of a Modern and Classical Language at the University of Montana. Courses encompass the comprehensive study of a natural language other than written or spoken contemporary English.

Upon completion of the Modern and Classical Languages sequence, students will have a basic functional knowledge of a second natural language sufficient to:

1. read and write if the language is classical, such as Latin;
2. speak and aurally comprehend, if the language does not have a written tradition, such as Salish;
3. perform all four skills (speaking, aural comprehension, reading, and writing) if the language is modern and has a written tradition, such as Japanese or French.
4. demonstrate both receptive (visual comprehension) and expressive (manual production) proficiency if the language is American Sign Language.

Course #	Title
ARAB 101	Elementary Modern Arabic I (Elementary Standard Arabic)
ARAB 102	Elementary Modern Arabic II (Elementary Modern Standard Arabic)
CHIN 101	Elementary Chinese I
CHIN 102	Elementary Chinese II
FRCH 101	Elementary French I
FRCH 102	Elementary French II
GRMN 101	Elementary German
GRMN 102	Elementary German
GRK 101	Elementary Greek I
GRK 102	Elementary Greek II
ITLN 101	Elementary Italian I
ITLN 102	Elementary Italian II
JPNS 101	Elementary Japanese I
JPNS 102	Elementary Japanese II
LATN 101	Elementary Latin
LATN 102	Elementary Latin
RUSS 101	Elementary Russian I
RUSS 102	Elementary Russian II
SPNS 101	Elementary Spanish

SPNS 102	Elementary Spanish
*IRSH 101	Elementary Irish One
*IRSH 102	Elementary Irish Two
*IRSH 103	Elementary Irish Three

- * Three 3 credit courses of Irish are required to fulfill the general education requirement
- Students may satisfy the requirement by demonstrating equivalent skill in any of these or other languages in testing administered by the Department of Modern and Classical Languages and Literatures.
- International students from non English speaking countries may satisfy this requirement by presenting a TOEFL score of 580 or greater, or by successful completion of ESL/LING 250 or 450, or by presenting a department approved application for degree.

Group III: Exceptions to the Modern and Classical Language requirement - Symbolic Systems

The majors listed below have been granted exceptions to the Modern and Classical Language requirement. Students graduating in any one of these majors may substitute the symbolic system course or courses designated by the major.

Each of these courses presents the foundations of a symbolic system, defined as a relationship that maps real-world objects, principles and doctrines with abstractions of the real-world.

Symbolic systems facilitate communication in specialized ways but do not comprise a spoken or written language by which members of a culture typically communicate with each other.

Upon completion of a symbolic systems course or courses, students will be able to:

1. demonstrate an understanding of the symbols and the transformations of the system;
2. relay and interpret information in terms of the given symbolic system;
3. apply creative thinking using the symbolic system in order to solve problems and communicate ideas;

Major	Symbolic Systems Course(S)
Accounting & Finance	STAT 216
Anthropology	ANTY 401 or FORS 201 or STAT 216 or SOCI 202 or PSYX 222
Biochemistry/Health Profession Option	M171, M162
Chemistry	One course in Mathematical Science at 162 level or above
Communication Studies	STAT 216 or PSYX 222 or SOCI 202 or HHP 486 or EDU 421
Computer Science	CSCI 131 and CSCI 136

Curriculum & Instruction	M 136
Division of Biological Sciences	M 162 or M 171
Economics	STAT 216 and either M 162 or M 171 or M 172
Environmental Studies	STAT 216 or SOCI 202 or PSYX 222 or FORS 201
Forestry	M 162
Geography	STAT 216
Geoscience	M 162 or M 171
Health and Human Performance	EDU 421/HHP 486 or STAT 216 or PSYX 222 or SOCI 202 or WBIO 210
Management Information Systems	STAT 216
Management & Marketing	STAT 216
Mathematics or combined Mathematics / Computer Science	M 171 or any course for which it is a prerequisite
Music - Bachelor of Music Education Bachelor of Music in Composition/Music, Bachelor of Music Specialization in Instrumental Performance Bachelor of Music Specialization in Piano Performance and Pedagogy Bachelor of Music Specialization in Piano Performance	MUSI 105, 106, 140 & 141
Pharmacy	M162 and STAT 216 or PSYX 222 or SOCI 202
Psychology	PSYX 222 or STAT 216
Parks, Tourism and Recreation Management	STAT 216 or FORS 201 or SOCI 202
Resource Conservation	STAT 216 or WILD 240 or FORS 201 or SOCI 202
Sociology	SOCI 202 or PSYX 222 (for double majors) or STAT 216

Theatre - Bachelor of Fine Arts (Acting Emphasis)	THTR 210, 211 & 310
Theatre - Bachelor of Fine Arts (Design/Technology Emphasis)	THTR 255 & THTR 345 or 355
Wildland Restoration	M 162 or M 171 and FORS 201 or WILD 240 or STAT 216
Wildlife Biology	M 162 or higher and WILD 240 or two Math courses 162 and Higher

Students are advised that most courses meeting the symbolic systems exception have prerequisites, as indicated in the chart below:

Course	Title	Pre-requisite(s)
ANTY 401	Anthropological Data Analysis	College algebra or consent of instructor
CSCI 135	Fundamentals of Computer Science I	Computer programming experience in a language such as BASIC, Pascal, C, etc.; coreq., M 095 D or consent of instr. CSCI 104 highly recommended as prereq. or coreq
CSCI 136	Fundamentals of Computer Science II	CSCI 135 ; coreq., M 151 or consent of instr
EDU 421	Statistical Procedures in Education	M 115 or equiv. or consent of instr
FORS 201	Forest Biometrics	M 115 or M 151 or equivalent
HHP 486	Statistical Procedures in Education	M 115 or equiv. or consent of instr
M 136	Mathematics for K-8 Teachers II	M 135
M 162	Applied Calculus	Appropriate placement score or one of M 121, 122, or 151
M 171	Calculus I	M 122 or 151 or appropriate placement score
STAT 216	Statistics	M 115 (preferred), or one of M 121, 135, 151, 162 or 171, or ALEKS placement ≥ 4
STAT 451	Statistical Methods	One year of college mathematics including M 115 or equiv. course in probability or consent of instr.
MUSI 105	Music Theory I	Coreq., MUSI 140

MUSI 106	Music Theory II	MUSI 105
MUSI 140	Aural Perception I	Coreq., MUSI 105
MUSI 141	Aural Perception II	MUS 137
MUSI 139	Language of Music II	MUSI 138
PSYX 222	Psychological Statistics	PSYX 100S, 120: M 115, 162, or 171
SOCI 202	Social Statistics	M 115 or consent of instructor
THTR 211	Voice and Speech II	THTR 210
THTR 310	Voice and Speech III	THTR 211
THTR 345	Flat Pattern Design and Drafting	THTR 255
THTR 355	Computer-Aided Drafting and Computer Applications for the Theatre	THTR 255
WILD 240	Introduction to Biostatistics	Calculus and consent of instructor

Group IV: Expressive Arts (A)

Expressive Arts courses are activity-based and emphasize the value of learning by doing in an artistic context. Upon completion of an Expressive Arts course, students will be able to express themselves in the making of an original work or creative performance; understand the genres and/or forms that have shaped the medium; and critique the quality of their own work and that of others.

Course #	Title
ARTZ 105A	Visual Language: Drawing
ARTZ 106A	Visual Language: 2-D Design
ARTZ 108A	Three Dimensional Fundamentals
ARTZ 131A	Ceramics for Non-Majors
ARTZ 191A	Art for Non-Majors - (one time only designation for autumn 2014)
ARTZ 211A	Drawing I
ARTZ 221A	Painting I

ARTZ 231A	Ceramics I
ARTZ 251A	Sculpture I
ARTZ 271A	Printmaking I
ARTZ 284A	Photo I - Techs and Processes
ARTZ 302A	Elementary School Art
ARTZ 394A	Environmental Draw Seminar
COMX 111A	Introduction to Public Speaking
COMX 217A	Oral Interpretation of Literature
CRWR 210A	Introduction Fiction Workshop
CRWR 211A	Introduction Poetry Workshop
CRWR 212A	Introduction Nonfiction Workshop
CRWR 312A	Interm Nonfiction Workshop
DANC 100A	Modern Dance I
DANC 110A	Ballet I
DANC 115A	Jazz Dance I
DANC 118A	Dance Forms: Tap
DANC 129A	Dance Performance Lab I
DANC 160A	Dance Forms: Irish
DANC 165A	Dance Forms: African
DANC 170A	Dance Forms: Tribal Style Belly
DANC 200A	Modern Dance II
DANC 210A	Ballet II

DANC 215A	Jazz Dance II
DANC 220A	Beginning Composition
DANC 229A	Dance Performance Lab II
ENST 373A	Nature Works
JRNL 140A	Beginning Radio/Audio Storytelling
JRNL 191A	GLI:From Homer to HeroCams:Adventure Narrative through the Ages (one time only designation for autumn 2014)
MART 112A	Intro to Non-Lin Editing
MART 111A	Integrated Digital Art
MUSI 102A	Performance Study
MUSI 108A	Orchestras: USMO (Orchestras)
MUSI 110A	Opera Theatre
MUSI 111A	Singing for Non-Majors
MUSI 112A	Choir: Chamber Choral
MUSI 114A	Band: UM Concert Band
MUSI 122A	Percussion Ensemble: UM
MUSI 123A	World Percussion Ensemble
MUSI 131A	Jazz Ensemble: UM Jazz Bands
MUSI 135A	Keyboard Skills I
MUSI 136A	Keyboard Skills II
MUSI 155A	Marching: Grizzly Marching Band
MUSI 160A	Beginning Guitar
MUSI 162A	Chamber Ensembles
MUSI 267A	Composers' Workshop I
MUSI 304A	Sound in the Natural World

MUST 227A	Mountain Electroacoustic Laptop Ensemble I
THTR 102A	Introduction to Theatre Design
THTR 106A	Theatre Production I: Run Crew
THTR 107A	Theatre Production I: Construction Crew
THTR 113A	Introduction to Vocal Acting
THTR 120A	Introduction to Acting I
THTR 121A	Introduction to Acting II
THTR 229A	Production Acting I
THTR 239A	Creative Drama/Dance: K-8

Group V: Literary and Artistic Studies (L)

In these courses, students develop familiarity with significant works of artistic representation, including literature, music, visual art, and/or performing arts. Through this experience, students enhance their analytical skills and explore the historical, aesthetic, philosophical, and cultural features of these works.

Upon completion of a Literary and Artistic Studies course, students will be able to:

1. analyze works of art with respect to structure and significance within literary and artistic traditions, including emergent movements and forms; and
2. develop coherent arguments that critique these works from a variety of approaches, such as historical, aesthetic, cultural, psychological, political, and philosophical.

Course #	Title
ARTH 160L	Global Visual Culture
ARTH 250L	Introduction to Art Criticism
CLAS 251L	The Epic
CLAS 252L	Greek Drama: Politics on Stage
COMX 140L	Introduction to Visual Rhetoric
CRWR 115L	Montana Writers Live!
DANC 234L	Dance in Cinema
DANC 360L	World Dance
ENST 335L	Environmental Vision

FILM 103L	Introduction to Film
GRMN 322L	The German Cinema
HONR 121L	Ways of Knowing
IRSH 345L	Literature in the Irish Language
LIT 110L	Introduction to Literature
LIT 120L	Poetry
LIT 191L	GLI:Crossing Borders: Flim, Literature, and Adaptation (one time only designation for autumn 2014)
LIT 210L	American Literature I
LIT 211L	American Literature II
LIT 220L	British Literature: Medieval to Renaissance
LIT 221L	British Literature: Enlightenment to Romanticism
LIT 222L	British Literature: Victorian to Contemporary
LIT 270L	Film and Literature
LIT 280L	Introduction to the Ecology of Literature
LIT 291L	The American Novel for Non-Majors - (one time only designation for spring 2015)
LIT 342L	Montana Writers
LIT 349L	Medieval Literature
LIT 350L	Chaucer
LIT 373L	Literature and the Environment
LIT 378L	Gay and Lesbian Studies
LSH 151L	Introduction to Humanities Bible
LSH 152L	Introduction to Humanities Medieval
LSH 327L	Gender and Sexuality in English Fiction
MART 101L	Intro to Media Arts

MCLG 155L	Survey of Classical Literature
MCLG 160L	Classical Mythology
MCLG 313L	Classical Chinese Poetry in Translation
MCLG 314L	Traditional Chinese Literature
MCLG 332L	Introduction to Multicultural Literature in Germany
MUSI 101L	Enjoyment of Music
MUSI 130L	History of Jazz
MUSI 132L	History of Rock and Roll
MUSI 133L	Country Music: Cowboys, Opry and Nashville
MUSI 202L	Introduction to Music Literature
NASX 235X	Oral and Written Traditions Native Americans
RUSS 312L	Russian Literature I
RUSS 313L	Russian Literature II
THTR 101L	Introduction to Theatre
THTR 235L	Dramatic Literature
WGSS 163L	Historical and Literary Perspectives on Women

Group VI: Historical and Cultural Studies (H)

These courses present the historical or cultural contexts of ideas and institutions, and examine cultural development or differentiation in the human past. They are foundational in that they are wide-ranging in chronological, geographical, or topical focus, or in that they introduce students to methods of inquiry specific to a particular discipline.

Upon completion of a Historical and Cultural Studies course, students will be able to:

1. synthesize ideas and information with a view to understanding the causes and consequences of historical developments and events;
2. evaluate texts or artifacts within their historical and/or cultural contexts;
3. analyze human behavior, ideas, and institutions within their respective historical and/or cultural contexts.

Course #	Title
AAS 141H/HSTA 141H	Black: Africa to Hip-Hop and Beyond, An introduction

AAS/HSTA 141H	Introduction to African American Studies
AAS 208H/HSTR 208H	Discovering Africa
AAS 342H/HISTA 342H	African American History to 1865
AAS 343H/HISTA 343H	African American History since 1865
ANTY 101H	Anthropology and the Human Experience
ANTY102H/LS 102H/SSEA 102H	Introduction to South & Southeast Asia
ANTY 103H	Introduction to Latin American Studies
ANTY 141H	The Silk Road
ANTY 241H	Central Asian Cultures and Civilizations: Peoples and Environments
ANTY 251H	Foundation of Civilization
ANTY 254H	Archaeological Wonders of the World
ANTY 351H	Archaeology of North America
ANTY 354H	Mesoamerican Prehistory
ARTH 200H	Art of World Civilization: Ancient to Medieval Art
ARTH 201H	Art of World Civilization: Early Modern to Contemporary Art
ARTH 433H	Ancient American Art
CHIN 211H	Chinese Culture and Civilization
CLAS 360H	Ancient Greek Civilization and Culture
COMX 240H	Introduction to Rhetorical Theory
ENST 230H	Nature & Society
ENST 231H	Nature & Society - Missoula College
GRMN 106H	Introduction to German Culture and Civilization
GRMN 351H	German Culture, Beginnings to 1900
GRMN 352H	German Culture, 1900 to the Present
HSTA 101H/103H	American History I/Honors American History I

HSTA 102H/104H	American History II/ Honors American History II
HSTA 370H	Women in America from the Colonial Era through the Civil War
HSTA 371H	Women in America from the Civil War to the Present
HSTR 101H/103H	Western Civilization I /Honors Western Civilization I
HSTR 102H/104H	Western Civilization II /Honors Western Civilization II
HSTR 230H	Colonial Latin America
HSTR 231H	Modern Latin America
HSTR 241H	Central Asian Cult & Civ
HSTR 262H	Islamic Civilization: Classical Age
HSTR 264H	Islamic Civilization: Modern Era
HSTR 301H	Ancient Greek Social History
HSTR 302H	Ancient Greece
HSTR 304H	Ancient Rome
JRNL 100H	Media History and Literacy
JPNS 150H	Japanese Culture and Civil
LSH 102H	Introduction to South & Southeast Asia
LSH 161H	Introduction to Asian Humanities
MCLG 100H	Introduction to Latin American Studies
MCLG 105H/RUSS 105H	Introduction to Russian Culture
MCLG 211H	Chinese Culture and Civilization
MCLG 231H	Germanic Mythology and Culture
MCLG 360H/ARTH 402H	Ancient Greek Civilization and Culture
MUSI 207H	World Music
MUSI 301H	Music History I
MUSI 302H	Music History II

NASX 105H	Introduction to Native American Studies
NASX 405H	Gender Issues in Native American Studies
PHL 241N	History and Philosophy of Science
RLST 204H	Introduction to the Hebrew Bible
RLST 232H	Buddhism
RUSS 105H	Introduction to Russian Culture
THTR 330H	Theatre History I
THTR 335H/ARTH 333H	Architectural History

Group VII: Social Sciences (S)

Social science courses describe and analyze human social organization and interaction, employing social data at a broad scale with statistical relevance, experimental data on individuals or groups, or qualitative data based on observation and discourse.

Upon completion of a Social Sciences course, students will be able to:

1. Describe the nature, structure, and historical development of human behavior, organizations, social phenomena, and/or relationships;
2. use theory in explaining these individual, group, or social phenomena; and/or
3. understand, assess, and evaluate how conclusions and generalizations are justified based on data

Course #	Title
ANTY 122S	Race and Minorities
ANTY 220S	Culture & Society
ANTY 250S	Introduction to Archaeology
BFIN 205S	Personal Finance
BGEN 105S	Introduction to Business
BGEN 160S/CCS 160S	Issues in Sustainability
BMGT 101S	Introduction to Entertainment Management
COMX 115S	Interpersonal Communication
COMX 191S	GLI: Can Giving Change the World (one time only designation for autumn 2014)

COMX 191S	GLI: Social Interaction, Relationship, and Human well-Being (one time only designation for autumn 2014)
COMX 202S	Nonverbal Communication
COMX 219S	Survey of Children's Communication
COMX 220S	Organizational Communication
ECNS 101S	Economic Way of Thinking
ECNS 201S	Principles of Microeconomics
ECNS 202S	Principles of Macroeconomics
ENST 489S	Environmental Justice Issues and Solutions
GPHY 121S	Human Geography
GPHY 141S	Geography of World Regions
GPHY 323S	Economic Geography of Rural Areas
KIN 191S	GLI: Exercise is Medicine (one time only designation for autumn 2014)
LING 270S	Introduction to Linguistics
NRSM 121S	Nature of Montana
NRSM 370S	Wildland Conservation Policy and Governance
PSCI 210S	Introduction to American Government
PSCI 220S	Introduction to Comparative Government
PSYX 100S	Introductory Psychology
PSYX 161S	Fundamentals of Organizational Psychology
PTRM 217S	Wildland Recreation Management
SOCI 101S	Introduction to Sociology
SOCI 130S	Sociology of Alternative Religions
SOCI 191S	GLI:Who Am I? Identity and Our Diverse Social World (one time only designation for autumn 2014)
SOCI 211S	Introduction to Criminology

SOCI 212S	Social Issues in Southeast Asia
SOCI 220S	Race, Gender, and Class
SOCI 275S	Gender and Society
WGSS 263S	Introduction to Women's & Gender Studies

Group VIII: Ethics and Human Values (E)

Ethics and Human Values courses familiarize students with one or more traditions of ethical thought. These courses rigorously present the basic concepts and forms of reasoning that define and distinguish each tradition. The focus of these courses may be on one or more of these traditions, or on a concept such as justice or the good life as conceptualized within one or more of these traditions, or on a professional practice within a particular tradition.

Upon completion of an Ethics and Human Values course, students will be able to:

1. correctly apply the basic concepts and forms of reasoning from the tradition or professional practice they studied to ethical issues that arise within those traditions or practices;
2. analyze and critically evaluate the basic concepts and forms of reasoning from the tradition or professional practice they studied.

Course #	Title
AHMS 270E	Medical Law and Ethics
ANTY 326E	Indigenous Peoples and Global Development
ANTY 403E	Ethics and Anthropology
BGEN 320E	Business Ethics and Social Responsibility
CHMY 302E	Chemical Literature and Scientific Writing
CLAS 365E	Roots of Western Ethics
CSCI 215E	Ethics and Information
CSCI 216E	Robots, Genetic Engineering, and Ethics
CSCI 315E	Computer, Ethics, and Society
EDU 407E	Ethics and Policy Issues
GEO 304E	Science and Society
HONR 122E	Ways of Knowing II
HONR 320E	Research Portfolio Seminar

HSTR 272E	Terrorism: Violence in the Modern World
HSTR 374E	War, Peace, and Society
HTH 475E	Legal & Ethical Issues in the Health & Exercise Professions
LSH 389E	Placebos: The Power of Words
NASX 303E	Ecological Perspectives of Native American Traditions
NASX 304E	Native American Beliefs and Philosophy
NRSM 449E	Climate Change Policy and Ethics
NRSM 489E	Ethics, Forestry and Conservation
PHAR 514E	CASE Studies in Pharmacy Ethics
PHL 110E	Introduction to Ethics
PHL 112E	Introduction to Ethics and the Environment
PHL 114E	Introduction to Political Ethics
PHL 210E	Moral Philosophy
PHL 321E	Philosophy and Biomedical Ethics
PSCI 250E	Introduction to Political Theory
RLST 281E	Comparative Ethics
SW 410E	Social Work Ethics
WRIT 240E	Arguments and Contemporary Issues

Group IX: American and European Perspectives (Y)

These courses present a critical introduction to the antecedents, principles, institutions, cultures, traditions and legacies of the United States and Europe.

Upon completion of an American and European Perspective course, students will be able to:

1. Demonstrate informed and reasoned understanding of American and/or European historical and contemporary behavior, ideas, institutions, and culture; and
2. Analyze and evaluate what is distinctive and significant about the American and/or European experience and legacy.

Course #	Title
ANTY 122S	Race and Minorities

ARTH 201H	Art of World Civilizations II: Renaissance to Modern
ARTH 435	American Art
GRMN 351H	German Culture to 1900
GRMN 352H	German Culture, 1900 to Present
GRMN 362Y	Germanic Mythology and Culture
HONR 122E	Ways of Knowing II
HSTA 101H/103H	American History I/ Honors American History I
HSTA 102H/104H	American History II/ Honors American History II
HSTR 101H/103H	Western Civilization I /Honors Western Civilization I
HSTR 102H/104H	Western Civilization II / Honors Western Civilization II
HSTR 240H	East Asian Civilizations
HSTR 377H	European International Relations
HSTR 380H	Foreign Relations of the Great Powers
JRNL 100H	Media History and Literacy
JRNL 102Y	News Literacy
LIT 222L	British Literature: Victorian to Contemporary
MCLG 105Y, RUSS 105Y	Introduction to Russian Culture
MUSI 301H	Music History I
MUSI 302H	Music History II
PHL 261Y	History of Ancient Philosophy
PHL 262Y	History of Modern Philosophy
PSCI 210S	Introduction to American Government
RUSS 105H	Introduction to Russian Culture
THTR 331Y	Theatre History II

Group X: Indigenous and Global Perspectives (X)

This perspective instills knowledge of diverse cultures in comparative and thematic frameworks. Students are encouraged to cultivate ways of thinking that foster an understanding of the complexities of indigenous cultures and global issues, past and present. Students will learn how geographically and culturally separate parts of the world are linked by various, multiple interactions.

Indigenous studies focus upon "first peoples" and their descendants who derive their cultural communal identities from their long-standing and/or historical habitation of particular places. These courses foster an appreciation for indigenous peoples, their histories and cultures, and their struggles both to maintain their ways of life and gain equal positions in world spheres of power and change.

Global studies investigate how societies and nations interact through human endeavor and /or natural processes. These courses encourage students to relate their knowledge of particular parts of the world, with their individual identities, and to larger trends and issues that affect multiple societies and environments. These include regional, national, and even transnational cultural flows, as well as a multiplicity of environmental processes and economic relationships.

Upon completion of an Indigenous and Global Perspective course, students will be able to:

1. place human behavior and cultural ideas into a wider (global/indigenous) framework, and enhance their understanding of the complex interdependence of nations and societies and their physical environments;
2. demonstrate an awareness of the diverse ways humans structure their social, political, and cultural lives; and
3. analyze and compare the rights and responsibilities of citizenship in the 21st century including those of their own societies and cultures.

Course #	Title
AAS 141H/HSTA 141H	Black: Africa to Hip-Hop and Beyond, An introduction
ANTY 101H	Anthropology and the Human Experience
ANTY 103H	Introduction to Latin American Studies
ANTY 133X	Food and Culture
ANTY 141H	The Silk Road
ANTY 220S	Culture & Society
ANTY 241H	Central Asian Cultures and Civilizations: Peoples and Environments
ANTY 251H	Foundation of Civilization
ANTY 254H	Archaeological Wonders of the World
ANTY 306X	Contemporary Issues of American Indians
ANTY 323X	Native Peoples of Montana
ANTY 326E	Indigenous Peoples and Global Development

ANTY 330X	People and Cultures of the World
ANTY 351H	Archaeology of North America
ANTY 352X	Archaeology of Montana
ANTY 354H	Mesoamerican Prehistory
ANTY 465X	Archaeology of the Southwestern United States
ARTH 200H	Art of World Civilization: Ancient to Medieval Art
CAS 140X	Diversity and Addictions
CCS 103X	Introduction to Climate Change: Science and Society
COMX 204X	International and Development Communication
COMX 212X	Introduction to Intercultural Communication
DANC 360L	World Dance
ECNS 317X	Economic Development
GPHY 243X	Africa
GPHY 245X	The Middle East
HSTR 230H	Colonial Latin America
HSTR 231H	Modern Latin America
HSTR 241H	Central Asian Cult & Civ
HSTR 291X	History of Modern Africa - (one time only designation for autumn 2014)
HSTR 384E	History of International Human Rights
JPNS 150H	Japanese Culture and Civilization
LING 375X	Endangered Languages
LSH 102H	Introduction to South & Southeast Asia
RLST 232H	Buddhism
RLST 234X	Hinduism
RLST 236X	Chinese Religions

RLST 238X	Japanese Religion
MCLG 100H	Introduction to Latin American Studies
MUSI 207H	World Music
NASX 105H	Introduction to Native American Studies
NASX 260X	Indig Community Developmnt
NASX 201X	Indian Culture as Expressed through Language
NASX 210X	Native American Sports and Games
NASX 231X	Indigenous World View Perspectives
NASX 235X	Oral and Written Traditions of Native America
NASX 260	Indians of North America
NASX 303E	Ecological Perspectives of Native Americans
NASX 304E	American Indian Religion and Philosophy
NASX 354X	Indians of Montana
NASX 405	Gender Issues in Native American Studies
NASX 464X	History of American Indian Affairs to 1776
NASX 465X	History of American Indian Affairs in the 19th Century
NASX 466X	History of Indian Affairs from 1890
NASX 475X	Tribal Sovereignty
PSCI 230X	Introduction to International Relations
PTRM 345X	Sustaining Human Society and the Natural Environment
SSEA 102H	Introduction to South & Southeast Asia
SSEA 202X	Introduction to India

Group XI: Natural Science

These courses present scientific conclusions about the structure and function of the natural world, and demonstrate or exemplify scientific questioning and validation of findings.

Upon completion of a Natural Science course, a student will be able to:

1. understand the general principles associated with the discipline(s) studied;
2. understand the methodology and activities scientists use to gather, validate and interpret data related to natural processes;
3. detect patterns, draw conclusions, develop conjectures and hypotheses, and test them by appropriate means and experiments;
4. understand how scientific laws and theories are verified by quantitative measurement, scientific observation, and logical/critical reasoning;
5. and understand the means by which analytic uncertainty is quantified and expressed in the natural sciences

Natural Science courses without a laboratory experience

Course #	Title
ANTY 210N	Introduction to Physical Anthropology
ANTY 211N	Human Genetics
ASTR 131N	Elementary Astronomy I
ASTR 132N	Elementary Astronomy II
BIOB 130N	Evolution and Society
BIOB 170N	Principles of Biological Diversity
BIOE 172N	Introductory Ecology
BIOH 191N	GLI: Human Genetics and Personalized Medicine (one time only designation for autumn 2014)
BIOM 135N	Biology of Yellowstone Hot Springs
BIOM 250N	Microbiology for Health Sciences
BIOO 101N	Survey of Montana Wildlife & Habitats
CHMY 121N	Intro to General Chemistry
CJUS 125N	Fund of Forensic Science
CSD 221N	Fundamentals of Acoustics: Applications in Speech, Hearing & Language
ENSC 105N	Environmental Science
ERTH 303N/CCS 303N	Weather and Climate
GEO 101N	Intro to Physical Geology
GEO 105N	Oceanography

GEO 108N/CCS 108N	Climate Change, Past and Future
GPHY 111N	Introduction to Physical Geography
GPHY 311N	Biogeography
NRSM 246N	Natural History, Ecology & Environmental Management South Queensland
NRSM 271N	Conservation Ecology
NUTR 221N	Basic Human Nutrition
PHAR 110N	Use and abuse of Drugs
PHAR 145N	Introduction to Cancer Biology
PHIL 241N	History and Philosophy of Science
PHSX 141N	Relativity: From Galileo to Einstein and Beyond
PHSX 205N	Fundamentals of Physics I
PHSX 207N	Fundamentals of Physics II
PHSX 215N	Fundamentals of Physics with Calculus I
PHSX 217N	Fundamentals of Physics with Calculus II
PSYX 250N	Fundamentals of Biological Psychology
SCN 100N	Issues in Biology
SCN 175N	Integrated Physical Science
WILD 105N	Wildlife and People

Natural Science courses with a laboratory experience:

Course #	Title
ANTY 213N	Introduction to Physical Anthropology Lab
ASTR 134N	Elementary Astronomy Laboratory I
ASTR 135N	Elementary Astronomy Laboratory II
ASTR 142N	The Evolving Universe: Theories and Observation

BIOB 101N	Discover Biology
BIOB 160N	Principles of Living Systems
BIOB 171N	Principles of Biological Diversity Lab
BIOB 226N	Gen Science: Earth & Life Science
BIOH 201N	Human Anatomy Phys I
BIOH 202N	Human Anatomy Phys I Lab
BIOH 211N	Human Anatomy Phys II
BIOH 212N	Human Anatomy Phys II Lab
BIOO 105N	Introduction to Botany
CHMY 101N	Chemistry for the Consumer
CHMY 141N	College Chemistry I
CHMY 143N	College Chemistry II
FORS 241N	Dendrology
GEO 102N	Intro to Physical Geology Lab
GEO 106N	The History of Life
GPHY 112N	Intro to Phys Geography Lab
NRSM 210N	Soils, Water and Climate
PHSX 206N	Physics Laboratory I
PHSX 208N	Physics Laboratory II
PHSX 216N	Physics Laboratory I with Calculus
PHSX 218N	Physics Laboratory II with Calculus
PHSX 225N	General Science: Physical and Chemical Science
SCN 105N	Montana Ecosystems
SCN 260N	The Biology of Behavior

Courses that satisfy more than one Group are listed below:

Course # and Title	General Education Groups
AAS 141H/HSTA 141H Black: Africa to Hip-Hop and Beyond, An introduction	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
AASC 167H Nature and Society	I. English Writing Skills and VI. Historical and Cultural Studies (H)
ANTY 101H Anthropology and the Human Experience	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 122S Race and Minorities	VII. Social Sciences (S) and IX. American and European Perspectives (Y)
ANTY 141H The Silk Road	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 220S Culture and Society	VII. Social Sciences (S) and X. Indigenous and Global Perspectives (X)
ANTY 241H Central Asian Cultures and Civilizations: Peoples and Environments	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 251H Foundation of Civilization	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 254H Archaeological Wonders of the World	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 326E Indigenous Peoples and Global Development	VIII. Ethics and Human Values (E) and X. Indigenous and Global Perspectives (X)
ANTY 351H Archaeology of North America	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 354H Mesoamerican Prehistory	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ANTY 403E Ethics and Anthology	I. English Writing Skills and VIII. Ethics and Human Values (E)
ARTH 200H Art of World Civilization: Ancient to Medieval Art	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
ARTH 201H Art of World Civilizations II: Renaissance to Modern	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)

ARTH 250L Introduction to Art Criticism	I. English Writing Skills and V. Literary and Artistic Studies (L)
ARTH 434H Latin American Art	I. English Writing Skills and VI. Historical and Cultural Studies (H)
CHMY 302E Chemical Literature and Scientific Writing	I. English Writing Skills and VIII. Ethics and Human Values (E)
CLAS 251L The Epic	I. English Writing Skills and V. Literary and Artistic Studies (L)
CLAS 252L Greek Drama:Politics on Stage	I. English Writing Skills and V. Literary and Artistic Studies (L)
CSCI 215E Ethics and Information Technology	I. English Writing Skills and VIII. Ethics and Human Values (E)
CSCI 216E Robots, Genetic Engineering, and Ethics	I. English Writing Skills and VIII. Ethics and Human Values (E)
DANC 360L World Dance	V. Literary and Artistic Studies (L) and X. Indigenous and Global Perspectives (X)
ENST 231H Nature and Society - Missoula College	I. English Writing Skills and VI. Historical and Cultural Studies (H)
GRMN 351H German Culture to 1900	I. English Writing Skills and VI. Historical and Cultural Studies (H)
GRMN 352H German Culture from 1900 to the Present	I. English Writing Skills and VI. Historical and Cultural Studies (H)
HONR 122E Ways of Knowing II	VIII. Ethics and Human Values (E) and IX. American and European Perspectives (Y)
HSTA 102H/104H American History II	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
HSTR 101H/103H Western Civilization I	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
HSTR 102H/104H Western Civilization II	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
HSTR 230H Colonial Latin America	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)

HSTR 231H Modern Latin America	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
HSTR 240H East Asian Civilizations	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
HSTR 241H Central Asian Cult & Civ	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives
HSTR 377H European International Relations: Origins of the State System to 1870	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
HSTR 380H Foreign Relations of the Great Powers	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
HSTR 384E History of International Human Rights	VIII. Ethics and Human Values (E) and IX. American and European Perspectives (Y)
JRNL 100H Media History and Literacy	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
JPNS 150H Japanese Culture and Civilization	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
LIT 110L Introduction to Literature	I. English Writing Skills and V. Literary and Artistic Studies (L)
LIT 120L Poetry	I. English Writing Skills and V. Literary and Artistic Studies (L)
LIT 210L American Literature I	I. English Writing Skills and V. Literary and Artistic Studies (L)
LIT 211L American Literature II	I. English Writing Skills and V. Literary and Artistic Studies (L)
LIT 220L British Literature: Medieval through Early Modern	I. English Writing Skills and V. Literary and Artistic Studies (L)
LIT 221L Enlightenment to Romantics	I. English Writing Skills and V. Literary and Artistic Studies (L)
LIT 222L British Literature: Victorian to Contemporary	V. Literary and Artistic Studies (L) and IX. American and European Perspectives (Y)
LIT 342L Montana Writers	I. English Writing Skills and V. Literary and Artistic Studies

	(L)
LSH 151I/152L Introduction to the Humanities	I. English Writing Skills and V. Literary and Artistic Studies (L)
M 162 Applied Calculus	II. Mathematics and III. Modern and Classical Languages or Symbolic Systems
M 171 Calculus I	II. Mathematics and III. Modern and Classical Languages or Symbolic Systems
MCLG 100H/ANTY 103H Introduction to Latin American Studies	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
MUSI 207H World Music	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
MUSI 301H Music History I	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
MUSI 302H Music History II	I. English Writing Skills and VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)
NASX 105H Introduction to Native American Studies	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
NASX 235X Oral and Written Traditions of Native America	I. English Writing Skills and V. Literary and Artistic Studies (L) and X. Indigenous and Global Perspectives (X)
NASX 303E Ecological Perspectives of Native Americans	VIII. Ethics and Human Values (E) and X. Indigenous and Global Perspectives (X)
NASX 304E American Indian Religion and Philosophy	VIII. Ethics and Human Values (E) and X. Indigenous and Global Perspectives (X)
PHL 210E Moral Philosophy	I. English Writing Skills and VIII. Ethics and Human Values (E)
PHL 241N History and Philosophy of Science	XI Natural Science without a lab (NS) and VI. Historical and Cultural Studies (H)
PSCI 210S Introduction to American Government	VII. Social Sciences (S) and IX. American and European Perspectives (Y)
RUSS 105H Introduction to Russian Culture	VI. Historical and Cultural Studies (H) and IX. American and European Perspectives (Y)

SSEA 102H Introduction to South and Southeast Asia	VI. Historical and Cultural Studies (H) and X. Indigenous and Global Perspectives (X)
STAT 216 Intro to Statistics	II. Mathematics and III. Modern and Classical Languages or Symbolic Systems
STAT 451 Statistical Methods I	II. Mathematics and III. Modern and Classical Languages or Symbolic Systems
THTR 330H Theatre History I	I. English Writing Skills and VI. Historical and Cultural Studies (H)
THTR 331Y Theatre History II	I. English Writing Skills and IX. American and European Perspectives (Y)
WRIT 240E Rhetoric and Ethics: Writing Arguments about Contemporary Issues	I. English Writing Skills and VIII. Ethics and Human Values (E)

General Education for Transfer Students

Students transferring credits from other institutions must meet all requirements by transfer, by examination, or by completing courses at the University of Montana-Missoula.

According to Board of Regents policy, students who can demonstrate that they have completed an approved lower-division general education requirement at an approved Montana institution of higher education will be deemed to have completed general education requirements except for the upper-division writing proficiency assessment and the upper-division writing requirements in their majors.

Transfer students who believe they have completed an approved lower-division general education requirement at another Montana school should request that the registrar of the other school send a letter to the University Registrar's Office certifying that the requirement has been met.

If students transfer 20 or more approved Montana University System core course credits with their initial registration at UM-Missoula, they may choose to complete the MUS General Education rather than the UM-Missoula General Education requirement

Students governed by the 2006-2007 catalog or later catalogs must earn a traditional letter grade of C- or better in courses used to satisfy General Education (except English composition and the Mathematical Literacy course must be a C or better). Students enrolled in a post-secondary institution prior to autumn 2006 may be eligible to choose an earlier governing catalog. Refer to the Governing Catalog information in the previous section. See index.

Students who have completed a bachelor degree at the University or elsewhere will be presumed to have completed the General Education Requirement.

Admissions & New Student Services will evaluate all transfer credits for General Education credit. Students who wish to appeal that evaluation may petition the Graduation Appeals Subcommittee of the Academic Standards and Curriculum Review Committee, but such petitions must be initiated during the first semester of the student's attendance following that evaluation.

Major and Minor Requirements

Major Requirements

Declaring a Major and Changing a Major

Students indicate on the application for admission the major or majors in which they are interested. Students undecided as to a field of interest may elect to be Undeclared while making program and career decisions. Students must declare a major in a degree granting program prior to completion of 45 credits or after three semesters, whichever occurs first.

Students must complete a major in order to earn a degree or certificate.

Students may change their majors or minors by obtaining the proper approval on a change of major or minor form available from the Registration Counter in Griz Central in the Lommasson Center. Because of enrollment limitations, students must request a change to a program in the Missoula College by completing an application for admission and submitting it to the College. Students whose initial admission was to the Missoula College may change to a major outside the College by submitting an application for admission to Enrollment Services-Admissions & New Student Services in the Lommasson Center.

Credits Required for a Major

Students in a bachelor degree program must complete a minimum of 30 credits in their major. Most majors require more.

Students may elect to earn a single degree with more than one major. Students may complete a double major (two majors) or any number of majors. All requirements for the majors must be completed even though students will receive a single degree such as a Bachelor of Arts with majors in Psychology and Sociology. It is only necessary to complete the total credit requirement for a single bachelor degree.

Courses completed to satisfy the requirements of a major also may be applied toward the General Education Requirement if they appear on the list of approved courses at the time they are taken.

Students in programs in the Missoula College complete requirements as listed in the College section of this catalog. See index.

Credit Limitations in a Major

A maximum of 60 credits in the student's major may be counted toward the baccalaureate degree, except some options in Health and Human Performance and Education, majors in Computer Science, and majors in the Schools of Business Administration, College of Visual and Performing Arts, Journalism, Law, The College of Health Professions and Biomedical Sciences and the College of Forestry and Conservation are allowed more. Students with combined majors, as opposed to two majors, are allowed to apply 75 credits in the major.

Grade Requirement

Courses taken to satisfy the requirements of the major must be completed with a grade of C- or better.

A minimum grade average of 2.00 in all work attempted in the major at the University of Montana-Missoula is required for graduation.

Options

Groups of courses have been identified which lead to a specialization within one major or between two or more majors. These specializations are called options. The names of approved options will be recorded on the permanent records of those students who have satisfactorily completed the requirements as given in the catalog governing their graduation. A student desiring a particular option must satisfy the requirements of the major offering it. If one option is offered within two or more majors, the student must satisfy the requirements of only one.

Only courses listed within the supporting major count toward the 60 credit limitation in the major. Courses in other fields do not count toward the maximum of 60 credits in the major even though they may be required or elected for the options.

If one major has two or more options, a student may satisfy the requirements for more than one option so long as the maximum credit limitations are observed.

Minor Requirements

Baccalaureate students may elect to complete one or more minors in fields outside their majors. Minors may be in fields unrelated to students' majors or they may be complementary or supportive of majors. A student may not take a minor in the same field of study as his or her major.

A student will not be required to satisfy the requirements of a minor in order to graduate unless that minor is required by the student's major department or school.

Courses completed to satisfy the requirements of a minor also may be applied toward the General Education Requirement if they appear on the list of approved courses at the time they are taken.

Credits Required for a Minor

To complete a minor, students must earn at least 18 credits in an approved minor listed in this catalog and complete a baccalaureate degree.

Students possessing a baccalaureate degree from an accredited college or university may earn a minor if they have been accepted by the University as an undergraduate degree student. In addition to meeting minor requirements, students must earn from the University of Montana-Missoula a minimum of 9 credits in the minor field and 15 credits overall.

Grade Requirement

Courses taken to satisfy the requirements of the major and the minor must be completed with a grade of C- or better. Some majors require a C or higher grade for some of the required courses. Specific information regarding the major requirements can be found in the majors individual section of the catalog.

A minimum grade average of 2.00 in all work attempted in the minor at the University of Montana-Missoula is required for graduation with the minor.

Teaching Minors

Teaching minors are separate entities from degree minors as described in this section. Teaching minors are identified and requirements listed in the College of Education section of this catalog.

Degree/Certificate Requirements for Graduation

»Catalog Governing Graduation

(Revised October 2013) Students may graduate fulfilling University and departmental major requirements in any single University of Montana-Missoula catalog under which the student has been enrolled during the six years prior to graduation. (For example, the 2013-2014 catalog can be used through summer 2020). The student **MUST** meet major requirements under the same catalog under which the student is meeting University requirements (general education requirements); minor requirements may be satisfied under a different catalog within the six year period. University or departmental requirements may change to comply with accreditation requirements, professional certification and licensing requirements, etc.

Students transferring to the University of Montana-Missoula may choose to graduate fulfilling requirements under the UM catalog in effect when they were enrolled at their original institution, provided the chosen catalog is not more than six years old at the time of graduation. Eligible students who choose an earlier catalog must notify the Admissions Office at the time of admission so their transfer work can be evaluated accordingly

»Applying for Certificate and Degree Candidacy

To become a candidate for a degree, the student must file formal application at the Registration Counter in Griz Central the beginning of the semester preceding the semester in which he or she expects to graduate. Deadline dates are specified in the Class Schedule. In the Missoula College, candidates for certificates and degrees must file a formal application with the Registrar's Office in the College at the beginning of the semester in which they expect to graduate

»Credits Required for a Certificate of Completion

See the specific course and credit requirements for certificate programs listed in the Missoula College and Linguistics sections of this catalog. See index. In addition, students in the Missoula College must complete successfully:

1. Mathematics one course from M 105T (MAT 100T) or above.
2. Communications and Human Relations PSYX 163T (PSY 105T) or PSYX 161S (PSY 110T) and one COM course as required by the specific program. Some programs have these skills imbedded within other courses which will satisfy this requirement.

»Credits Required for a Degree

»*Associate of Applied Science*

To receive an Associate of Applied Science (A.A.S.) Degree from the Missoula College, a student must fulfill the following criteria:

1. Complete a minimum of 60 credits.
2. Possess a minimum grade average of 2.00 in all work attempted at the University of Montana-Missoula and a minimum grade of C- in all classes that count toward major, minor or general education requirements.
3. Complete the specialized degree requirements of his or her specific program.
4. Complete the following related subject area of core collegiate-level courses:
 1. **Communication:** the ability to formulate and adapt messages to a variety of audiences through written, verbal, and nonverbal processes. To ensure all graduates have developed skills in the area of communication, students must successfully demonstrate competency in one of the following writing courses: WTS 101, WTS 115, or other approved writing course. Furthermore it is recommended that all students complete one of the following communication courses, such as COM 150S, COM 160A, or other approved courses to further develop understanding of human communication processes
 2. **Computation:** the ability to complete basic algebraic manipulations and achieve mathematical literacy. To ensure all graduates have achieved computational literacy, students must demonstrate competency in MAT 100 or a higher number mathematics course.
 3. **Human Relations:** the ability to analyze social problems and structure, ethical norms of professions and society, human behavior, or human values systems. To ensure all graduates have explored dimensions in human relations, students must demonstrate competency in on of the following courses: COM 150S, COM 210E, CRT 122E, PSY 100S, PSY 110S, SUR 204E, or other approved ethical and human values or social sciences course.
 4. **Computer Literacy:** the ability to utilize a modern computing system including web applications and an office productivity suite to research, develop and produce information in a 21st century society. To ensure all graduates have achieved basic technology literacy, students must demonstrate competency in one of the following: CRT 100, CRT 103T, or other approved applied computing course
 5. **Professional Capstone:** the opportunity to apply skills acquired through a specialized field of study in a professional realm. To ensure all graduates the opportunity to apply specialized skills in a professional environment, it is recommended student complete a program-related internship, field experience, capstone project, or professional certification activity.

»*Associate of Arts*

A total of 60 credits is required for graduation with an Associate of Arts (A.A.) degree. The minimum grade average for graduation is 2.00 in courses taken on the traditional letter grade (A F) basis. To receive an Associate of Arts degree all students must complete successfully all the general education requirements for a baccalaureate degree.

»*Bachelor Degrees*

A total of 120 credits is required for graduation with a bachelor degree; except a greater number is required in teacher education programs, pharmacy, physical therapy and the Bachelor of Applied Science. See the College of Health Professions and Biomedical Sciences section of this catalog.

Students may elect to earn two or more bachelor degrees. Those deciding to earn two or more degrees must complete all the requirements of the majors for each degree. In addition, students must earn for each degree a minimum of 30 credits beyond the number required for the first degree. The degrees may be earned concurrently or at different times.

»*Upper-Division Requirement*

All students must complete a minimum of 39 credits in courses numbered 300 and above to meet graduation requirements for the first baccalaureate degree. Upper division credits transferred from other four year institutions will count toward the 39 credit requirement.

»*Residency Requirements for Degrees/Certificates*

University of Montana credit is the credit earned in any course which has been approved to be listed in the University of Montana-Missoula catalog and which has been approved for offering by the department chair and dean of the school or college in which the course is taught. University of Montana-Missoula credit may be offered at any location.

Requirements for Missoula College Certificate of Completion and Associate of Applied Science Degree

A minimum of 51% of the required number of credits must be earned from the University of Montana-Missoula

Requirements for the Associate of Arts Degree

A minimum of 30 credits of the required number must be earned from the University of Montana-Missoula.

Requirements for the First Bachelor Degree

A first bachelor degree is defined as any bachelor degree earned by a student who has not previously earned a bachelor degree from the University of Montana-Missoula. Thus, the requirements below also apply to any student who previously earned a bachelor degree at another institution and now is seeking a bachelor degree from the University of Montana-Missoula.

- a) A minimum of 30 credits of the required number must be earned from the University of Montana-Missoula. b) A minimum of 30 credits of the required number must be earned in study on the University of Montana-Missoula campus.
- c) Of the last 45 credits required for the degree, at least 30 of these must be earned from the University of Montana- Missoula. Students attending elsewhere on a University approved exchange may be exempt from this requirement with the prior written approval of their major department chair or dean.

Requirements for the Second Bachelor Degree

In regard to residency requirements, a second bachelor degree is defined as any bachelor degree earned by a student who previously had earned a bachelor degree from the University of Montana-Missoula.

A minimum of 20 credits of the required 30 credits must be earned in study on the University of Montana-Missoula campus.

»*Credit Maximums*

The amount of credit which may be counted toward the minimum credit requirements for the bachelor (B.A./B.S.), associate of science (A.S.), and associate of arts (A.A.) degrees is limited in certain areas follows:

Category	For Bachelor Degree	For AA or AS Degree
Technical courses (course number suffix of 'T') - up to 15 technical course credits can be applied toward the minimum credit requirement for all students, except up to 20 technical course credits can be applied to the minimum course credits for students with an earned A.A.S. degree.	15-20	15-20
Career skills	0	0

Study skills courses (e.g. AASC 101, C&I 160)	2	2
Physical education activity/skills courses (e.g. DANC 325 (DRAM 385), ACT 101-207 (HHP 100-179), MSL 204 and 315 (MS 203 and 315))	4	4
Military Science Leadership Courses (contracted students may present 24 credits)	12	12
Music performance (MUSI 102A, 135A, 136A (MUS 100A, 115A, 116A) MUSI 123 (MUS 117A), 235 (MUS 215), 236 (MUS 216), 218 (MUS 218))	6	6
Ensemble music (MUSI 112A, 114A, 110A, 131A and 122A (MUS 107A, 110A, 113A, 114A and 150A))	8	8
Credit/No Credit credits	18	18
Internship credits in 198/298/398/498 (or previous numbers 190/290/390/490)	6	6

Credits attempted in these areas which are beyond the maximum applicable will remain on the students' permanent record but cannot be used toward graduation.

»*Grade Average Requirement*

A minimum grade average of 2.00 in all work attempted at the University of Montana-Missoula is required for graduation.

»*Graduation with Honors or High Honors*

Students will be awarded their certificates, associate of applied science, and bachelor degrees with honors if they receive the recommendation of their major department or school and the faculty of the University of Montana-Missoula. At the time of graduation they must have a 3.40 or higher grade average in the following four areas:

1. All work attempted at the University of Montana- Missoula.
2. The combination of all work attempted at the University of Montana-Missoula and all other work, including failing grades, transferred to this University.
3. All work attempted in the major field at the University of Montana-Missoula.
4. The combination of all work attempted in the major field at the University of Montana-Missoula and all other work in the major field, including failing grades, transferred to this University.

Students will be awarded their certificates, associate of applied science, and bachelor degrees with high honors if they have the recommendations mentioned above and, at the time of graduation, have a 3.70 or higher grade average in the four areas listed.

In the School of Law, the grade average for honors is computed on law credits only.

General Admission Information

Advanced Placement (AP) Program/College Level Examination Program (CLEP)

College credit may be granted based on achievement in college level high school courses, provided the University has received satisfactory scores from the College Level Entrance Examination Program (CLEP) or the Advanced Placement Program (AP) examinations.

It should not be assumed that credit granted by other colleges/universities would be allowed by UM. Specific questions regarding the Advanced Placement Program should be directed to Enrollment Services-Admissions.

The University policy for awarding credit on the basis of AP/CLEP is available on the [Admissions Advanced-Credit web page](#).

International Baccalaureate

The University of Montana recognizes IB achievement and grants college credit provided the University has received satisfactory scores from the International Baccalaureate Program. University policy on awarding IB credit is available on the [Admissions Advanced-Credit web page](#).

Foreign Language Placement

Transfer credit is not granted for high school foreign languages. Placement testing is done by the Department of Modern and Classical Languages and Literatures to determine appropriate class placement for entering students.

Immunization Requirements

Montana state law requires postsecondary students to provide proof of immunization. Students must complete the Pre-Registration Immunization Requirements form and return the form to the Curry Health Center prior to orientation and registration.

Registration cannot be completed without this documentation. A Pre-Registration Immunization Requirements form is sent with the admission acceptance letter. For additional information visit the [Curry Health Center website](#).

High School Pilot Program

Area high school juniors and seniors of outstanding ability can enroll in University classes under the High School Pilot Program. Students must have approval from their high school counselor/principal and parent/guardian if under age 18. High school students earn college credit, receive an early introduction to University opportunities and are able to develop skills and knowledge beyond the high school level. For more information, contact the Coordinator of the High School Pilot Program, Enrollment Services-Admissions, Lommasson Center 101, The University of Montana-Missoula, Missoula, MT 59812 or phone (406) 243-6266. For opportunities in the Missoula College, phone (406) 243-7828.

Dual Credit Program

The Dual Credit Program enables high school juniors and seniors of outstanding ability to earn college credit in certain high school courses. Students must have approval from their high school counselor/principal and parent/guardian if under age 18. For information, contact the Missoula College at (406) 243-7828.

International Student Exchange Program (ISEP)

The University of Montana is a member of the International Student Exchange Program (ISEP), which allows University of Montana students to spend a semester, a year, or a summer abroad at one of ISEP's 141 member institutions in 42 foreign countries. ISEP offers reciprocal exchanges (students pay their home tuition, room and board, and create a space for an incoming international student) and ISEP-Direct programs (students pay a program fee covering tuition, room and board through the University of Montana to ISEP). Other expenses for which the student is responsible include: books and supplies, local transportation, round-trip airfare, or personal expenses.

For information on ISEP, please contact International Programs, International Center, The University of Montana-Missoula, Missoula, MT 59812 or phone (406) 243 2288.

National Student Exchange (NSE)

The University of Montana-Missoula participates in the National Student Exchange (NSE) program with 190 other state colleges and universities. This program offers students the opportunity to become better acquainted with different social and educational patterns in other areas of the United States. NSE encourages students to experience new life and learning styles, appreciate differing cultural perspectives, learn more about themselves and others and broaden their educational backgrounds through specialized courses or unique programs which may not be available on the home campus. Qualified students may participate in the exchange program for up to one academic year. For more information, contact the Coordinator of the National Student Exchange Program, Enrollment Services-Admissions, Lommasson Center 101, The University of Montana-Missoula, Missoula, MT 59812 or phone (406) 243-6266. Find more information on the [National Student Exchange website](#).

Special Admission Committee

A special admission committee reviews applications from students who do not meet the regular admission standards.

Enrollment Limitation

The University of Montana-Missoula may deny or condition admission, readmission, or continuing enrollment of any individual who, in the judgment of the University, presents an unreasonable risk to the safety and welfare of the campus and persons thereon. In making such judgment, the University may, among other things, take into account the individual's history and experience relative to (a) violence and destructive tendencies, (b) behavior on other college campuses, and (c) any rehabilitative therapy the individual may have undergone.

The University of Montana-Missoula adopts the following Admission Review Procedures:

The Assistant Vice President for Enrollment, the Dean of the Graduate School or the Chair of the Admissions Committees of the various professional schools at The University of Montana-Missoula shall be responsible for the administration of the Admissions Review procedures established to implement Board of Regents policy. When the responsible admissions officer has reason to believe an applicant may present an unreasonable risk to the safety and welfare of the campus and persons thereon, additional information regarding the applicant's background and experiences shall be requested. No applicant's admission may be barred automatically, solely by reason of a criminal conviction, if state supervision has terminated, or solely by reason of a youth court adjudication. The responsible admissions officer may request additional information in the following instances: (1) When an applicant has been convicted of a felony; (2) When an applicant has been adjudicated as a danger to others or to self; (3) When an applicant has been suspended or expelled for disciplinary reasons from other educational institutions, either before or after the applicant has been accepted at The University of Montana-Missoula; (4) When, on the basis of other facts, the Assistant Vice President for Enrollment or other responsible officer has reason to believe an applicant may present an unreasonable risk to the safety and welfare of the campus and persons thereon.

After obtaining additional information, the responsible admissions officer may admit the applicant or refer the application to the Admissions Review Committee for review and recommendation.

Evaluation of Transfer Credits

Evaluation of transfer credits is determined by Enrollment Services-Admissions at the time of admission. The evaluation is included in the acceptance packet and in the advising materials distributed during orientation. All college-level credits from regionally accredited colleges and universities will be accepted for transfer. Credits from colleges or universities that are candidates for regional accreditation will be accepted only after the student has successfully completed twenty semester credits at UM. Course work from unaccredited schools is not accepted or evaluated unless an individual exception is requested by the student and approved by a committee composed of the Academic Vice President, Assistant Vice President for Enrollment and the Registrar.

Enrollment Services-Admissions determines whether or not courses are college-level, the appropriate grading and credit conversion and the applicability of the transfer courses to UM's general education requirements. Transfer courses graded C- or above will count toward general education and major, minor, option or certificate

requirements. Transfer courses with grades of D or D- transfer as elective credit. The student's major department may further evaluate the applicability of transfer courses to the student's selected program of study. College-level courses which do not have an equivalent at UM will be accepted as elective credits.

Up to 15 credits of vocational-technical course work from regionally accredited schools are accepted as free electives in transfer toward an AA, AS, or baccalaureate program. Up to 20 credits may transfer for students completing an AAS degree. Missoula College technical courses are designated by a course number suffix of "T."

Elective credit may be given for military courses according to the recommendations in the American Council (ACE) Service Guide. Elective credit may also be given for training programs recommended by the ACE Guide.

The University of Montana database of courses transferable from colleges and universities is available on the [Admissions transfer credit web page](#).

Students who wish to appeal a decision regarding acceptance of transfer credit should contact Enrollment Services-Admissions to receive information on the appeal process.

Evaluation of Transfer Credit-Missoula College

Missoula College students must submit official transcripts for evaluation. If a student feels that a course taken at another institution may substitute for a specific Missoula College course, the evaluation will be done by the associate dean and the chair of the department of the equivalent course. Transfer courses graded C- or above will count toward general education requirements. Transfer courses with grades of D or D- transfer as elective credit. The student's major department may require a grade above C- to meet specific major requirements.

Western Interstate Commission for Higher Education

The Western Interstate Commission for Higher Education's Professional Student Exchange Program enables students in thirteen western states to enroll in out of state professional programs when those programs are not available in their home states. Exchange students receive preference in admission. They pay reduced levels of tuition: for most students, resident tuition in public institutions or reduced standard tuition at private schools. The home state pays a support fee to the admitting schools to help cover the cost of students' education.

The following professional programs are not available in Montana but are supported by the Montana WICHE program. They are dentistry, medicine, occupational therapy, optometry, osteopathic medicine, podiatry, public health and veterinary medicine.

The Certifying Officer for the State of Montana can be contacted for specific details about the program. WICHE Student Exchange Program, Montana University System, 2500 Broadway, Helena, MT 59620. (406)444-6570 or Fax: (406) 444-1469.

Western Undergraduate Exchange Program (WUE)

The Western Undergraduate Exchange (WUE) Scholarship program at The University of Montana-Missoula is a highly competitive academic merit based scholarship which strictly monitored. Awards are decided upon a comprehensive review of a student's cumulative G.P.A. and test scores. When undergraduate students apply and are admitted from a WUE state they are automatically considered for the WUE, if not eligible for the WUE they are reviewed for other awards. The WUE states are limited to students who are legal residents of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming. Please note: Only first time incoming freshman and new transfer students are eligible for the WUE scholarship. *Currently enrolled students not originally awarded WUE, post-baccalaureate students and returning students are not eligible for WUE.*

The amount of the WUE scholarship will always represent the 150% of the cost of Montana resident tuition and fees. The WUE scholarship will automatically be renewed each semester providing students follow all conditions of the WUE Scholarship.

The conditions of the WUE Scholarship are:

- The award is in effect for four years or until completion of a bachelor's degree (120 credits) whichever comes first.
- You must maintain a 3.0 grade point average and register for at least 15 credits each consecutive term of enrollment. Please note that completion of 15 credits per semester leads to graduation within four years.
- Tuition and fees at UM between 12 – 21 credits costs the same. The best way to maximize your tuition dollars is by taking advantage of this cost savings during your scholarship eligibility.

- You may not earn Montana residency for fee purposes at any unit of the Montana University System.
- If you change your status to Distance Only or if you transfer your enrollment to the Missoula College your Western Undergraduate Exchange Scholarship will no longer apply.

To be eligible for the WUE scholarship first time incoming freshman and transfer students must apply for admission and be admitted to The University of Montana. Awarding of the WUE will occur on a space available rolling basis with priority given to those who apply before December 31st. Further details are available from the [Enrollment Services-Admissions Office website](#).

Student Conduct Code

The Student Conduct Code, embodying the ideals of academic honesty, integrity, human rights and responsible citizenship, governs all student conduct at The University of Montana-Missoula. Student enrollment presupposes a commitment to the principles and policies embodied in this Code. The Student Conduct Code sets forth University jurisdiction, student rights, standards of academic and general student conduct, disciplinary sanctions for breach of the standards of student conduct and procedures to be followed in adjudicating charges of both academic and general misconduct. The Vice President for Student Affairs is responsible for procedural administration of the Student Conduct Code for all general conduct. The Provost and Vice President for Academic Affairs is responsible for all academic conduct. Copies of the Student Conduct Code can be obtained from the offices of the Vice President for Student Affairs, the Provost and Vice President for Academic Affairs, Residence Life, and Associated Students of The University of Montana-Missoula (ASUM). The Student Conduct Code also can be accessed from the [Vice President for Student Affairs Student Conduct Code web page](#).

Service Members Opportunity College

The University is a member of Service members Opportunity Colleges, a consortium of over 1300 institutions pledged to be reasonable in working with service members and veterans trying to earn degrees.

VETS Office
 1000 E. Beckwith
 Missoula, MT 59801
 Phone: (406) 243-2744
 Fax: (406) 243-5444
vetsoffice@umontana.edu

Colleges, Schools and Programs

Name	Minor	Certificate	Associate	Bachelor
Accounting				Requirements
Accounting Information Systems		Requirements		
Accounting Technology			Requirements	
Administrative Management			Requirements	
Administrative System Mgmt	Requirements			
African-American Studies	Requirements			

<u>Anthropology</u>				<u>Requirements</u>
<u>Applied Science</u>				<u>Requirements</u>
<u>Arabic Studies</u>	<u>Requirements</u>			
<u>Art</u>				<u>Requirements</u>
<u>Art History/Criticism</u>	<u>Requirements</u>			
<u>Art Studio</u>	<u>Requirements</u>			
<u>Astronomy</u>	<u>Requirements</u>			
<u>Biochemistry</u>				<u>Requirements</u>
<u>Biology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Carpentry</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Central & Southwest Asian Stds</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Chemistry</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Chinese</u>	<u>Requirements</u>			
<u>Classical Civilization</u>	<u>Requirements</u>			
<u>Classics</u>				<u>Requirements</u>
<u>Climate Change Studies</u>	<u>Requirements</u>			
<u>Commun Sci & Disorders</u>				<u>Requirements</u>
<u>Communication Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Computer Aided Design</u>		<u>Requirements</u>		
<u>Computer Applications</u>	<u>Requirements</u>			
<u>Computer Sci-Mathematical Sci</u>				<u>Requirements</u>
<u>Computer Science</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Computer Support Specialist</u>		<u>Requirements</u>		
<u>Culinary Arts</u>		<u>Requirements</u>		
<u>Customer Relations</u>		<u>Requirements</u>		

<u>Dance</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Dance Specialization Education</u>	<u>Requirements</u>			
<u>Diesel Technology</u>			<u>Requirements</u>	
<u>Digital Marketing</u>		<u>Requirements</u>		
<u>East Asian Studies</u>				<u>Requirements</u>
<u>Ecological Restoration</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Economics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Education</u>				<u>Requirements</u>
<u>Electronics Technology</u>			<u>Requirements</u>	
<u>Energy Technology</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Engl as a Sec Lang</u>		<u>Requirements</u>		
<u>English</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Entertainment Management</u>		<u>Requirements</u>		
<u>Entrepreneurship</u>		<u>Requirements</u>		
<u>Environmental Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Film Studies</u>	<u>Requirements</u>			
<u>Finance</u>				<u>Requirements</u>
<u>Fire Sciences & Management</u>	<u>Requirements</u>			
<u>Food Service Management</u>			<u>Requirements</u>	
<u>Forensic Studies</u>		<u>Requirements</u>		
<u>Forestry</u>				<u>Requirements</u>
<u>French</u>	<u>Requirements</u>			<u>Requirements</u>
<u>General AA</u>			<u>Requirements</u>	
<u>Geographic Information Systems</u>		<u>Requirements</u>		
<u>Geography</u>	<u>Requirements</u>			<u>Requirements</u>

<u>Geosciences</u>	<u>Requirements</u>			<u>Requirements</u>
<u>German</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Gerontology</u>	<u>Requirements</u>			
<u>Global Public Health</u>	<u>Requirements</u>			
<u>Greek</u>	<u>Requirements</u>			
<u>Health & Human Performance</u>				<u>Requirements</u>
<u>Health Information Technology</u>		<u>Requirements</u>		
<u>Heavy Equipment Operation</u>		<u>Requirements</u>		
<u>Historic Preservation</u>		<u>Requirements</u>		
<u>History</u>	<u>Requirements</u>			<u>Requirements</u>
<u>History-Political Science</u>				<u>Requirements</u>
<u>Human and Family Development</u>	<u>Requirements</u>			
<u>Information Technology</u>			<u>Requirements</u>	
<u>International Business</u>				<u>Requirements</u>
<u>International Development Stds</u>	<u>Requirements</u>			
<u>International Field Geos Dual</u>				<u>Requirements</u>
<u>International Field Geos Joint</u>				<u>Requirements</u>
<u>Irish Studies</u>	<u>Requirements</u>			
<u>Japanese</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Journalism</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Language Rejuvenation & Maint</u>		<u>Requirements</u>		
<u>Latin</u>	<u>Requirements</u>			
<u>Latin American Studies</u>	<u>Requirements</u>			
<u>Liberal Studies</u>	<u>Requirements</u>			<u>Requirements</u>

<u>Linguistics</u>	<u>Requirements</u>			
<u>Management</u>			<u>Requirements</u>	<u>Requirements</u>
<u>Management Information Systems</u>				<u>Requirements</u>
<u>Marketing</u>				<u>Requirements</u>
<u>Mathematical Sci-Computer Sci</u>				<u>Requirements</u>
<u>Mathematics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Media Arts</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Medical Information Technology</u>			<u>Requirements</u>	
<u>Medical Reception</u>		<u>Requirements</u>		
<u>Medical Technology</u>				<u>Requirements</u>
<u>Microbiology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Military Studies</u>	<u>Requirements</u>			
<u>Mountain Studies</u>	<u>Requirements</u>			
<u>Music</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Music Education</u>				<u>Requirements</u>
<u>Native American Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Network & Info Security Prof</u>		<u>Requirements</u>		
<u>Nonprofit Administration</u>	<u>Requirements</u>			
<u>Paralegal Studies</u>			<u>Requirements</u>	
<u>Parks, Tourism &Rec Management</u>				<u>Requirements</u>
<u>Pharmacy Technology</u>		<u>Requirements</u>		
<u>Philosophy</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Physics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Political Science</u>	<u>Requirements</u>			<u>Requirements</u>

<u>Political Science-History</u>				<u>Requirements</u>
<u>Practical Nursing</u>			<u>Requirements</u>	
<u>Psychology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Radio-Television</u>				<u>Requirements</u>
<u>Radiologic Technology</u>			<u>Requirements</u>	
<u>Recreational Power Equipment</u>		<u>Requirements</u>		
<u>Registered Nursing</u>			<u>Requirements</u>	
<u>Resource Conservation</u>				<u>Requirements</u>
<u>Respiratory Care</u>			<u>Requirements</u>	
<u>Russian</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Russian Studies</u>	<u>Requirements</u>			
<u>Sales and Marketing</u>		<u>Requirements</u>		
<u>Secondary Certification</u>				
<u>Social Work</u>				<u>Requirements</u>
<u>Sociology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>South & Southeast Asian Stds</u>	<u>Requirements</u>			
<u>Spanish</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Surgical Technology</u>			<u>Requirements</u>	
<u>Sustainable Business Strategy</u>		<u>Requirements</u>		
<u>Theatre</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Welding Technology</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Wilderness Studies</u>	<u>Requirements</u>			
<u>Wildlife Biology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Women's and Gender Studies</u>	<u>Requirements</u>			

School of Business Administration

Larry D. Gianchetta, Dean

Terri L. Herron, Associate Dean

Homepage: www.business.umt.edu

The School of Business Administration, founded in 1918, is the largest professional school at the University. All programs are accredited by AACSB International–The Association to Advance Collegiate Schools of Business.

Mission

The University of Montana's School of Business Administration enhances lives and benefits society by providing a world-class business education in a supportive, collegial environment. We accomplish this mission by acting on our shared core values of creating significant experiences, building relationships, teaching and researching relevant topics, behaving ethically, and inspiring individuals to thrive.

The goal of the School of Business Administration's programs is to provide a broad foundation in organizational administration and principles of various business disciplines, while providing opportunity to gain expertise within the specific majors and certificate areas. The complexity of contemporary society has increased need for responsible, ethical leadership. A professional business education combined with solid grounding in the liberal arts and sciences prepares men and women to meet difficult challenges and to participate in the molding of the future. School of Business Administration graduates work in business, nonprofit, and government sectors all over the world.

Students may pursue programs of study leading to the B.S. in Business Administration with a major in any of the following areas: accounting, finance, international business, management, management information systems, and marketing.

High School Preparation:

High school students who are planning to major in business administration at the University of Montana-Missoula should take their school's college preparatory curriculum. Additional courses to improve quantitative, writing, verbal communication, and computer skills will be beneficial. Students should take as much mathematics as possible, including two years of algebra.

Credit/No Credit Option:

Most business administration courses are offered traditional letter grade only.

All courses required for the major, certificates, and all general education courses must be taken for a traditional letter grade. Business courses taken as electives may be taken on a credit/no credit basis if not identified as traditional letter grade only and if approved by the instructor and the department chair. For additional information see the General Education section of the catalog.

Graduate Programs

Opportunity for further study at the graduate level is offered through programs leading to the degrees of Master of Business Administration (M.B.A.), Master of Accountancy (M-Acct.), joint J.D./M.B.A., joint M.B.A./D.P.T. and joint M.B.A./Pharm.D. The M.B.A. and M-Acct. programs are suited to all students regardless of undergraduate training. Further details may be obtained from the Graduate School or by specific inquiries directed to: Director of M.B.A. Program, School of Business Administration or Director of M-Acct. Program, School of Business Administration.

Foundation Program for Graduate Work in Business

The M.B.A. and M-Acct. programs are open to graduates of non-business undergraduate programs (prerequisites strictly enforced). Students in the arts and sciences or other professional schools are encouraged to consider the

M.B.A. and M-Acct programs. Completion of all of the foundation courses listed below prior to starting the program will reduce the time required for the M.B.A. or M-Acct. at the University of Montana-Missoula by one year; however, many of the courses listed below have prerequisites that are strictly enforced (including, without limitation, a general prerequisite that all upper-division business courses require the completion of each lower-core business course with a grade of C or better).

- ACTG 201 Principles of Financial Accounting
- ACTG 202 Principles of Managerial Accounting
- BGEN 235 Business Law
- BFIN 322 Business Finance
- BMIS 270 MIS Foundations for Business
- BMGT 322 Operations Management
- BMGT 340 Management and Organizational Behavior
- BMKT 325 Principles of Marketing
- ECNS 201S Principles of Microeconomics
- STAT 216 Introduction to Statistics

The School of Business Administration also offers a series of five graduate-level courses that can substitute for the above undergraduate courses. These courses are only open to students who have already earned an undergraduate degree. For more information, please visit the University of Montana School of Business Administration Graduate School website at <http://www.business.umt.edu/DegreesPrograms/graduatePrograms/deansWelcome.aspx>

Name	Minor	Certificate	Associate	Bachelor
<u>Accounting</u>				<u>Requirements</u>
<u>Accounting Information Systems</u>		<u>Requirements</u>		
<u>Digital Marketing</u>		<u>Requirements</u>		
<u>Entertainment Management</u>		<u>Requirements</u>		
<u>Entrepreneurship</u>		<u>Requirements</u>		
<u>Finance</u>				<u>Requirements</u>
<u>International Business</u>				<u>Requirements</u>
<u>Management</u>				<u>Requirements</u>
<u>Management Information Systems</u>				<u>Requirements</u>
<u>Marketing</u>				<u>Requirements</u>
<u>Sustainable Business Strategy</u>		<u>Requirements</u>		

Accounting and Finance Department

Bruce A. Costa, Chair

The Department of Accounting and Finance prepares ethically aware decision-makers with effective analytical and qualitative business knowledge and skills to become professionals in their respective fields in the region and beyond. We commit to high quality teaching and applying scholarship to professional practice, pedagogy, and theory to enhance the professional accounting and finance fields. The department offers the Master of Accountancy degree and two undergraduate majors within the Bachelor of Science in Business Administration degree: accounting and finance. The department also offers a Certificate in Accounting Information Systems.

Course Descriptions

Accounting

- **ACTG 201 - Principles of Fin Acct**

Credits: 3. Offered every term. Prereq. or Coreq., grade of C or better in M 115, M 121, M 151 or M 162. Introduction to financial accounting concepts, including transactions analysis, financial statement analysis, and corporate financial reporting practices.

- **ACTG 202 - Principles of Mang Acct**

Credits: 3. Offered every term. Prereq., ACTG 201 with a grade of C or better, M 115, M 121, M 151 or M 162 with a grade of C or better. Continuation of ACTG 201 with a focus on managerial accounting topics.

- **ACTG 203 - Accounting Lab**

Credits: 1. Offered every term. Prereq., ACTG 201 with a grade of C or better. Applying accounting cycle concepts to comprehensive hands-on financial statement cases and/or a practice set and exploring career options.

- **ACTG 298 - Internship**

Credits: 1 TO 3. (R 3) Offered autumn and spring. Prereq., last semester in program, minimum grade of "C" in all ACTG courses, and approval of program director. On-the-job training in positions related to the accounting field. This experience increases students' skills, prepares them for initial employment, and increases occupational awareness and professionalism. Students work a minimum of six hours each week at an approved site and attend scheduled one-hour seminars.
Course Attributes: Internships/Practicums Internship graduation limit 6

- **ACTG 305 - Corporate Reporting I**

Credits: 3. Offered every term. Prereq. or coreq., junior standing in Business, ACTG 201 and 202 with grades of C or better or consent of instr. Prereq., or Coreq., ACTG 203. Topics include concepts in financial accounting, assets and related income statement accounts.

- **ACTG 306 - Corporate Reporting II**

Credits: 3. Offered every term. Prereq., junior standing in Business, ACTG 203, ACTG 305 with grades of C or better, or consent of instr. Continuation of ACTG 305. Topics include concepts in financial accounting, coverage of the liability and equity side of the balance sheet, the cash flow statement, and several special financial accounting topics.

- **ACTG 307 - Corporate Reporting III**

Credits: 2. Offered spring. Prereq., junior standing in Business; prereq., or coreq., ACTG 306, or consent of instr. Application of accounting principles to complex issues such as post-retirement benefits, accounting changes, bankruptcies, reorganizations, income taxes and other topics.

- **ACTG 321 - Acct Information Systems I**

Credits: 3. Offered autumn and spring. Prereq., Junior standing in Business. Prereq., or coreq., ACTG 203. Provides thorough understanding of business processes, risks, and internal controls. Computer applications may be used to demonstrate concepts.

- **ACTG 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing in Business and consent of

instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ACTG 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **ACTG 394 - Undergraduate Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **ACTG 401 - Principles of Fed Tax - Ind**

Credits: 3. Offered autumn. Prereq., Junior standing in Business or consent of instr. Prereq., or coreq., ACTG 306. The application of the federal income tax law to determine income, deductions and losses. Special topics include property transactions.

- **ACTG 410 - Cost/Mgmt Acct I**

Credits: 3. Offered autumn and/or spring. Prereq., junior standing in business or consent of instr. The study of cost management for business and other organizations. Emphasis on how information about costs helps managers make better decisions.

- **ACTG 411 - Auditing I**

Credits: 3. Offered spring. Prereq., junior standing in Business, ACTG 321 and ACTG 306, or consent of instr. Introduction to auditing with emphasis on the independent audit of financial statements. Coverage includes professional standards, ethics, audit risk, evidence, internal controls, procedures, opinions, operational and compliance auditing.

- **ACTG 420 - Cost/Mgmt Acct II**

Credits: 3. Offered intermittently. Prereq., senior standing in Business and ACTG 410 or consent of instr. Advanced cost management with emphasis on how financial and non-financial information helps managers make better decisions in a wide variety of business and not-for-profit organizations. Current readings in cost management and related topics.

- **ACTG 425 - State & Local Gov't Acctg**

Credits: 2. Offered spring. Prereq., junior standing in Business or consent of instr. Prereq., or coreq., ACTG 306. Reporting requirements and generally accepted accounting principles applicable to state and local governmental units.

- **ACTG 426 - Acctg for Nonprofits**

Credits: 1. Offered spring. Prereq., junior standing in Business or consent of instr. Prereq., or coreq., ACTG 306. Reporting requirements and generally accepted accounting principles applicable to nonprofit entities, including colleges/universities.

- **ACTG 432 - Income Tax Practicum**

Credits: 1. Offered spring. Prereq., junior standing in Business. Service course that provides free tax preparation to low income taxpayers and students, in conjunction with the IRS. Students apply their knowledge of tax law to the preparation and e-filing of income tax returns under the direction of a practicing CPA. Designated as a service learning course. Graded credit/no credit only. **Course Attributes:** Service Learning/Volunteer

- **ACTG 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing in Business and consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ACTG 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of inst.

- **ACTG 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **ACTG 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., junior standing in Business and consent of instr. Students are placed with private or governmental organizations to receive on-the-job training. Written reports are required. A maximum of 3 credits count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **ACTG 509 - Financial Rptg & Control**

Credits: 3. Online course. Offered spring. Prereq., admission to M.B.A. or M-Acct. program or graduate standing with consent of graduate business program director. Reporting and using financial information of an enterprise, with a focus on internal and external decision-making. Topics include analysis and recording financial transactions, understanding how these events affect financial statements, and using quantitative tools for internal decision-making. Level: Graduate

- **ACTG 605 - Administrative Controls**

Credits: 2. Offered autumn. Prereq., admission to the M.B.A. program. Not open to M-Acct. students. The application of accounting information to managerial and financial decision making. Level: Graduate

- **ACTG 615 - Accounting Theory**

Credits: 3. Offered autumn or spring. Prereq., cumulative GPA of 3.0 or better in all accounting fundamental courses taken to date, Business core, accounting core, and admission to M-Acct. program or consent of accounting graduate director. A critical analysis of the concepts underlying the development and application of financial accounting in the United States. Coverage of current accounting standards as well as other current topics in financial accounting. Level: Graduate

- **ACTG 616 - Adv. Financial Topics**

Credits: 3. Offered fall or spring. Prereq., cumulative GPA of 3.0 or better in all accounting fundamental courses taken to date, business core, accounting core, admission to M-Acct. program or consent of accounting graduate director. Study of financial accounting topics requiring complex treatment, such as accounting for business combinations, consolidations, investments in other entities, and accounting for non-corporate for-profit entities. Level: Graduate

- **ACTG 631 - Advanced Tax**

Credits: 3. Offered autumn or spring. Prereq., cumulative GPA of 3.0 or better in all accounting fundamental courses taken to date, ACTG 401, admission to M-Acct. program or consent of accounting graduate director. The application of the federal income tax law to corporations and partnerships, and special problems associated with taxation of trusts, estates and gifts. Level: Graduate

- **ACTG 632 - Adv Income Tax Prac**

Credits: 1. Offered spring. Prereq., graduate student in business or consent of accounting graduate director and instr. Service course that provides free tax preparation to low income taxpayers and students, in conjunction with the IRS. Graduate students apply their knowledge of tax law to the preparation and e-filing of income tax returns under the direction of a practicing CPA, review the work of undergraduate preparers, and assist in the organization and training of undergraduate preparers. Designated as a service-learning course. Grade option credit/no credit only. Level: Graduate

- **ACTG 641 - Advanced Auditing**

Credits: 3. Offered autumn or spring. Prereq., admissions to M-Acct., cumulative GPA of 3.0 or better in all accounting fundamental courses taken to date, ACTG 411, graduate student in business or consent of accounting graduate director. Research cases in auditing and coverage of contemporary topics in auditing, typically including attestation standards, other reports and services, legal and ethical environment, and fraud detection. Level: Graduate

- **ACTG 643 - Fraud/Forensic Acct**

Credits: 2 TO 3. Offered intermittently. Prereq., admission to M-Acct., with grade of B or better in ACTG 321 and 411 or equivalents, or consent of M-Acct. director. A study of fraud motivations, techniques, prevention, and detection. Includes the study of forensic accounting using forensic science, information security, and other forensic auditing/investigation tools and techniques, as they apply in various fraud and financial contexts. Level: Graduate

- **ACTG 661 - Acct Law & Ethics**

Credits: 3. Offered autumn or spring. Prereq., cumulative GPA of 3.0 or better in all accounting fundamental courses taken to date, Business core, admission to M-Acct. program or consent of accounting graduate director. Legal issues from the common law and appropriate statutes applicable to the public practice of accounting. The professional responsibilities and ethics of a practicing CPA. Level: Graduate

- **ACTG 675 - Contemporary Acct Problems**

Credits: 4. Offered first summer session. Prereq. or coreq., cumulative GPA of 3.0 or better in all accounting fundamental courses taken to date, student must be in good academic standing, ACTG 611, 615, 631, 641, and 661. Integration of accounting theory and practice. Primarily for the student preparing to take the uniform CPA examination. Graded only credit/no credit. Level: Graduate

- **ACTG 694 - Seminar**

Credits: 1 TO 3. (R-15) Offered intermittently. Prereq., graduate student in business or consent of business graduate director. Selected topics in accounting. Level: Graduate

- **ACTG 696 - Independent Study**

Credits: 1 TO 9. (R-6) Offered every term. Prereq., graduate student in business or consent of business graduate director and consent of instr. Directed study of individual or small groups of students in topics not available in scheduled classes. Level: Graduate **Course Attributes:**
Service Learning/Volunteer

- **ACTG 698 - Internship**

Credits: 1 TO 6. (R-3) Offered every term. Prereq., graduate student in business or consent of business graduate director and consent of instr. Placements with private or governmental organizations for practical training. Written reports required. Level: Graduate **Course Attributes:**
Internships/Practicums

- **ACTG 699 - Thesis**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., graduate student in business or consent of business graduate director. Grade option credit/no credit only. Level: Graduate

Business Finance

- **BFIN 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BFIN 192 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Course material appropriate to the needs and objectives of the individual student.

- **BFIN 205S - Personal Finance**

Credits: 3. Offered intermittently. Concepts, strategies and techniques in analyzing financial situations and investment opportunities from the individual's perspective. **Course Attributes:**
Social Sciences Course

- **BFIN 292 - Independent Study**

Credits: 1 TO 3. (R-3) Course material appropriate to the needs and objectives of the individual student.

- **BFIN 298 - Internship**

Credits: 1 TO 3. (R-3) Offered every term. Extended classroom experience which provides practical application of classroom learning during placements within the business community. The student must complete a learning agreement with a faculty member, relating the placement opportunity to his or her field of study. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **BFIN 301 - Analysis of Finan Statements**

Credits: 3. Offered intermittently. Prereq., junior standing in Business. Analysis of balance sheets, income and cash flow statements and statements of owners' equity in terms of structure, strategy and performance of the company being analyzed. Emphasis is on the use rather than preparation of financial statements.

- **BFIN 322 - Business Finance**

Credits: 3. Offered every term. Prereq., junior standing in Business. The methodology and practice of business financial decisions.

- **BFIN 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing in Business and consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BFIN 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **BFIN 394 - Undergraduate Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **BFIN 410 - \$50,000 Portfolio**

Credits: 3. Offered autumn. Prereq., junior standing in Business, grade of C or better in BFIN 322, and consent of department chair. Under the guidance of a broker, students manage a diversified investment portfolio for a semester. Students analyze and discuss investment opportunities and implement their decisions.

- **BFIN 420 - Investments**

Credits: 3. Offered autumn. Prereq., junior standing in Business, grade of C or better in BFIN 322 or consent of instr. Principles, practices and methodology in investment analysis and portfolio management.

- **BFIN 421 - Real Estate Invmtmnt & Analysis**

Credits: 3. Offered intermittently. Prereq., junior standing in Business and FIN 322, or consent of instr. Introduction to the principles and practices of real estate. Includes the study of real estate law, financing, valuation, brokerage and land use.

- **BFIN 424 - Markets, Instns & Fin Enginrng**

Credits: 3. Offered spring. Prereq., junior standing in Business, grade of C or better in BFIN 322 and successful completion of BFIN 429 or BFIN 439, or consent of instr. Topics covered include operations and analysis of the national and international money and capital markets as they affect financial institutions and usage of derivatives to hedge risks.

- **BFIN 429 - Fin Mgmt I:Thry/Analysis**

Credits: 3. Offered spring. Prereq., junior standing in Business, grade of C or better in BFIN 322 and ECNS 202S or consent of instr. Understanding the practice of business investment and working capital decisions. Computer models and cases used to demonstrate the management process.

- **BFIN 439 - Fin Mgmt II: Analysis/Problems**

Credits: 3. Offered autumn. Prereq., junior standing in Business, grade of C or better in BFIN 322 and ECNS 202 or consent of instr. Topics include business valuation techniques, capital structure, raising capital, mergers and acquisitions, working capital management, and multinational financial management. Course uses computer models and cases to emphasize analysis and decision making.

- **BFIN 450 - Banking**

Credits: 3. Offered spring. Prereq., junior standing in Business, grade of C or better in BFIN 322, or consent of instr. The financial management of banking institutions including financial analysis, interest rate risk management, liquidity management, investment and loan portfolio management.

- **BFIN 473 - Multinational Financial Mgmt**

Credits: 3. Offered spring. Prereq., junior standing in Business, BFIN 322 and ECNS 202S, or consent of instr. Students are strongly encouraged to complete BGEN 360 prior to BFIN 473. Topics include financial skills required of corporate executives in international business, exchange rate risk analysis, analysis of global financial systems and assessment of real international investments.

- **BFIN 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing in Business and consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BFIN 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **BFIN 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **BFIN 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., junior standing in Business and consent of instr. Students are placed with private or governmental organizations to receive on-the-job training. Written reports are required. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **BFIN 522 - Prin Financial Analysis**

Credits: 3. Online course. Offered summer. Prereq., admission to M.B.A. or M-Acct. program or graduate standing with consent of graduate business program director; grade of B or better in ACTG 509. Introduction to financial management and the application of these principles to business decisions. Topics include financial analysis, time value of money, theories of risk and return, stock and bond valuation, capital budgeting, cost of capital, and working capital management. Level: Graduate

- **BFIN 651 - Cornerstone of Grad Fin**

Credits: 1. Offered fall. Course is designed to prepare M-Acct. and MBA students who desire an improved foundation in corporate finance. Level: Graduate

- **BFIN 681 - Financial Management**

Credits: 2. Offered autumn. Prereq., admission to the M.B.A. or admission to the M-Acct. programs. Advanced theory and analysis in corporate financial management. Level: Graduate

- **BFIN 694 - Seminar**

Credits: 1 TO 15. (R-15) Offered intermittently. Prereq., graduate student in business or consent of business graduate director. Selected topics in finance. Level: Graduate

Accounting B.S.

The undergraduate accounting program is committed to preparing students to apply accounting and business knowledge in organizations. Students develop competence in a broad range of accounting practices. The curriculum strives to foster critical thinking and problem-solving skills. Students are prepared to enter professional positions in accounting with business, nonprofit, or government organizations. Accounting programs in the School of Business Administration hold separate AACSB International accreditation.

See the School of Business Administration section of the catalog for additional credit restrictions and residency requirements.

Bachelor of Science - Accounting

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 77

Required Cumulative GPA: 2.0

Note: At least 51 credits must be earned in Business classes (ECNS courses may be counted in OR out of Business).

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

No more than 30 credits of ACTG (including ACTG 201 and ACTG 202) may count towards the 120 credits required to graduate.

At least 26 credits in business AND all required 400-level accounting courses must be taken at UM.

SoBA - Lower Core

Rule: All courses are required

Note: All requirements must be completed with a "C" or better for admission into an upper-division Business Major.

Course	Credits
ACTG 201 - Principles of Fin Acct	3 Credits
ACTG 202 - Principles of Mang Acct	3 Credits
BGEN 235 - Business Law	3 Credits
BMIS 270 - MIS Foundations for Business	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits

WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C	31 Total Credits Required

SoBA Math Requirement

Rule: Students choose one or the other to fulfill their math requirement

Note: A student must take either M 115 or M 162, despite what he or she earns on the ALEKS Math Placement Exam. SoBA requires that credit be earned for one of the above math courses.

The course must be completed with a "C" or better for admission into an upper-division Business Major.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C	3 Total Credits Required

SoBA - Upper Core

Rule: All courses are required

Note: All upper-core courses must be completed before the capstones can be taken.

Course	Credits
BFIN 322 - Business Finance	3 Credits
BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
BMGT 322 - Operations Management	3 Credits
BMGT 340 - Mgmt & Organization Behavior	3 Credits
BMKT 325 - Principles of Marketing	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Accounting Major Requirements

Rule: Must complete the following subcategories

Note: No more than 30 credits of ACTG (including ACTG 202) may count towards the 120 credits required to graduate.

All required 400-level accounting courses must be taken at UM.

21 Total Credits Required

Accounting Major Requirements

Rule: All courses are required

—	Course	Credits
	ACTG 203 - Accounting Lab	1 Credits
	ACTG 305 - Corporate Reporting I	3 Credits
Minimum Required Grade: C		4 Total Credits Required

Accounting Major Requirements

Rule: All courses are required

—	Course	Credits
	ACTG 306 - Corporate Reporting II	3 Credits
	ACTG 321 - Acct Information Systems I	3 Credits
	ACTG 401 - Principles of Fed Tax - Ind	3 Credits
	ACTG 410 - Cost/Mgmt Acct I	3 Credits
	ACTG 411 - Auditing I	3 Credits
	ACTG 425 - State & Local Gov't Acctg	2 Credits
Minimum Required Grade: C-		17 Total Credits Required

Accounting Major - Electives

Rule: Take 3 credits from the list below.

Note: No more than 3 credits of ACTG 498 may count towards the 120 credits required to graduate.
No more than 30 credits of ACTG (including ACTG 201 and ACTG 202) may count towards the 120 credits required to graduate.

See MAcct Director for information pertaining to the Master's of Accountancy Program or taking the CPA exam.

—	Course	Credits
	ACTG 307 - Corporate Reporting III	2 Credits
	ACTG 420 - Cost/Mgmt Acct II	3 Credits
	ACTG 426 - Acctg for Nonprofits	1 Credits
	ACTG 432 - Income Tax Practicum	1 Credits
	ACTG 498 - Internship	1 To 6 Credits

Minimum Required Grade: C-

3 Total Credits Required

SoBA - Capstone Courses

Rule: All courses are required; BMGT 486 and BGEN 499 are co requisite courses and must be taken together

Note: Students must have an approved graduation application to register for their capstones.

—	Course	Credits
	BGEN 499 - Integrated Business Simulation	1 To 9 Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

SoBA Upper-Division Writing Requirement

Rule: All courses are required

—	Course	Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

SoBA Symbolic Systems Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C		4 Total Credits Required

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Social Science Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Ethical & Human Values Requirement

Rule: All courses are required

—	Course	Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Finance B.S.

The finance curriculum is designed to equip students with a comprehensive foundation in financial management, financial markets and investments. Students will gain competence in making effective decisions, performing complex analyses, providing expert financial advice and utilizing current technology tools and data sources.

Basic Requirements for Finance Major

All students must complete a faculty-approved plan of study during the first semester of their junior year. The plan of study is available from a finance faculty advisor and must be completed and signed by the faculty advisor. Failure to implement and adhere to a program of study may delay graduation. Some courses have grade requirements in the prerequisite course (see the catalog course descriptions). Many of these courses may be taught once a year, so students should see their advisor for the schedule each academic year.

Bachelor of Science - Finance

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 77

Required Cumulative GPA: 2.0

Note: At least 51 credits must be earned in Business classes (ECNS courses may be counted in OR out of Business).

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

At least 26 credits in business AND all required 400-level finance courses must be taken at UM.

SoBA - Lower Core

Rule: All courses are required

Note: All requirements must be completed with a "C" or better for admission into an upper-division Business Major

Course	Credits
ACTG 201 - Principles of Fin Acct	3 Credits
ACTG 202 - Principles of Mang Acct	3 Credits
BGEN 235 - Business Law	3 Credits
BMIS 270 - MIS Foundations for Business	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C	31 Total Credits Required

SoBA Math Requirement

Rule: Students choose one or the other to fulfill their math requirement

Note: The Finance Department encourages that a student take M 162 to complete his or her math requirement to better prepare the student for a major in Finance. However, M 115 will be accepted for students who choose not to take M 162.

A student must take either M 115 or M 162, despite what he or she earns on the ALEKS Math Placement Exam. SoBA requires that credit be earned for one of the above math courses.

All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C	3 Total Credits Required

SoBA - Upper Core

Rule: All courses are required

Note: BFIN 322 must be completed with a C or higher as a prerequisite to the finance major requirements. All upper-core courses must be completed before the capstones can be taken.

—	Course	Credits
	BFIN 322 - Business Finance	3 Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
	BMGT 322 - Operations Management	3 Credits
	BMGT 340 - Mgmt & Organization Behavior	3 Credits
	BMKT 325 - Principles of Marketing	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Finance Major - Requirements

Rule: All courses are required

Note: Finance major courses only offered once per academic year. All required 400-level finance courses must be taken at UM.

—	Course	Credits
	BFIN 420 - Investments	3 Credits
	BFIN 424 - Markets, Instns & Fin Enginrng	3 Credits
	BFIN 429 - Fin Mgmt I:Thry/Analysis	3 Credits
	BFIN 439 - Fin Mgmt II: Analysis/Problems	3 Credits
	BFIN 450 - Banking	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Finance Major - Electives

Rule: Take 9 credits from the list below.

Note: BFIN 205 is encouraged for Finance majors, but does not count as an elective for the Finance Major.

Note: These 9 credits are selected in consultation with your faculty advisor. A signed track sheet reflecting these courses is required on file in the SoBA Advising Office.

ACTG 305 and ACT 321 have a co-requisite of ACTG 203.

Up to 3 credits of BFIN 498 can count towards the 9 credit elective requirement.

—	Course	Credits
	ACTG 305 - Corporate Reporting I	3 Credits
	ACTG 321 - Acct Information Systems I	3 Credits

	ACTG 410 - Cost/Mgmt Acct I	3 Credits
	BFIN 301 - Analysis of Finan Statements	3 Credits
	BFIN 410 - \$50,000 Portfolio	3 Credits
	BFIN 415 - Real Estate Invest & Analysis	3 Credits
	BFIN 473 - Multinational Finance and FDI	3 Credits
	BFIN 498 - Internship	1 To 6 Credits
	ECNS 301 - Intermediate Micro with Calc	3 Credits
	ECNS 302 - Intermediate Macroeconomics	3 Credits
	ECNS 403 - Introduction to Econometrics	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

SoBA - Capstone Courses

Rule: All courses are required; BMGT 486 and BGEN 499 are co requisite courses and must be taken together

Note: Students must have an approved graduation application to register for their capstones.

—	Course	Credits
	BGEN 499 - Integrated Business Simulation	1 To 9 Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

SoBA Upper-Division Writing Requirement

Rule: All courses are required

—	Course	Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

SoBA Symbolic Systems Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C		4 Total Credits Required

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Social Science Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Ethical & Human Values Requirement

Rule: All courses are required

—	Course	Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Accounting Info Systems Certificate

Certificate of Art - Accounting Information Systems

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 25

Required Cumulative GPA: 3.0

Note: All students pursuing an AIS Certificate must also complete the degree requirements for one of the business majors.

The 3.0 GPA requirement pertains specifically to the 25 credits listed below, not a student's cumulative GPA. Please meet with an AIS Certificate Advisor for assistance (see SoBA Advising for list of advisors by major).

Accounting Information Systems Certificate - Requirements

Rule: All courses are required

Note: See individual course descriptions in the catalog for additional grade and prerequisite requirements.

Course	Credits
ACTG 203 - Accounting Lab	1 Credits
ACTG 305 - Corporate Reporting I	3 Credits
ACTG 306 - Corporate Reporting II	3 Credits
ACTG 321 - Acct Information Systems I	3 Credits
ACTG 411 - Auditing I	3 Credits
BMIS 365 - Business App Development	3 Credits
BMIS 370 - Managing Information and Data	3 Credits
BMIS 373 - Business System Analy & Design	3 Credits
BMIS 479 - Introduction to Consulting	3 Credits
Minimum Required Grade: C-	25 Total Credits Required

International Business Major

Klaus Uhlenbruck, Chair

The Department of Management and Marketing offers three majors within the Bachelor of Science in Business Administration: International Business, Management, and Marketing.

International Business B.S.

Bachelor of Science - International Business

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Note: At least 51 credits must be earned in Business classes (ECNS courses may be counted in OR out of Business).

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

At least 26 credits in business must be taken at UM.

In addition to the below requirements, students seeking a major in International Business must complete all degree requirements for a major in ACCT, FIN, MGMT, MIS, or MKTG.

International Business Major - Foreign Language Requirement

Rule: All courses are required

Note: See SoBA Advising for listing of available options for BMGT 491 requirement - Only specific offerings of BMGT 491 will count towards a major in International Business.

Course	Credits
BFIN 473 - Multinational Finance and FDI	3 Credits
BGEN 360 - International Business	3 Credits
BMGT 480 - Cross-Cultural Mgmt	3 Credits
BMGT 491 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-	12 Total Credits Required

International Business Major - Foreign Language Requirement

Rule: Four semesters or equivalent of one foreign language is required.

Note: A student may be exempt from this requirement if using English as a Second Language. Please see the International Business Advisor for assistance.

Minimum Required Grade: C-

16 Total Credits Required

International Business Major - Track Courses

Rule: Take 6 credits in approved track courses.

Note: These 6 credits are selected in consultation with your faculty advisor. A signed track sheet reflecting these courses is required on file in the SoBA Advising Office.

Minimum Required Grade: C-

6 Total Credits Required

Klaus Uhlenbruck, Chair

The Department of Management and Marketing offers three majors within the Bachelor of Science in Business Administration: International Business, Management, and Marketing.

Course Descriptions

Business Admin

- **BADM 191 - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **BADM 191E - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. **Course Attributes:** Internships/Practicums Ethical & Human Values Course
- **BADM 195 - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **BADM 196 - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently.
- **BADM 295 - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **BADM 495 - Special Topics**
Credits: 1 TO 9. (R 9) Offered intermittently. Prereq., junior standing in Business and consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

Business: General

- **BGEN 360 - International Business**
Credits: 3. Offered autumn and spring. Prereq., junior standing in Business. Analysis of business in diverse parts of the globe. Examines the impact of socio-economic, political, legal, educational, and cultural factors on management.
- **BGEN 445 - Sustainability Reporting**
Credits: 3. Offered spring. Prereq., junior, senior, or graduate standing. This course provides students with an understanding of sustainability reporting by organizations. Topics covered include sustainability reporting metrics for the public disclosure of the economic, environmental, and social impacts of organizations. Regulation of sustainability reporting, greenwashing, and external assurance of sustainability reports are also covered.

Business: Management

- **BMGT 101S - Intro to Entertainment Mgmt**
Credits: 3. Offered autumn and spring. Open to non-business majors. Designed to provide basic distinctions and concepts necessary for understanding various business aspects that underpin the business of entertainment as well as most other businesses, regardless of context. **Course Attributes:** Social Sciences Course

- **BMGT 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMGT 192 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **BMGT 205 - Professional Business Comm**

Credits: 3. Offered intermittently. Prereq., WRIT 101, COMX 111A. Focuses on understanding the scope and nature of business communication and becoming more fluent and effective writers and speakers in a variety of business situations. Students practice choosing and applying the best communication vehicle and strategy for multiple purposes, audiences, and situations. The course asks students to spend significant time on their own professional writing and presentation skills, and will also survey various contemporary issues in business communication. **Course Attributes:**
Writing Course-Approved Writing Course-Intermediate

- **BMGT 275 - Venue Management**

Credits: 3. Offered Autumn. Open to non-business majors. This course is designed to provide some of the basic tools for better understanding the processes involved in the conceptualization, development and production of live-events and successfully managing various types of venues.

- **BMGT 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMGT 292 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **BMGT 298 - Management Internship**

Credits: 1 TO 3. (R 3) Offered every term. Extended classroom experience which provides practical application of classroom learning during placements within the business community. The student must complete a learning agreement with a faculty member, relating the placement opportunity to his or her field of study. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **BMGT 340 - Mgmt & Organization Behavior**

Credits: 3. Offered autumn and spring. Prereq., junior standing in Business. An intensive examination of the fundamentals of management and organization supported by the application of behavioral science principles to the management of people in organizations.

- **BMGT 357 - Entrepren for Non-Bus Students**

Credits: 3. Offered intermittently. Prereq., junior standing; open to non-business majors only. Focuses on starting and managing a growing business. Topics include recognizing business opportunities, setting strategy for the firm, raising capital, marketing new products, and organizing a management team. Students write a business plan for starting a business of their choice.

- **BMGT 375 - Business of Film & Television**

Credits: 3. Offered intermittently. Open to non-business majors. The purpose of this class is to gain a basic understanding of the business elements of film and television production. This is done through a semester long project and lectures by visiting television and film professionals.

- **BMGT 391 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMGT 392 - Independent Study**
Credits: 1 TO 6. (R-6) Offered every term. Prereq. junior standing in Business and consent of instr.
- **BMGT 394 - Seminar/Workshop**
Credits: 1 TO 3. (R-3) Offered intermittently. Prereq., junior standing in Business and consent of instr.
- **BMGT 401 - Event Management**
Credits: 3. Offered autumn. Prereq., junior standing; open to non-business majors. Students are introduced to skills that are necessary for managing entertainment events. Topics include: market research; artist research; negotiating events; producing live events; and working with community and non-profit organizations. Students will develop and participate in several live events throughout the semester.
- **BMGT 402 - Prin of Entertainment Mgmt I**
Credits: 3. Offered autumn and spring. Prereq., junior standing and consent of instructor; open to non-business majors. Students are introduced to the fundamental aspects of the entertainment business. Topics include: artist development and management; productions; promotions; and venue management and marketing. Students will produce an artist development plan.
- **BMGT 403 - Prin of Entertainment Mgmt II**
Credits: 3. Offered spring. Prereq., junior standing; open to non-business majors. Topics include: tour development and marketing; agency relations and responsibilities; and new forms of entertainment media and distribution. Students will produce an event management plan.
- **BMGT 410 - Sustainable Business Practices**
Credits: 3. Offered autumn. Prereq., junior standing. This course explores how changing perceptions around environmental and social issues influence current business practices. Through this exploration, we discuss the impact these influences have on business and how adept firms can gain competitive advantage through embracing and integrating them into their core strategies.
- **BMGT 420 - Leadership and Motivation**
Credits: 3. Offered autumn and spring. Prereq., junior standing in Business and BMGT 340. Study of fundamental concepts, theories, and models of leadership and motivation. Selected topics include: trait and behavioral theories of leadership, charismatic and transformational leadership, power and influence, emotions and justice perceptions in motivation, expectancy and equity theories.
- **BMGT 426 - Strategic Management**
Credits: 3. Offered autumn. Prereq., junior standing in Business; prereq/coreq. BFIN 322. Analyzes theories and concepts of corporate and international strategy formulation and implementation, including industry and firm analysis. Extensive use of cases and class discussions. **Course Attributes:** Writing Course-Upper-Division
- **BMGT 430 - Business Negotiations**
Credits: 3. Offered intermittently. Prereq., junior standing in Business. Theories and processes of negotiation in various business settings. Theories and concepts of negotiation presented through illustrative case studies proven to increase the value of negotiated deals. Students become cognizant of their instinctive negotiation styles and build on their accumulative knowledge progressing to sophisticated skills such as multiparty negotiation, mediation and arbitration.
- **BMGT 444 - Management Communications**
Credits: 3. Offered autumn and spring. Prereq., junior standing in Business; BMGT 340. This course focuses on four modules managing external and internal communications: Communication of Innovations; Communications with Company Leadership; PR Crisis Communications; and Business Negotiations. Course projects include team research, team oral presentations, individual written executive reports, case studies and analysis, and competitive negotiations. **Course Attributes:** Writing Course-Upper-Division

- BMGT 458 - Advanced Entrepreneurship**
 Credits: 1. (R-3) Offered spring. Prereq., senior standing in business or BMGT 357 if non-business major. Focus on managing and marketing a growing business, legal and technology issues for entrepreneurs, and financing new ventures. Students refine an existing or write a new business plan and participate in a business plan competition or write case analyses. UM instructors supervise course content delivered by local and regional experts in entrepreneurship. Four separate one credit weekend seminars are offered.
- BMGT 474 - Entertainment Rsrch & Planning**
 Credits: 3. Offered intermittently. Prereq., junior standing and consent of instructor; open to non-business majors. This course will provide students with a better understanding of the processes involved in the conceptualization, development, production and or marketing for businesses, particularly entertainment related entities. This is done through a variety of real world projects.
- BMGT 480 - Cross-Cultural Mgmt**
 Credits: 3. Offered autumn. Prereq., junior standing in Business. Study of issues related to cultural diversity within the work force and the problems inherent in the management of a firm's activities on an international scale.
- BMGT 486 - Strategic Venture Management**
 Credits: 3. Offered every term. Prereq., senior standing in Business, COMX 111, ECNS 202, BGEN 220 with grades C or better and completed upper Business core; coreq., BGEN 499. Integration of all functional areas of business including starting and managing a growing business. Topics include recognizing business opportunities, setting strategy for the firm, raising capital, marketing new products, and organizing a management team. Students write a business plan for themselves or for a local entrepreneur or organization. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced
- BMGT 491 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- BMGT 492 - Independent Study**
 Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.
- BMGT 493 - International Experience**
 Credits: 1 TO 6. (R-6) offered intermittently. Prereq., junior standing in business. Field-based, experiential courses that focus on international business topics, incl. the culture and business environment of important U.S. trading partners, such as China, Germany, or Italy.
- BMGT 494 - Seminar/Workshop**
 Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.
- BMGT 498 - Internship**
 Credits: 1 TO 6. Offered every term. Prereq., junior standing in Business and consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6
- BMGT 595 - Special Topics**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **BMGT 604 - Competitive Strategy**

Credits: 1. Offered autumn. Prereq., admission to the M.B.A. or M.Acct. program. An introduction to strategic management with a focus on the analysis of the firm and its environment as the basis for strategic decision making. Level: Graduate

- **BMGT 640 - Organizational Behavior**

Credits: 2. Offered autumn. Prereq., admission to the M.B.A. or M.Acct. programs. Professionally oriented strategic overview of intrapersonal, interpersonal, and leadership skills for employees, management, and organizational designers. Topics include diversity, communication, motivation, groups/teams, culture and structure. Level: Graduate

- **BMGT 650 - Business Ethics**

Credits: 1. BMGT 650-01 and BMGT 650-60 Business Ethics. 1 credit. Offered in the last five weeks of the fall semester. Prerequisites: admission in MBA program. Business Ethics is a course designed to acquaint students with the ethical implications of business decisions, policy, strategy and operations. The students will learn how to (1) develop a system of ethics that will form the foundation for future ethical practices in business; (2) analyze specific contemporary issues in business for their ethical implications and content; and (3) challenge conventional thinking about ethics by introducing broad-based ethical principles and systems to enlighten and inform ethical thinking. Level: Graduate

- **BMGT 665 - Strategic Mgmt Seminar**

Credits: 1 TO 12. Offered spring. Prereq., admission to the M.B.A. or M.Acct. program and ACTG 605, BFIN 681, BMIS 574, BMGT 604, and BMGT 640; coreq., MBA 603. Analysis of the firm within its industry and the structure of the industry; competitive positioning and competitor analysis; decision-making under conditions of uncertainty; developing a competitive advantage in international markets. Level: Graduate

- **BMGT 685 - International Business**

Credits: 2. Offered spring. Prereq., admission to the M.B.A. or M.Acct. programs. Review and analysis of international trade theories and institutions, the role of the multinational enterprise (MNE) in global trade and how the MNEs operate in a global setting. Level: Graduate

Business: Marketing

- **BMKT 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMKT 192 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **BMKT 291 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMKT 292 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **BMKT 298 - Internship**

Credits: 1 TO 3. (R-3) Offered every term. Extended classroom experience which provides practical application of classroom learning during placements within the business community. The student must complete a learning agreement with a faculty member, relating the placement opportunity to his or her field of study. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums

Internship graduation limit 6

- **BMKT 325 - Principles of Marketing**

Credits: 3. Offered autumn and spring. Prereq., junior standing in Business. The marketing environment, product, price, distribution, and promotion strategies including government regulation and marketing ethics.

- **BMKT 337 - Consumer Behavior**

Credits: 3. Offered autumn and spring. Prereq., junior standing in Business and BMKT 325; PSYX 100S and 230S recommended. A behavioral analysis of consumer decision making and of the factors influencing consumer decisions, i.e., those decisions directly involved with the obtaining of economic goods and services.

- **BMKT 342 - Marketing Research**

Credits: 3. Offered autumn and spring. Prereq., junior standing in Business, BMKT 325. Emphasis on data acquisition and analysis for improved decision making in marketing. Topics include problem definition; secondary data; primary data via observation, interrogation and experimentation; data analysis; written and oral reports. May include field project.

- **BMKT 343 - Integrated Marketing Comm**

Credits: 3. Offered autumn and spring. Prereq., junior standing in Business, BMKT 325. An integrated course in promotion strategy. Topics include advertising message design, media selection, promotions, public relations, personal selling, and other selected topics.

- **BMKT 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMKT 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **BMKT 411 - Service/Relationship Marketing**

Credits: 3. Offered intermittently. Prereq., junior standing in Business and BMKT 325. Service marketing integrates marketing concepts and techniques for organizations whose core product is service; topics include quality service delivery, customer attraction and retention, and relationship marketing. Focus is on service fields such as financial, healthcare, and communication services.

- **BMKT 412 - Non Profit Marketing**

Credits: 3. Offered intermittently. Prereq., junior standing in Business and BMKT 325. Integration of core concepts of marketing into philanthropic and other nonprofit organizations. Includes strategies for large-scale enterprises such as unions, educational and religious institutions to small organizations that provide local support such as cultural services, human and environmental services. Student work with nonprofit organizations creating marketing communications plans in an experiential learning environment.

- **BMKT 413 - Sports Marketing**

Credits: 3. Offered intermittently. prereq., junior standing in Business, BMKT 325. Examines the marketing of sports products and non-sports products using sports as a platform. Topics include the use of traditional marketing strategies as well as the use of sponsorship strategies including endorsements, venue naming rights, and licensing.

- **BMKT 420 - Integrated Online Marketing**

Credits: 3. Offered intermittently. Prereq., junior standing in business, BMKT 325. Exploration and application of marketing communications principles to the internet environment. Students develop individual WordPress websites/blogs, learn about online marketing techniques, and complete online marketing and social media projects.

- **BMKT 440 - Marketing Analytics**

Credits: 3. Offered autumn or spring. Prereq., BMKT 325; junior standing in Business or consent of instr. The purpose of this course is to learn about the importance and value of using new measurement tools in marketing and using related research and data to create compelling content. Students in this course are also challenged to bring actual ideas to life.

- **BMKT 450 - Marketing Connections**

Credits: 3. Offered intermittently, prerequisites: Marketing major, BMKT 325 and 343 and consent of instructor. This is an experiential course offering designed to allow students to apply marketing concepts and strategy to their career/job aspirations. Principles addressed in previous courses are integrated in this class. The concept of marketing strategy will be applied to real-world career development. Students also spend several days meeting business professionals in the region. Upon successful completion of this course each student will have an immediate, actionable plan that will help achieve career aspirations.

- **BMKT 460 - Mktg Hi-Tech Prod & Innov**

Credits: 3. Offered autumn. Prereq., BMKT 325; junior standing in Business or consent of instr. Exploration of concepts and practices related to marketing in fast-paced environment; draws from a range and diversity of industries and contexts including the Internet.

- **BMKT 480 - Marketing Management**

Credits: 3. Offered autumn and spring. Prereq., senior standing in Business; BMKT 325, 337, 342, 343. Case analysis in marketing management.

- **BMKT 490 - Undergraduate Research**

Credits: 3. (R-6) Offered intermittently. Prereq., junior standing in Business, BMKT 325. An experiential course in the strategy, research, and execution of an integrated marketing communications plan. Students' work culminates in the American Association of Advertising's National Student Advertising Competition. **Course Attributes:** Research & Creative Schlrshp

- **BMKT 491 - Special Topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMKT 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **BMKT 493 - International Experience**

Credits: 1 TO 6. (R-6) offered intermittently. Prereq., junior standing in business. Field-based, experiential courses that focus on international business topics, incl. the culture and business environment of important U.S. trading partners, such as China, Germany, or Italy.

- **BMKT 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **BMKT 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., junior standing and consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **BMKT 560 - Marketing & Stats**

Credits: 3. Online course. Offered autumn. Prereq., admission to the M.B.A. or M-Acct. programs or graduate standing with consent of graduate business program director. Introduction to marketing principles to create long-term competitive advantage for an organization. Topics include

environmental analysis, marketing planning, segmentation analysis, target marketing, and planning for product, price, promotion and distribution. Business statistics covered including t-tests, analysis of variance, regression and correlation analysis; statistics applications in context of marketing research and marketing problems. Level: Graduate

- **BMKT 660 - Marketing Management**

Credits: 2. Offered spring. Prereq., admission to the M.B.A. or M-Acct. programs. Marketing decisions faced by managers in a variety of business settings including large corporations, small businesses and not-for-profit organizations. Level: Graduate

MBA

- **MBA 601 - Career & Leadership Skills**

Credits: 1. Offered autumn during orientation week. Prereq., admission to the M.B.A. program. Provides an intensive orientation and introduction to behavioral skills required to excel in the M.B.A. program and one's business career; structured to create a sense of community among students and faculty and set expectations for future class involvement. Graded only credit/no credit. Level: Graduate

- **MBA 603 - Integrated Project**

Credits: 1. Offered spring. Prereq., admission to the M.B.A. or M-Acct. program; coreq., BMGT 665. This is the capstone course of the MBA program and is offered during the last five weeks of spring semester. Students develop a business plan that requires the incorporation of knowledge from all other core MBA courses. Level: Graduate

- **MBA 645 - Interpersonal Perspectives**

Credits: 1 TO 12. (R- 12) Offered every term. Prereq., admission to the M.B.A. or M-Acct. program. Some classes are open to pre-MBA and pre-M-Acct. students. Selected topics cover leadership theory and practice, ethics in the workplace, and managerial processes such as motivation, communication, conflict resolution, negotiations, team building, critical thinking, goal setting, and building workforce commitment. MBA students must complete at least 2 credits of interpersonal perspective coursework for the MBA degree. Level: Graduate

- **MBA 655 - Technology Seminar**

Credits: 1 TO 12. (R-12) Offered every term. Prereq., admission to the M.B.A. or M-Acct. programs. Contemporary issues in information technology with emphasis on how technology is used in business organizations. Topics vary each term and may include electronic commerce on the internet, decision support technology, electronic media support, advanced spreadsheet applications, accounting applications and quality control systems. Level: Graduate

- **MBA 692 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., graduate student in business or consent of business graduate director and consent of instr. Directed study of individual or small groups of students in topics not available in scheduled classes. Level: Graduate

- **MBA 694 - Seminar**

Credits: 1 TO 15. (R-15) Offered every term. Prereq., graduate student in business or consent of business graduate director. Selected topics in business. Level: Graduate

- **MBA 695 - Practicum**

Credits: 1 TO 6. Practical hands-on experience with area organizations. Provides application of classroom learning. Level: Graduate

- **MBA 696 - Independent Study**

Credits: 1 TO 9. (R 9) Offered every term. Prereq., graduate student in business or consent of business graduate director and consent of instr. Directed study of individual or small groups of students in topics not available in scheduled classes. Level: Graduate

- **MBA 698 - Internship**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., graduate student in business or consent of business graduate director and consent of instr. Placements with private or governmental organizations for practical training in business. Written reports required. Level: Graduate

- **MBA 699 - Thesis**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., graduate student in business or consent of business graduate director. Level: Graduate

Management

- **MGMT 348 - Entrepreneurship**

Credits: 3. BMGT 348 Entrepreneurship 3 cr. Offered autumn and spring. Prereq., junior standing in Business, BFIN 322, MGMT 340S, MKTG 360. Focuses on starting and managing a growing business. Topics include recognizing business opportunities, setting strategy for the firm, raising capital, marketing new products, and organizing a management team. Students write a business plan for themselves or for a local entrepreneur. **Course Attributes:** Writing Course-Upper-Division

- **MGMT 395 - Special Topics**

Credits: 1 TO 9. (R 9) Offered intermittently. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **MGMT 445 - Sm Bus Mgmt/Strat Plng**

Credits: 3. Offered autumn and spring. Prereq., senior standing in Business, all business core. Application of the concepts of strategic management to small businesses. Integrates the functional areas of management, marketing, finance and accounting. Students work with local businesses in a consulting role and are required to write a consulting report. Credit not allowed for both MGMT 445 and 446. **Course Attributes:** Writing Course-Upper-Division

Marketing

- **MKTG 394 - Undergraduate Seminar**

Credits: 1 TO 3. (R-3) Offered intermittently. Prereq., junior standing in Business and consent of instr.

Marketing B.S.

The marketing major provides students with knowledge and skills required for the process of marketing products, services, or ideas. The contemporary role of marketing in society is treated from various perspectives, including functional and institutional analysis, as well as the application of decision-making tools.

Bachelor of Science - Marketing

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 77

Required Cumulative GPA: 2.0

Note: At least 51 credits must be earned in Business classes (ECNS courses may be counted in OR out of Business).

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

At least 26 credits in business must be taken at UM.

SoBA - Lower Core

Rule: All courses are required

Note: All requirements must be completed with a "C" or better for admission into an upper-division Business Major

Course	Credits
ACTG 201 - Principles of Fin Acct	3 Credits
ACTG 202 - Principles of Mang Acct	3 Credits
BGEN 235 - Business Law	3 Credits
BMIS 270 - MIS Foundations for Business	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C	31 Total Credits Required

SoBA Math Requirement

Rule: Students choose one or the other to fulfill their math requirement

Note: A student must take either M 115 or M 162, despite what he or she earns on the ALEKS Math Placement Exam. SoBA requires that credit be earned for one of the above math courses.

All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C	3 Total Credits Required

SoBA - Upper Core

Rule: All courses are required

Note: All upper-core courses must be completed before the capstones can be taken.

Take BMKT 325 in the first semester in the upper-division major as it is a prerequisite course for the Marketing Major.

—	Course	Credits
	BFIN 322 - Business Finance	3 Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
	BMGT 322 - Operations Management	3 Credits
	BMGT 340 - Mgmt & Organization Behavior	3 Credits
	BMKT 325 - Principles of Marketing	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Marketing Major - Requirements

Rule: All courses are required

—	Course	Credits
	BGEN 360 - International Business	3 Credits
	BMKT 337 - Consumer Behavior	3 Credits
	BMKT 342 - Marketing Research	3 Credits
	BMKT 343 - Integrated Marketing Comm	3 Credits
	BMKT 480 - Marketing Management	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Marketing Major - Electives

Rule: Take 9 credits from the list below.

Note: Up to 6 credits of BMGT 493 can count towards the 9 credit elective requirement.

Up to 6 credits of BMKT 491 can count towards the 9 credit elective requirement.

Up to 6 credits of BMKT 494 can count towards the 9 credit elective requirement.

Up to 3 credits of BMKT 498 can count towards the 9 credit elective requirement.

—	Course	Credits
	BMGT 401 - Event Management	3 Credits

BMGT 402 - Prin of Entertainment Mgmt I	3 Credits
BMGT 403 - Prin of Entertainment Mgmt II	3 Credits
BMGT 410 - Sustainable Business Practices	3 Credits
BMGT 444 - Management Communications	3 Credits
BMGT 493 - International Experience	1 To 6 Credits
BMIS 478 - E Commerce a Managerl Prspctv	3 Credits
BMKT 411 - Service/Relationship Marketing	3 Credits
BMKT 412 - Non Profit Marketing	3 Credits
BMKT 413 - Sports Marketing	3 Credits
BMKT 420 - Integrated Online Marketing	3 Credits
BMKT 450 - Marketing Connections	3 Credits
BMKT 460 - Mktg Hi-Tech Prod & Innov	3 Credits
BMKT 491 - Special Topics	1 To 9 Credits
BMKT 494 - Seminar	1 To 6 Credits
BMKT 498 - Internship	1 To 6 Credits
COMX 351 - Principles of Public Relations	3 Credits
COMX 352 - Public Relations Portfolio	3 Credits
MAR 101L - Intro to Media Arts	3 Credits
MART 102 - Digital Technology in the Arts	3 Credits
MART 111A - Integrated Digital Art	3 Credits
MART 341 - Intro to Web Design	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

SoBA - Capstone Courses

Rule: All courses are required; BMGT 486 and BGEN 499 are co requisite courses and must be taken together

Note: Students must have an approved graduation application to register for their capstones.

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—	Course	Credits
	BGEN 499 - Integrated Business Simulation	1 To 9 Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

SoBA Upper-Division Writing Requirement

Rule: All courses are required

—	Course	Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

SoBA Symbolic Systems Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C		4 Total Credits Required

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Social Science Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits

Minimum Required Grade: C	3 Total Credits Required
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SoBA Ethical & Human Values Requirement

Rule: All courses are required

Course	Credits
BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Digital Marketing Certification

Certificate of Art - Digital Marketing

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 3.0

Note: All students pursuing a Digital Marketing Certificate must also complete the degree requirements for one of the business majors.

The 3.0 GPA requirement pertains specifically to the 24 credits listed below, not a student's cumulative GPA. Please meet with a Digital Marketing Certificate advisor for assistance (see SoBA Advising for list of advisors by major).

Digital Marketing Certificate - Requirements

Rule: All courses are required

Course	Credits
BMIS 372 - Information Infrastructures	3 Credits
BMIS 373 - Business System Analy & Design	3 Credits
BMIS 478 - E Commerce a Managerl Prspctv	3 Credits
BMKT 342 - Marketing Research	3 Credits
BMKT 343 - Integrated Marketing Comm	3 Credits
BMKT 420 - Integrated Online Marketing	3 Credits

	BMKT 460 - Mktg Hi-Tech Prod & Innov	3 Credits
Minimum Required Grade: C-		21 Total Credits Required

Digital Marketing Certificate - Electives

Rule: Take 3 credits from the list below.

Course	Credits
BMIS 365 - Business App Development	3 Credits
BMIS 370 - Managing Information and Data	3 Credits
BMIS 479 - Introduction to Consulting	3 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
GPHY 284 - Intro to GIS and Cartography	3 Credits
MAR 101L - Intro to Media Arts	3 Credits
MAR 112A - Intro to Non-Linear Editing	3 Credits
MART 102 - Digital Technology in the Arts	3 Credits
MART 111A - Integrated Digital Art	3 Credits
MART 341 - Intro to Web Design	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Entertainment Management Certificate

Certificate of Art - Entertainment Management

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 3.0

Note: This certificate is open to all majors across campus.

The 3.0 GPA requirement pertains specifically to the 25 credits listed below, not a student's cumulative GPA.

Entertainment Management Certificate - Requirements

Rule: All courses are required

Course	Credits
BMGT 401 - Event Management	3 Credits
BMGT 402 - Prin of Entertainment Mgmt I	3 Credits
BMGT 403 - Prin of Entertainment Mgmt II	3 Credits
Minimum Required Grade: B	9 Total Credits Required

Entertainment Management Certificate - Electives

Rule: Take 9 credits from the list below.

Note: Up to 3 credits of BMGT 498 can count towards the 9 credits of electives.

BMGT 498 must be an entertainment-based internship to count towards the 9 credits of electives.

Course	Credits
BFIN 205 - Personal Finance	3 Credits
BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
BMGT 275 - Venue Management	3 Credits
BMGT 375 - Business of Film & Television	3 Credits
BMGT 420 - Leadership and Motivation	3 Credits
BMGT 474 - Entertainment Rsrch & Planning	3 Credits
BMGT 498 - Internship	1 To 6 Credits
BMIS 478 - E Commerce a Managerl Prspctv	3 Credits
BMKT 411 - Service/Relationship Marketing	3 Credits
BMKT 412 - Non Profit Marketing	3 Credits
BMKT 413 - Sports Marketing	3 Credits
BMKT 420 - Integrated Online Marketing	3 Credits
MAR 112A - Intro to Non-Linear Editing	3 Credits
MART 111A - Integrated Digital Art	3 Credits

	MUSI 132L - History of Rock & Roll	3 Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
Minimum Required Grade: B		9 Total Credits Required

Entrepreneurship Certificate

Certificate of Art - Entrepreneurship

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Note: All student pursuing a Certificate in Small Business & Entrepreneurship must also complete the degree requirements for one of the business majors.

The 2.0 GPA requirement pertains specifically to the 15 credits listed below, not a student's cumulative GPA.

Entrepreneurship Certificate - Requirements

Rule: All courses are required

Note: Students must take 3 credits of BMGT 458 to earn the Entrepreneurship Certificate.

Students must complete a 498 internship course with an entrepreneurial venture.

—	Course	Credits
	BMGT 458 - Advanced Entrepreneurship	1 Credits
	BMGT 486 - Strategic Venture Management	3 Credits
	BMGT 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-		9 Total Credits Required

Entrepreneurship Certificate - Electives

Rule: Take 6 credits from the list below

—	Course	Credits
	BFIN 301 - Analysis of Finan Statements	3 Credits
	BMGT 420 - Leadership and Motivation	3 Credits

	BMIS 478 - E Commerce a Managerl Prspctv	3 Credits
	BMKT 337 - Consumer Behavior	3 Credits
	BMKT 342 - Marketing Research	3 Credits
	BMKT 343 - Integrated Marketing Comm	3 Credits
	BMKT 460 - Mktg Hi-Tech Prod & Innov	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Sustainable Business Strategy

Certificate of Art - Sustainable Business Strategy

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 12

Required Cumulative GPA: 3.0

Note: In addition to the above requirements, students are required to complete the following:

- Meet with a SBSC certificate advisor;
- After completion of the two required courses, complete one "hands-on" experience to learn to apply and to demonstrate proficiency with sustainable business strategies and tools, as approved by the SBSC advisor (either an internships/service learning experience or case writing/submission; and
- Attend and complete an assignment on two speaker presentations on topics relating to Sustainability & Business as approved by the SBSC advisor.

Please meet with an SBSC advisor for assistance (see SoBA Advising for list of advisors by major).

SBSC Required Courses

Rule: All courses are required

Course	Credits
BGEN 445 - Sustainability Reporting	3 Credits
BMGT 410 - Sustainable Business Practices	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

SBSC Elective Courses

Rule: Must choose 2

Note: Note: Only 3 credits of BMGT 493 - International Experience can count towards the 6 required elective credits for the SBSC. BMGT 493 must be approved through SBSC advisor as having a focus on sustainability issues.

—	Course	Credits
	BMGT 493 - International Experience	1 To 6 Credits
	ECNS 445 - Int Env Econ & Clim Change	3 Credits
	ENST 367 - Envr Politics & Policies	3 Credits
	ENST 487 - Globalization, Justice & Envir	3 Credits
	GEO 482 - Global Change	3 Credits
	NRSM 408 - Global Cycles and Climate	3 Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 475 - Environment & Development	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Management B.S.

Bachelor of Science - Management

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 77

Required Cumulative GPA: 2.0

Note: At least 51 credits must be earned in Business classes (ECNS courses may be counted in OR out of Business).

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

At least 26 credits in business must be taken at UM.

SoBA - Lower Core

Rule: All courses are required

Note: All requirements must be completed with a "C" or better for admission into an upper-division Business Major

—	Course	Credits

	ACTG 201 - Principles of Fin Acct	3 Credits
	ACTG 202 - Principles of Mang Acct	3 Credits
	BGEN 235 - Business Law	3 Credits
	BMIS 270 - MIS Foundations for Business	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C		31 Total Credits Required

SoBA Math Requirement

Rule: Students choose one or the other to fulfill their math requirement

Note: A student must take either M 115 or M 162, despite what he or she earns on the ALEKS Math Placement Exam. SoBA requires that credit be earned for one of the above math courses.

All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA - Upper Core

Rule: All courses are required

Note: All upper-core courses must be completed before the capstones can be taken.

Take BMGT 340 in the first semester in the upper-division major as it is a prerequisite course for the Management Major.

—	Course	Credits
	BFIN 322 - Business Finance	3 Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits

	BMGT 322 - Operations Management	3 Credits
	BMGT 340 - Mgmt & Organization Behavior	3 Credits
	BMKT 325 - Principles of Marketing	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Management Major - Requirements

Rule: All courses are required

—	Course	Credits
	BGEN 360 - International Business	3 Credits
	BMGT 420 - Leadership and Motivation	3 Credits
	BMGT 426 - Strategic Management	3 Credits
	BMGT 444 - Management Communications	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Management Major - Electives

Rule: Take 12 credits from the list below.

Note: Up to 3 credits of BMGT 458 can count towards the 12 credit elective requirement.

Up to 6 credits of BMGT 491 can count towards the 12 credit elective requirement.

Up to 6 credits of BMGT 493 can count towards the 12 credit elective requirement.

Up to 6 credits of BMGT 494 can count towards the 12 credit elective requirement.

Up to 3 credits of BMGT 498 can count towards the 12 credit elective requirement

—	Course	Credits
	BMGT 401 - Event Management	3 Credits
	BMGT 402 - Prin of Entertainment Mgmt I	3 Credits
	BMGT 403 - Prin of Entertainment Mgmt II	3 Credits
	BMGT 410 - Sustainable Business Practices	3 Credits
	BMGT 430 - Business Negotiations	3 Credits
	BMGT 458 - Advanced Entrepreneurship	1 Credits
	BMGT 480 - Cross-Cultural Mgmt	3 Credits
	BMGT 491 - Special Topics	1 To 9 Credits

	BMGT 493 - International Experience	1 To 6 Credits
	BMGT 494 - Seminar/Workshop	1 To 6 Credits
	BMGT 498 - Internship	1 To 6 Credits
	COMX 415 - Intercultural Communication	3 Credits
	ECNS 312 - Labor Economics	3 Credits
	PSCI 462 - Human Resource Management	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

SoBA - Capstone Courses

Rule: All courses are required; BMGT 486 and BGEN 499 are co requisite courses and must be taken together

Note: Students must have an approved graduation application to register for their capstones.

—	Course	Credits
	BGEN 499 - Integrated Business Simulation	1 To 9 Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

SoBA Upper-Division Writing Requirement

Rule: All courses are required

—	Course	Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

SoBA Symbolic Systems Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C		4 Total Credits Required

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Social Science Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Ethical & Human Values Requirement

Rule: All courses are required

—	Course	Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Management Information Systems Department

Lee Tangedahl, Chair

The Department of Management Information Systems offers a major in Management Information Systems within the Bachelor of Science in Business Administration.

Management Information Systems Major

The management information systems curriculum prepares students to manage an organization's information resources. The major focuses on:

- 1) analyzing and managing the flows of information within and across the organization's business processes;
- 2) effectively managing the acquisition and utilization of information technology; and
- 3) using both information and information technology to enhance the organization's strategic advantage.

The knowledge and skills developed in the curriculum lead to careers in consulting, programming, systems analysis and design, database administration, electronic commerce, telecommunications, network administration, big data and project management.

Business Finance

- **BFIN 267 - Real Estate Theory and Law**

Credits: 4. Offered intermittently through UM Dept. of Continuing Education. Introduction to the theory and legal issues involved in a real estate transaction.

Business: General

- **BGEN 105S - Introduction to Business**

Credits: 3. Offered every term. Nature of business enterprise; role of business in society; problems confronting business management; career opportunities in business. Open to non-business majors and business majors of freshman or sophomore standing only. Business majors are advised to register for the course their freshman year. Credit allowed for only one of BGEN 105S, MIS 100S, IS 100S, BADM 100S and BUS 103S. **Course Attributes:** Social Sciences Course

- **BGEN 220E - Business Ethics and Social Responsibility**

Credits: 3. Offered autumn and spring. Focuses on moral judgments, responsibilities to society and their impact on decision making, with particular emphasis on business ethics and values. Addresses organizations and their relationship to the external environment, the law, and various stakeholders. **Course Attributes:** Ethical & Human Values Course

- **BGEN 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BGEN 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **BGEN 361 - Principles of Business Law**

Credits: 3. Offered autumn and spring. Prereq., junior major or minor in business. This course examines law as it applies to business transactions. Topics include the nature and sources of law; courts and procedure; contracts, employment; Uniform Commercial Code; property; environmental; business organizations; tort liability; insurance; consumer and creditor protection; bankruptcy; criminal law; and agency law. Credit not allowed for more than one of BGEN 235, BGEN 361 and BADM 257.

- **BGEN 499 - Integrated Business Simulation**

Credits: 1. Prereq., senior standing in Business, all business core. Co-req., BMGT 486. Students will operate a virtual business in a simulation, aiding in the integration of cumulative business knowledge, analytical processing, and ethical awareness.

Business: Management

- **BMGT 322 - Operations Management**

Credits: 3. Offered every term. Prereq., junior major in Business, CSCI 172 with a C or better. A survey of the processes that organizations, public or private, use to produce goods and services. Includes management science topics.

- **BMGT 453 - Manuf. Planning & Control Sys**

Credits: 3. Offered intermittently. Prereq., BMGT 322, junior standing in Business, or consent of instr. Principles and techniques of production scheduling and inventory control. Systems for setting strategic and tactical objectives, accomplishing detailed material and capacity plans, and

establishing and executing shop floor priorities.

Business: Management Info Sys

- **BMIS 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **BMIS 192 - Independent Study**
Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **BMIS 270 - MIS Foundations for Business**
Credits: 3. Offered every term. Prereq., WRIT 101 with a C or better. Introduces the development, use, and management of computer-based information systems.
- **BMIS 292 - Independent Study**
Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **BMIS 298 - Internship**
Credits: 1 TO 3. (R-3) Offered every term. Extended classroom experience which provides practical application of classroom learning during placements within the business community. The student must complete a learning agreement with a faculty member, relating the placement opportunity to his or her field of study. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6
- **BMIS 326 - Introduction to Data Analytics**
Credits: 3. Prereq., College-level statistics. This course introduces the terminology and application of big data and data analytics. Students will complete cases in a variety of disciplines as they become acquainted with some of the software, tools, and techniques of data analytics.
- **BMIS 365 - Business App Development**
Credits: 3. Offered autumn and spring. Prereq., junior standing in Business. Provides an understanding of algorithm development, programming, computer concepts and the design and application of data and file structures.
- **BMIS 370 - Managing Information and Data**
Credits: 3. Offered autumn and spring. Prereq., junior standing in Business and BMIS 365. Managing and exploiting organizational data and information. Designing data and information models.
- **BMIS 372 - Information Infrastructures**
Credits: 3. Offered spring. Prereq., junior standing in Business. Explores the evolution of technological infrastructures with an emphasis on strategic implications. Students develop an enterprise infrastructure and then examine innovations that allow for the design and development of products and services in a global business environment.
- **BMIS 373 - Business System Analy & Design**
Credits: 3. Offered autumn. Prereq., junior standing in Business. Provides an understanding of the systems development and modification process, including requirements determination, logical design, physical design, test planning, implementation planning and performance evaluation.
- **BMIS 391 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time

offerings of current topics.

- **BMIS 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **BMIS 394 - Undergraduate Seminar**

Credits: 1 TO 3. (R-3) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **BMIS 465 - Introduction to Real-time Data Analytics**

Credits: 3. Offered intermittently. Prereq., STAT 216, BMIS 365 or equivalents. Focuses on analyzing big data in motion using commercially available software.

- **BMIS 471 - Fund of Network Management**

Credits: 3. Offered intermittently. Prereq., junior standing in Business. Current topics will focus on the design, installation, configuration, and operation of local area networks. Includes a hands-on lab to demonstrate the concepts.

- **BMIS 472 - Advanced Network Management**

Credits: 3. Offered intermittently. Prereq., junior standing in Business, BMIS 372, and BMIS 471. Focuses on network security, directory services, and network infrastructure. Includes a hands-on lab to demonstrate the concepts.

- **BMIS 476 - Integrated Project Mgmt for IS**

Credits: 3. Offered every term Prereq., junior standing in Business and BMIS 365, 370, and 373. Emphasis on project planning, team selection models, and project management techniques. A software package is used to demonstrate how projects are planned, managed, monitored, and controlled.

- **BMIS 478 - E Commerce a Managerl Prspctv**

Credits: 3. Offered intermittently. Prereq., junior standing in Business. Focuses on the capabilities of the Internet to support and enable commerce. Provides a managerial perspective on topics including effective web site design, emerging technologies, business models, infrastructure architectures, and security.

- **BMIS 479 - Introduction to Consulting**

Credits: 3. Offered intermittently. Prereq., junior standing in Business. Managerial approach to consulting engagements. Includes scoping and writing proposals, presenting to clients, documenting consulting work, and interpersonal skills necessary for successful consulting. Course does not require a technical background.

- **BMIS 482 - Big Data Project**

Credits: 3. Offered spring. Prereq., BMIS 326 and any 2 electives listed in part 4 of the Big Data Analytics Certificate, or consent of instructor. Students will work in cross-disciplinary teams to complete big data projects from different disciplines. There will be emphasis on agile project management.

- **BMIS 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., junior standing in Business or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BMIS 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., junior standing in Business and consent of instr.

- **BMIS 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing in Business and consent of instr.

- **BMIS 495 - Practicum: Information Systems**
 Credits: 3. Offered every term. Prereq., junior standing in Business and consent of instr. Practical hands-on experience with area organizations. Provides application of classroom learning. **Course Attributes:** Internships/Practicums
- **BMIS 498 - Internship**
 Credits: 1 TO 6. R-6) Offered every term. Prereq., junior standing in Business and consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
 Internship graduation limit 6
- **BMIS 541 - Systems & Operations**
 Credits: 3. Online course. Offered spring. Prereq., admission to M.B.A. or M-Acct. program or graduate standing with consent of graduate business program director; grade of B or better in BMKT 560. Design and use of information systems to meet the tactical and strategic needs of an enterprise, particularly within the operations function. Topics include systems analysis, data and process modeling, database designs, manufacturing planning and control, forecasting, and quality management. Level: Graduate
- **BMIS 571 - Enterprise Modeling**
 Credits: 2. Offered intermittently. Prereq., graduate standing. Explores knowledge management systems, data warehouses, data mining, ERP, SANS, and data distribution. Focuses on management; does not require a technical background. Level: Graduate
- **BMIS 572 - IT Strategy and Leadership**
 Credits: 2. Offered intermittently. Prereq., graduate standing. Explores how alignment of IT infrastructure and capabilities can achieve competitive advantage with an industry. Includes the role of IT management in leading change, managing decisions and integrating information systems across the organization. Focuses on management; does not require a technical background. Level: Graduate
- **BMIS 573 - Business Processes & Security**
 Credits: 2. Offered intermittently. Prereq., graduate standing. Analyzes business processes and the security challenges created from the emergence of new technology. Includes the effect of legal, regulatory and security technology on policy development. Focuses on management; does not require a technical background. Level: Graduate
- **BMIS 575 - Fundamentals of Consulting**
 Credits: 2. Offered spring. Prereq., graduate standing. The technical, interpersonal, and consulting skills necessary to effectively work with clients. Focuses on management; does not require a technical background. Level: Graduate
- **BMIS 650 - Quantitative Analysis**
 Credits: 2. Offered spring. Prereq., admission to the M.B.A. or M-Acct. programs. Quantitative methods supporting managerial decision-making. Theory and logic underlying such methods as linear programming and simulation. Solution of complex problems and practice of interpersonal skills in team projects. Level: Graduate
- **BMIS 674 - Mgmt of Information Systems**
 Credits: 2. Offered autumn. Prereq., admission to the M.B.A. or M-Acct. program. The tactical/operational responsibilities and roles of the CIO. Includes governance issues, supporting the learning organization, managing the technologies, and managing the development of systems. Focuses on management; does not require a technical background. Level: Graduate

- **MIS 260 - Life and Health Insurance**
Credits: 3. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of life and health insurance as well as the legal and regulatory environment for each industry.
- **MIS 261 - Life Insurance**
Credits: 1. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of life insurance as well as the life insurance industry's legal and regulatory environment.
- **MIS 262 - Health Insurance**
Credits: 1. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of health insurance as well as the health insurance industry's legal and regulatory environment.
- **MIS 263 - Property and Casualty Ins.**
Credits: 3. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of property insurance as well as the property insurance industry's legal and regulatory environment.
- **MIS 264 - Property Insurance**
Credits: 1. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of property insurance as well as the property insurance industry's legal and regulatory environment.
- **MIS 265 - Casualty Insurance**
Credits: 1. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of casualty insurance as well as the casualty insurance industry's legal and regulatory environment.
- **MIS 266 - Personal Lines Insurance**
Credits: 1. Offered intermittently through School of Extended and Lifelong Learning (formerly Continuing Education). Introduction to the principles of personal lines insurance as well as the personal lines insurance industry's legal and regulatory environment.

Management Information Systems B.S.

Bachelor of Science - Management Information Systems

School of Business Admin

Catalog Year: 2014-2015

Degree Specific Credits: 77

Required Cumulative GPA: 2.0

Note: At least 51 credits must be earned in Business classes (ECNS courses may be counted in OR out of Business).

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

At least 26 credits in business AND BMIS 476 must be taken at UM.

SoBA - Lower Core

Rule: All courses are required

Note: All requirements must be completed with a "C" or better for admission into an upper-division Business Major

—	Course	Credits
	ACTG 201 - Principles of Fin Acct	3 Credits
	ACTG 202 - Principles of Mang Acct	3 Credits
	BGEN 235 - Business Law	3 Credits
	BMIS 270 - MIS Foundations for Business	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C		31 Total Credits Required

SoBA Math Requirement

Rule: Students choose one or the other to fulfill their math requirement

Note: A student must take either M 115 or M 162, despite what he or she earns on the ALEKS Math Placement Exam. SoBA requires that credit be earned for one of the above math courses.

All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA - Upper Core

Rule: All courses are required

Note: All upper-core courses must be completed before the capstones can be taken.

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Course	Credits
BFIN 322 - Business Finance	3 Credits
BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
BMGT 322 - Operations Management	3 Credits
BMGT 340 - Mgmt & Organization Behavior	3 Credits
BMKT 325 - Principles of Marketing	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Management Information Systems - Requirements

Rule: All courses are required

Note: BMIS 365, BMIS 370, and BMIS 476 must be taken at UM.
3 credits of BMIS 498 are required to graduate.

Course	Credits
BMIS 365 - Business App Development	3 Credits
BMIS 370 - Managing Information and Data	3 Credits
BMIS 372 - Information Infrastructures	3 Credits
BMIS 373 - Business System Analy & Design	3 Credits
BMIS 476 - Integrated Project Mgmt for IS	3 Credits
BMIS 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-	18 Total Credits Required

Management Information Systems - Electives

Rule: Take 6 credits from the list below.

Note: Students can also take any upper-division computer science course to count towards the 6 credits of electives

Students taking ACTG 321 for an elective must also take the ACTG 203 co requisite course.

Course	Credits
ACTG 321 - Acct Information Systems I	3 Credits
BMIS 465 - Real-Time Data Analytics	3 Credits
BMIS 471 - Fund of Network Management	3 Credits

	BMIS 472 - Advanced Network Management	3 Credits
	BMIS 478 - E Commerce a Managerl Prspctv	3 Credits
	BMIS 479 - Introduction to Consulting	3 Credits
	BMIS 491 - Special Topics	1 To 9 Credits
	BMIS 492 - Independent Study	1 To 6 Credits
	BMKT 460 - Mktg Hi-Tech Prod & Innov	3 Credits
	C&I 341 - Information Managemnt & Design	3 Credits
	CSCI 181 - Web Design and Programming	3 Credits
	EDU 472 - Dev Digital Rich Workplace	3 Credits
	M 361 - Discrete Optimization	3 Credits
	M 362 - Linear Optimization	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

SoBA - Capstone Courses

Rule: All courses are required; BMGT 486 and BGEN 499 are co requisite courses and must be taken together

Note: Students must have an approved graduation application to register for their capstones.

—	Course	Credits
	BGEN 499 - Integrated Business Simulation	1 To 9 Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

SoBA Upper-Division Writing Requirement

Rule: All courses are required

—	Course	Credits
	BMGT 486 - Strategic Venture Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

SoBA Symbolic Systems Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C		4 Total Credits Required

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Social Science Requirement

Rule: All courses are required

Note: All SoBA lower-core requirements must be completed with a C or better for a student to be permitted into an upper-division SoBA major.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C		3 Total Credits Required

SoBA Ethical & Human Values Requirement

Rule: All courses are required

—	Course	Credits
	BGEN 320E - Bus Ethics & Soc Responsibility	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

James McKusick, Dean

The Davidson Honors College is a campus-wide association of faculty and students united by a common concern for academic and personal excellence. Its mission is to foster intellectual and civic values, and to support the best possible teaching and learning circumstances for participating faculty and students.

The College offers an academic and social home to talented and motivated students as they pursue their undergraduate education. Students from all major areas in the College of Humanities and Sciences and the professional schools are welcome, as well as students who are undecided about a major. Honors is not a major in itself, but an enhancement to General Education in the liberal arts and sciences as well as to virtually all undergraduate majors on campus.

The Honors College building, at the center of the campus, provides a large student lounge, study rooms, classrooms and a computer center for student use. The Honors Student Association plans and conducts a variety of social and academic activities as well as community service projects throughout the year. Special Honors residence hall floors and living units are available.

The Davidson Honors College also sponsors the University of Montana Office for Civic Engagement, an office that coordinates student service activities in the community and beyond, and supports the integration of community service experience into the academic curriculum.

»Curriculum

In accordance with our mission, the DHC is committed to offering students the additional resources, challenges, and encouragement to be active and collaborative learners. DHC students are expected to:

- be intellectually curious;
- develop skills in critical thinking, analytic reasoning, and problem solving;
- increase their abilities to write and speak effectively;
- acquire skills and habits of community and public service;
- develop research and life-long learning skills and habits.

Honors students are expected to pursue these student learning outcomes inside the classroom and out, in their work and their recreation, volunteer service, membership in clubs and organizations, participation in campus and civic governance, independent study, pursuit of their hobbies and interests, and formal course work.

Honors courses are limited in enrollment to 20 students and usually are conducted in a discussion or seminar format. They emphasize critical thinking, the development of written and oral communication skills, direct contact with the faculty, and use of original texts or "hands-on," participatory experience. These courses are taught by outstanding faculty selected according to their department's standards of excellence. Course offerings vary somewhat and represent many academic departments and subject areas. Honors courses often fulfill General Education and many common major requirements.

At the junior and senior level students are offered a selection of Honors seminars. These seminars are open to students from all disciplines. The aim of these seminars is to assist students in applying different methods of inquiry and research, in using the insights of various disciplines, in integrating the students' knowledge, and in developing well-informed personal stances toward the material and issues studied.

In their senior year, students complete an Honors thesis or research project, assuming responsibility, together with a faculty mentor, for an original scholarly research or creative project. This project may coincide with a departmental requirement, and is intended to prepare students to fulfill roles of intellectual, moral, and cultural leadership as they realize their places in society.

»Assessment of Personal and Academic Goals

A college education invites students to formulate goals and reflect on their progress toward attaining them. Davidson Honors College students are responsible for evaluating their aims and attainments from year to year in collaboration with an advisor. Entering students are asked to assess their abilities and resources and begin to formulate interests and aims in light of the student learning outcomes mentioned previously.

Requirements

Davidson Honors College students are required to complete a minimum of seven Honors courses, including HONR 121L and a senior Honors research project (which may be counted as one Honors course). An Honors section of *Introduction to Humanities*, LSH 151L or LSH 152L, may be counted as equivalent to HONR 121L. HONR 120, *Introduction to Honors*, also is required of all first-year students. As this is a one-credit course, it does not count toward the seven Honors courses required to graduate. Details are available in the Davidson Honors College office or on the DHC web site at www.dhc.umt.edu.

It also is recommended that all students include in their curriculum at least one course or independent study project that includes an experience of volunteer community service or study abroad.

To maintain good standing in the Davidson Honors College, students must take at least one Honors course per year and maintain an overall cumulative grade point average of 3.0 or above. Academic progress is reviewed each semester. Students whose grades are below the 3.0 standard are given an academic warning. A student whose cumulative grade point average falls below 3.0 is placed on academic probation and remains in this status until the cumulative grade point average rises to 3.0 or higher. Suspension from the Honors College occurs when the term grade point average of a student on probation is below 3.0. A suspended student may be reinstated when the cumulative grade point average rises to 3.0 or higher.

Graduation through the Davidson Honors College requires a cumulative grade point average of 3.0 or higher, and 3.4 in the major field. Upon successful completion of the requirements, students will receive their bachelor degrees as "University Scholars" in their respective majors and have this distinction noted on their diplomas. Graduation through the Davidson Honors College is not connected with the distinctions "with honors" and "with high honors" bestowed on the recommendation of major departments according to certain grade point averages and/or on the basis of exams or other means of assessment in the senior year.

Scholarships

The Davidson Honors College administers the Presidential Leadership Scholarships for incoming freshmen, and several other scholarship programs for currently enrolled students. For further information about these scholarship programs, contact the Honors College. Honors students and those transferring from other institutions are eligible for the general scholarship program. For further information, contact the Financial Aid Office. The Honors College also coordinates University of Montana participation in the National Merit Scholarship program. Four-year awards are available to National Merit finalists and semi-finalists who have indicated UM as their first choice for attending college. Interested students should contact the Honors College for details as soon as they know their status in the competition.

»Admission to the DHC

Students applying to the Davidson Honors College should show evidence of academic talent and motivation. Generally, a minimum high school GPA of 3.5 is expected, as well as an ACT score of 27 or higher, or SAT combined score of 1800. These criteria are not absolute, and highly motivated students are encouraged to apply.

Applications are particularly welcomed from older or non-traditional students and students from varied racial and ethnic backgrounds. College transfer students with a record of strong academic performance (GPA of 3.5 or higher) also are welcome to apply. *The Davidson Honors College Application for Admission* must be postmarked or submitted online by December 31. Note that all applicants to the Davidson Honors College also must complete a separate application for admission to the University of Montana-Missoula.

Presidential Leadership Scholarships

The Presidential Leadership Scholarships are the University of Montana's premier academic scholarships, recognizing outstanding talent, academic performance, leadership, and contribution to the community. These awards are renewable for four years, subject to satisfactory performance by the student. Each scholarship includes a full or partial tuition waiver, the value of which varies according to the amount of tuition each year.

Eligible candidates for the Presidential Leadership Scholarship must be recent high school graduates who have not previously enrolled as a regular college or university student. Recent finalists for the Presidential Leadership Scholarship posted an average of 3.98 GPA, SAT combined score of 2100, and ACT composite score of 32.

All Davidson Honors College applications for admission received by December 31 of each year will be considered for the Presidential Leadership Scholarship.

Contact:
The Davidson Honors College
University of Montana
Missoula, MT 59812
Phone: (406) 243-2541
e-mail: dhc@umontana.edu
web site: www.dhc.umt.edu

Department Faculty

Professors

Brock Tessman, Dean, Davidson Honors College

College of Education and Human Sciences

Roberta D. Evans, Dean
Susan Harper-Whalen, Associate Dean

The Phyllis J. Washington College of Education and Human Sciences is comprised of five academic departments—Communicative Sciences and Disorders, Counselor Education, Curriculum and Instruction, Educational Leadership, and Health and Human Performance. It is also the home for the Institute for Educational Research and Service (IERS).

Mission: The College of Education and Human Sciences shapes professional practices that contribute to the development of human potential. We are individuals in a community of lifelong learners, guided by respect for knowledge, human dignity, and ethical behavior. We work together producing and disseminating knowledge to advance the physical, emotional, and intellectual health of a diverse society.

The College of Education and Human Sciences coordinates the University of Montana Professional Education Unit, a unit comprised of initial teacher preparation at the elementary and secondary levels, and the advanced preparation of teachers, certified speech-language pathologists, educational leaders, school counselors, and school psychologists. The Department of Communicative Sciences and Disorders prepares professionals at the master's level in speech-language pathology. The Departments of Curriculum and Instruction, Educational Leadership and Counseling Education prepare professionals for careers in education with bachelor, master's, Education Specialist and Doctor of Education programs while the School Psychology Program, housed in the Psychology Department in the College of Humanities and Sciences, prepares students for careers in education with its master's, education specialist, and doctoral degrees. These programs are organized to foster the development of learning communities and incorporate three basic themes: integration of knowledge and experience; cooperation among participants; and inclusiveness, caring, and respect for others. The Professional Education Unit at the University of Montana is accredited by the National Council for Accreditation of Teacher Education (NCATE), <http://www.ncate.org>.

The Communicative Sciences and Disorders, Counselor Education, and Health and Human Performance Departments all prepare professionals for careers in human service professions. Via its bachelor's degree in Communicative Disorders, the Communicative Sciences and Disorders Department prepares graduates qualified to work as clinical aides in speech-language pathology or audiology. Through its master's program in Speech-Language Pathology, the department produces professional students qualified to work as speech-language pathologists in schools and clinical settings. Students pursuing the Master of Arts in Counselor Education are prepared to work in a variety of community/agency settings. Upon completion of the program, graduates are prepared to sit for the Licensed Practical Counselor or Licensed Practical Clinical Counselor examination. Via its Bachelor and Master of Science degrees, the Department of Health and Human Performance prepares students in the areas of community health, athletic training, exercise science, and health enhancement. The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education.

Central to its research and outreach efforts with P/K-12 schools, the College of Education and Human Sciences' Institute for Educational Research and Service (IERS) designs, evaluates, and disseminates programs that support the well-being of students and communities. Since 1957, IERS has collaborated with numerous local, state, national, and federal organizations to provide effective, data-driven research models that enhance the social development and academic achievement of all learners. Externally sponsored teaching, research, and service activities are central to IERS. In addition, the College of Education and Human Sciences supports a Preschool Laboratories, Preschool Program, Health and Human Performance Laboratory and Technology Resource Center. These programs offer enhanced opportunities for student involvement and learning.

Specific program options within the College of Education and Human Sciences are described below and in the various departmental sections of this catalog. The web address for the college is <http://www.coehs.umt.edu>

Name	Minor	Certificate	Associate	Bachelor
<u>Administrative System Mgmt</u>	<u>Requirements</u>			
<u>Commun Sci & Disorders</u>				<u>Requirements</u>
<u>Education</u>				<u>Requirements</u>
<u>Health & Human Performance</u>				<u>Requirements</u>
<u>Secondary Certification</u>				

Communicative Science and Disorders Department

Amy Glaspey, Chair

The Bachelor of Arts Degree in Communicative Sciences and Disorders prepares students for graduate study in speech-language pathology, audiology, various education specialties, business, and health care as well as such fields as developmental and cognitive psychology. The Master of Science degree in Speech Language Pathology provides students with the foundational knowledge and clinical skills in the field of speech language pathology to work in medical and educational settings with clients across the life span.

Department Faculty

Professor

Al Yonovitz, Professor / Audiologist

Associate Professor

Amy Glaspey, Department Chair / Associate Professor
 Lucy Hart Paulson, Associate Professor
 Julie Wolter, Graduate Program Director / Associate Professor

Assistant Professor

Ginger Collins, Assistant Professor
 Christine Merriman, Director of Clinical Education
 Catherine Off, Assistant Professor
 Jennifer Schoffer Closson, Clinic Director / Assistant Professor
 Laurie Slovarp, Ph.D., Assistant Professor

Adjunct

Julie Doerner, CSD Adjunct Instructor; Rural Instit MonTECH Clinical Coord
Nancy Dold, Adjunct Assistant Professor
Megan Eandi, Clinical Educator
Dana Fitz Gale, Adjunct Assistant Professor
Jenna Griffin, Clinical Educator / Adjunct Asst Professor
RoseMary Johnson, Adjunct Assistant Professor
Mary Morrison, CSD Adjunct Instructor; Rural Instit PEPNET Director
Jessica Reynolds

Course Descriptions

Biology-Human

- **BIOH 330 - Anat & Phys Speech Mech**

Credits: 3. Offered autumn. Introduction to anatomy and physiology of the speech and hearing mechanisms including the anatomical orientation and embryological development, the breathing mechanism, structures of phonation, articulators, audition and the nervous system.

Communicative Sci & Disorders

- **CSD 110 - The Field of CSD**

Credits: 3. Offered autumn. Introduction to the scientific study of human communication and its disorders and to the professions of Speech-Language Pathology and Audiology. Overview of biological systems of speech, language, and hearing and the nature and treatment of communication disorders.

- **CSD 131 - American Sign Language I**

Credits: 3. Offered autumn. Introduces the fundamentals of American Sign Language (ASL) used by the Deaf Community, including basic vocabulary, syntax, fingerspelling, and grammatical non-manual signals. Focuses on basic expressive and receptive competence. In addition, the course provides a survey of various issues raised by examining ASL and the Deaf community. **Course Attributes:** Foreign Language Requirement

- **CSD 132 - American Sign Language II**

Credits: 3. Offered spring. Prereq., CSD 131. ASL II emphasizes further development of receptive and expressive skills; use of signing space; further use of non-manual components of ASL grammar including facial expression and body postures, and introduction to conversational regulators. Discussion of regional and ethnic sign variations, and social, political and educational institutions of the Deaf community. Interaction with members of the Deaf community in both directed and non-directed activities will be featured. **Course Attributes:** Foreign Language Requirement

- **CSD 210 - Speech & Lang Devel**

Credits: 3. Offered autumn. Sophomore standing or greater. Topics include typical speech and language development, phonology, semantic, morphological, syntax, and pragmatics, along with individual differences, second language acquisition and literacy.

- **CSD 221N - Fundamentals of Acoustics**

Credits: 3. Offered spring. Provides students with a basic and working knowledge of acoustics and the physics of sound. Provides the basis for measurement and description of speech stimuli. Direct application to Speech Hearing and Language intervention as well as application into communicative sciences. **Course Attributes:** Natural Science Lab Course
Natural Science Course

- **CSD 222 - Intro to Audiology**

Credits: 3. Offered autumn. Introduction to principles of acoustics as a basis for understanding hearing assessment. Development of ability to interpret audiograms as well as the results from a hearing evaluation. Includes pure tone and speech audiometry, acoustic immittance and reflex testing. Hearing screening procedures are also included.

- **CSD 320 - Phono Devel & Phonetics**

Credits: 3. Offered autumn. Prereq., CSD 210. Exploration of the sounds and sound structure of American English and some of its dialects. Introduction to the theory and practice of phonetic and phonological analysis and trained in the transcription of speech into the International Phonetic Alphabet.

- **CSD 345 - Developmental Speech & Language Disorders**

Credits: 3. Offered spring. Prereq., CSD 210, CSD 320. Nature of developmental speech and language disorders and basic understanding of principles underlying assessment and treatment of these disorders.

- **CSD 365 - Acquired Speech and Language Disorders**

Credits: 3. Offered spring. Prereq., CSD 210, CSD 320. Identification, assessment, and intervention for a variety acquired speech and language disorders. Other topics include secondary conditions, potential psychosocial and educational concerns, multicultural considerations, and family roles.

- **CSD 405 - The Clinical Process**

Credits: 3. Offered spring. Prereq., CSD 210, CSD 222, CSD 320, CSD 340, CSD 360. The underlying principles of clinical methods and practice including: the observation of human behavior and clinical processes, assessment of communication differences, clinical management of these differences, delays and disorders, behavior, interviewing/counseling, lesson planning, and writing skills.

- **CSD 411 - Neuroanatomy & Physiology**

Credits: 3. Offered spring. Prereq., BIOH 330. Focused study on the anatomy of the nervous system and how the nervous system supports behaviors inherent to communication. Students will be introduced to anatomical terms, structures, and functions. Clinical implications will be discussed as well.

- **CSD 420 - Speech Science**

Credits: 3. Offered spring. Prereq., CSD 222, CSD 320, BIOH 330. Physiologic, neurologic, and acoustic aspects of human communication, theoretical framework for speech science, and principles of acoustics applied to speech pathology.

- **CSD 430 - Senior Capstone**

Credits: 3. Offered autumn. Prereq., senior status. Part one of a two course sequence where the student completes an independent project. Students will prepare a literature review, and ethics application, and a proposal in preparation for a major research project of their design. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **CSD 450 - Intro to Aural Rehabilitation**

Credits: 3. Offered spring. Prereq., CSD 210, CSD 222, CSD 340, & CSD 360 or graduate standing. Fundamental skills in speech reading, various types of hearing aids, and the tools necessary to assess and implement auditory training. Management of the client with hearing impairment including psycho-social development and educational intervention. Both children and adults are included.

- **CSD 470 - Clinical Observation**

Credits: 2. Offered spring. Prereq., CSD 320, CSD 330, CSD 340, CSD 360. Complete clinical observation guides to fulfill ASHA Standard IV-C by viewing live and recorded treatment and diagnostic sessions under the guidance of speech-language pathologist who holds the certificate of clinical competence.

- **CSD 480 - Multicultural Issues**

Credits: 3. Offered autumn. Prereq., CSD 210, CSD 222, CSD 320, CSD 340, CSD 360. Topics include: dynamics of community and culture; strategies to communicate with people from a variety of backgrounds; learning English as a second language; phonological and linguistic analysis of differences between Standard English speakers and culturally diverse populations and international differences in service delivery.

- **CSD 490 - Undergrad Clin Practicum**

Credits: 1 TO 3. 1-3 cr. (per semester). Prereq., lower division CSD courses and consent of CSD Clinical Director. A maximum of 5 credits of clinical practicum may count toward graduation. Allows the advanced student an opportunity to pursue independent or small group clinical practicum. Students will be directly supervised by a certified speech and language pathologist or audiologist.

Course Attributes: Internships/Practicums

- **CSD 491 - Special Topics**

Credits: 1 TO 3. (R-6) Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CSD 498 - Independent Research**

Credits: 1 TO 3. (R-6) Offered Autumn, Spring. Prereq., consent of the instructor. Participation in independent or instructor associated research activities. **Course Attributes:**

Internships/Practicums

- **CSD 520 - Artic & Phono Disorders**

Credits: 3. Offered Autumn. Prereq., Graduate standing and CSD 320, CSD 330, CSD 340 or equivalent course work. Theoretical perspectives on phonological and articulation disorders with emphasis on application to clinical management including evaluation, assessment techniques, and intervention strategies. Level: Graduate

- **CSD 525 - Prof. Iss. in Speech-Lang Path**

Credits: 3. Offered Spring. Prereq., Graduate standing, CSD 520, CSD 550, CSD 565. Discussion of contemporary issues in the field of speech-language pathology including assessment, intervention, prevention, and service delivery models. Level: Graduate

- **CSD 526 - Autism**

Credits: 3. Offered intermittently. Prereq. Graduate standing. Introduction to the disorder of autism through the lifespan as it impacts the scope and practice of speech and language pathologists. Course topics include: characteristics of ASD, screening and diagnostics tools and procedures, program planning/service delivery models, transition and advocacy, and recent research in speech-language pathology. Level: Graduate

- **CSD 530 - Voice & Motor Speech Disorders**

Credits: 4. Prereq., Graduate standing, CSD 330, 340, and 411, or equivalent course work. Study of anatomy, physiology, and pathology of voice. Diagnosis and management of voice and resonance disorders. Neural bases of normal and disordered speech motor control. Assessment and treatment of motor speech disorders. Level: Graduate

- **CSD 540 - Fluency Disorders**

Credits: 3. Offered Autumn. Prerequisites: Graduate standing and CSD 340 or equivalent course work. Theoretical, etiological, and developmental perspectives of fluency disorders. Principles of assessment and intervention, including integration of fluency shaping and stuttering modification techniques. Level: Graduate

- **CSD 545 - Augmentative & Alt. Comm.**

Credits: 3. Offered variable terms. Prereqs., graduate standing. Topics include: AAC terminology, design and use of multiple AAC devices (high and light tech), and implementation of treatment programs for individuals and communication partners. Level: Graduate

- **CSD 550 - Lang/Learn Dis.Yng Chld SERV**
 Credits: 3. Offered autumn. Prereq., Graduate standing and CSD 210 and CSD 360 or equivalent course work. Theoretical perspectives, research, and clinical issues concerning disorders of language in infants, toddlers and preschoolers considering contributing factors, special populations and basic assessment and intervention principles. Level: Graduate **Course Attributes:** Service Learning
- **CSD 560 - Lang/Learn Dis.Schl Age SERV**
 Credits: 3. Offered spring. Prereq., graduate standing and CSD 210 and CSD 360 or equivalent course work. Theoretical perspectives, research, and clinical issues concerning disorders of language, literacy, and learning in the school-age population (elementary through high school) considering contributing factors, special populations and basic assessment and intervention principles. Level: Graduate **Course Attributes:** Service Learning
- **CSD 563 - Schools**
 Credits: 3. Offered intermittently. Prereq., Graduate standing. Historical and current trends for speech-language services in the schools for clients birth to 21 years of age including: state and federal laws, the therapeutic needs of special populations, and the pre-referral, referral, assessment, and service delivery process. Level: Graduate
- **CSD 565 - Aphasia & Acquired Apraxia of Speech**
 Credits: 3. Offered autumn. Prereq., CSD 210, CSD 330, CSD 360, and CSD 411 or equivalent course work and graduate standing. Neural bases and medical etiologies of acquired apraxia of speech and acquired cognitive-linguistic disorders in adults. Evaluation and treatment of aphasia and apraxia of speech in persons with acquired neurologic disorders across successive stages of recovery. Incorporates models of rehabilitation across prevention, assessment, and treatment, with a focus on the WHO ICF and aspects of disability across diverse populations. Level: Graduate
- **CSD 566 - Acquired Cog-Com Disorders**
 Credits: 3. Offered intermittently. Prereq., Graduate standing, CSD 565 or equivalent course work. Assessment, treatment, and prevention of acquired cognitive-communication disorders including pediatric and adult traumatic brain injury (TBI) and mild traumatic brain injury (MTBI), right hemisphere syndrome (RHS), and dementia. Emphasis on neurobiological principles of rehabilitations, differential diagnosis and theories, and evidence-based research pertaining to clinical management. Level: Graduate
- **CSD 570 - Clinical Procedures I**
 Credits: 1. Offered autumn, summer; on campus only. Prereq., graduate standing, permission of clinical director. Co-convened with CSD 571. Study of professional and clinical issues with application to clinical practicum. Discussions, demonstrations, and student presentations. Mandatory weekly meeting. Level: Graduate **Course Attributes:** Co-Convened Course
- **CSD 571 - Applied Clinic I**
 Credits: 1. Offered autumn, summer; on campus only. Prereq., graduate standing, permission of clinical director. Co-convened with CSD 570. Application of professional skills in the UM RiteCare Clinic. Assignment of cases and area of specialization will vary with the clients needs and availability. Level: Graduate **Course Attributes:** Co-Convened Course
- **CSD 575 - Clinical Procedures II**
 Credits: 1. (R-9) Offered autumn, spring, summer. Prereq., CSD 570. Co-convened with CSD 576. Advanced study of professional and clinical issues with application to clinical practicum. Discussions, demonstrations, and student presentations. Mandatory synchronous weekly class meeting. Out of state placement by approval of clinical director. Level: Graduate **Course Attributes:** Co-Convened Course
- **CSD 576 - Applied Clinic II**
 Credits: 2. (R-9) Offered autumn, spring, summer. Prereq., CSD 570. Co-convened with CSD 575. Advanced application of professional skills in the UM RiteCare Clinic or off-campus. Assignment of

cases and area of specialization will vary with the clients needs and availability. Out of state placement by approval of clinical director. Level: Graduate. **Course Attributes:**
Co-Convened Course

- **CSD 580 - Diagnostics**

Credits: 2. Offered every term. Prereq., Graduate Standing and CSD 570. Students will accrue clinical clock hours with pediatric and adult populations while developing the following skills: using case history information to form a diagnostic plan; administering various standardized and non-standardized diagnostic tools; interpreting assessment results; writing diagnostic reports; and sharing diagnostic results with clients, caregivers and other professionals. Mandatory weekly class meetings. Level: Graduate

- **CSD 594 - Graduate Seminar**

Credits: 1 TO 12. (R-3) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

- **CSD 595 - Special Topics**

Credits: 1 TO 12. Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offering of current topics. Level: Graduate

- **CSD 600 - Research Methods**

Credits: 3. Offered spring. Prereq., graduate standing. Research methodologies appropriate for quantitative and qualitative studies in communication sciences and disorders. Focuses on critical reading of research papers, design, and implementation of experiments. Level: Graduate

- **CSD 610 - Counseling**

Credits: 3. Offered intermittently. Prereq., CSD 520, CSD 540, CSD 550, CSD 560, CSD 565. Introduction to counseling clients and caregivers regarding speech and hearing disorders across the lifespan. Topics include adjustment to injury, the grief process, specific counseling approaches, advocacy and identifying community resources. Level: Graduate

- **CSD 640 - Swallowing Disorders**

Credits: 3. Prereq, Graduate standing and CSD 330, CSD 340, and CSD 411, or equivalent course work. Study of anatomy, physiology, and pathology of swallowing. Diagnosis and treatment of swallowing disorders. Level: Graduate

- **CSD 675 - Clinical Externship**

Credits: 6. Offered every term. Prereq., permissions of Clinic Director and completion of at least 4 credits of CSD 575 clinical course work. The course is an externship typically completed during a student's final semester of graduate school. The externship requires a commitment of 30-40 hours a week in a school, clinic, or medical site across Montana or out of state that is approved by The University of Montana. Online case study is also required to fulfill requirements. Level: Graduate

- **CSD 688 - CSD Master of Science Capstone**

Credits: 3. Offered spring and autumn. Prereq., CSD 600, Graduate standing and consent of instructor. In depth literature review of a particular field of study related to speech-language pathology. Level: Graduate

- **CSD 696 - Independent Study**

Credits: 1 TO 5. Prereq. Consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

- **CSD 699 - Thesis**

Credits: 1 TO 6. (R-9) Offered autumn, spring, summer. Prereq., CSD 600, Graduate standing and consent of instructor. The primary purpose of the thesis is to allow a student to conduct a research project in a particular field of study related to speech and language pathology. Level: Graduate

Communicative Sciences and Disorders B.A.

Counselor Education Department

John Sommers-Flanagan and Kirsten Murray, Co-Chair

The Counselor Education program educates students for employment in school (K-12 and higher education) and community mental health and human service settings. Counselors are practitioners, consultants, and coordinators who assist in problem solving, decision-making skills, personal growth and development, and individual, family school, and/or career issues. Counselors receive training in the eight core areas identified by the American Counseling Association Council for Accreditation of Counseling and Related Educational Programs: human growth and development, social and cultural foundations, the helping relationship, group theories and methods, career and lifestyle development, client assessment and evaluation, research and program evaluation, and professional orientation. We offer a School Counseling M.A., a Mental Health Counseling M.A., and an Interdisciplinary M.A. Each option requires additional specialty courses and comprehensive written and oral examinations focused on the student's career track. The more advanced graduate degrees (Ed.S. and Ed.D.) develop depth, supervisory, and leadership skills in these areas.

The Department of Counselor Education is also the academic home for an interdisciplinary masters degree in Global Youth Development. Students in this program are prepared for humanitarian and advocacy work, focusing specifically on youth and family development across cultures. Requirements include one year of campus-based course work and an approved internship of at least two semesters duration working with youth and family concerns. GYD is a Peace Corps Master's International program, and the expectation therefore is that students will complete the Internship requirement by serving as U.S. Peace Corps Volunteers abroad. For further information and course listings, see: <http://coehs.umt.edu/departments/counsel/YFD/default.php>

Graduate Programs: The M.A., Ed.S., and Ed.D. are offered in Counselor Education. An interdisciplinary M.A. is offered in Global Youth Development. Information regarding specific requirements and program options is available from the Phyllis J. Washington College of Education and Human Sciences. For more information, please refer to the University of Montana Graduate Programs and Admissions Catalog. Graduate programs are accredited by NCATE and CACREP.

Admission to Counseling: Applicants for this program should contact the Department for more specific admissions information. Requirements include official transcripts from all undergraduate and graduate institutions attended; three current letters of recommendation; and a letter of application stating academic and professional background, purpose in obtaining the degree, and thoughts about eventual employment and career direction. Applicants have the option to include GRE scores. Priority deadline is February 15th with complete applications reviewed after this date on a space available basis. Admission is competitive.

Certification Requirements: The Counselor Education, M.A., School Counseling option, leads to licensure at the Class IV level.

Department Faculty

Professor

Catherine Jenni, Professor
John Sommers-Flanagan, Professor

Associate Professor

Kirsten Murray, Department Chair / Associate Professor

Assistant Professor

Veronica Johnson, Assistant Professor
Lindsey Nichols, Assistant Professor / GYD Director

Affiliates

Course Descriptions

Counselor Education

- **COUN 242S - Intimate Relationships**

Credits: 3. Offered autumn and spring semester. This course covers the fascinating, multi-faceted world of intimate relationships and explores the topic from empirical and theoretical perspectives. The examination of intimate relationships in this course will look at the subject through cultural, biological, social and developmental lenses and will explore specific topics such as attraction, communication, friendship, sexuality, love, conflict, power and violence, loss, social cognition, and repairing relationships. **Course Attributes:** Social Sciences Course

- **COUN 395 - Special Topics**

Credits: 1 TO 9. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **COUN 475 - Forgiveness & Reconcilia**

Credits: 3. Offered spring. Survey of the theory and practice of healing fractured relationships at the individual and community levels, treating historical and personal issues from philosophical, psychological and religious perspectives drawn from several diverse cultures.

- **COUN 485 - Counseling Theories**

Credits: 3. Offered autumn. Prereq., PSYX 100S. Same as PSYX 442 and SW 485. Introduction to the primary theories that constitute the intellectual foundation for common counseling and psychotherapy techniques, with a special focus on gender, interpersonal influence strategies, and diversity issues.

- **COUN 495 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **COUN 510 - Intro to Counseling**

Credits: 1. Course is designed to prepare school and mental health counselors-in-training gain an understanding of the counseling field and begin developing professional identity. Much of the material introduced in this course will be developed in greater detail in later courses. This course is an overview that prepares the student for his or her professional identity and activities. Level: Graduate

- **COUN 511 - Theories & Tech of Counseling**

Credits: 3. Offered autumn. Examination of historic and current theories of counseling. Overview of techniques associated with each theory. Basic introduction to ethical concerns with each theory. Level: Graduate

- **COUN 512 - Counseling Fundamentals**

Credits: 3. Offered autumn. Prereq., COUN 511. Overview of approaches to counseling, including common factors. Includes meta-theoretical considerations and guided dyadic practice. Level: Graduate

- **COUN 520 - Group Coun & Guidance**

Credits: 3. Offered spring. Prereq., COUN 511. Theories, approaches, and methods for group counseling and guidance. Level: Graduate

- **COUN 530 - Applied Counseling Skills**

Credits: 3. Offered autumn and spring. Prereq., COUN 511, 512 and consent of instr. Review and

application of counseling theories and techniques to client issues. Intensive supervision including ethics, professional practice and diagnostic considerations. Lecture and class presentation with a focus on professional counseling development. Level: Graduate

- **COUN 540 - Individual Appraisal**

Credits: 3. Offered spring. Prereq., C&I 517 or consent of instr. Overview of appraisal techniques utilized in counseling, including interviewing, observation, and psychological/educational testing. The processes of selection, administration, scoring, interpretation, and reporting information from appraisal techniques are examined in relation to practical, legal, and ethical considerations. Level: Graduate

- **COUN 550 - Intro Family Counseling**

Credits: 3. Offered summer only. Prereq., admission to Counselor Education program or consent of instr. An introduction to the major theories, techniques, and diagnostic tools of family counseling. Course includes a family systems emphasis. Level: Graduate

- **COUN 560 - Lifespan Developmentl Coun**

Credits: 3. Offered spring. Overview of counseling from the framework of lifespan developmental theory. Normal and abnormal development in the environmental context of family, school, society and culture emphasized. Level: Graduate

- **COUN 565 - Coun, Prog Dev, & Superv**

Credits: 3. Offered spring. Prereq., graduate standing or consent of instr. Examination of counseling techniques and approaches relevant to prevention and remediation of behavioral, social, emotional and academic problems for students P-12. Overview of school counseling program development and administration. Level: Graduate

- **COUN 566 - Coun Child & Adol**

Credits: 3. Offered every spring. Prereq., COUN 511, 512, 565 or consent of instr. Review and application of counseling concerns and approaches with children and adolescents in school and related educational settings, including classroom and psychoeducational strategies. Level: Graduate

- **COUN 570 - Career Coun Theory & Tech**

Credits: 3. Offered summer only. Examination of theories of career choice and development; information sources for career counseling; techniques and approaches of career counseling with clients at different stages of career and life development and from diverse populations. Level: Graduate

- **COUN 575 - Multicultural Coun**

Credits: 3. Offered spring. Prereq., graduate standing or consent of instr. An introduction to the field of multicultural counseling. Issues and practical considerations in counseling five population groups; definition of terms and concepts. Level: Graduate

- **COUN 580 - Addictions Counseling**

Credits: 3. Offered summer. Pre-req., admission to the Counselor Education program or consent of instr. Understanding of addictions with a focus on chemical dependency and its treatment including community and school-based prevention. Course includes Motivational Interviewing approach. Level: Graduate

- **COUN 585 - Coun Meth: School & Agency**

Credits: 1 TO 9. Offered every term. Prereq., COUN 511, 512. Supervised counseling methods and theories as applied in mental health agencies and schools. Review of the principles of counseling as these apply to various settings and client issues. Level: Graduate

- **COUN 589 - Comprehensive Project**

Credits: 1. Offered autumn and spring. Integration of professional experience and academic research in a comprehensive paper or applied project. Students may elect to have an oral

examination covering the eight CACREP core areas of counseling. Level: Graduate

- **COUN 594 - Seminar**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Group analysis of problems in specific areas of professional counseling. Level: Graduate

- **COUN 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **COUN 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

- **COUN 597 - Research**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

- **COUN 610 - Profess Ethics/Orient**

Credits: 3. Offered spring. Prereq., COUN 530 or consent of instr. The public and institutional roles and responsibilities of counseling professionals including ethical and legal responsibilities. Level: Graduate

- **COUN 615 - Diag/Treat Plan in Coun**

Credits: 3. Offered spring. Prereq., COUN 512. Overview of diagnosis, treatment planning and case documentation in counseling. Level: Graduate

- **COUN 625 - Intro Mental Health Systems**

Credits: 3. Prereq., acceptance into Counselor Education program mental health track. Essential knowledge for professional identity, understanding of public policy, and community assessment procedures. Includes brief lectures, guest speakers, discussion, and student presentations. Level: Graduate

- **COUN 685 - Advanced Counseling Method**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., COUN 585. Supervised advanced counseling methods and approaches as applied to mental health agencies and schools. Level: Graduate

- **COUN 699 - Thesis/Profess Paper**

Credits: 2 TO 10. (R-10) Offered intermittently. Prereq., EDLD 620 or 625. Preparation of a thesis, professional paper, or manuscript based on research for presentation and/or publication. Level: Graduate

Bachelor of Arts - Commun Sci & Disorders

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: All courses listed are required

Course	Credits
CSD 110 - The Field of CSD	3 Credits
CSD 210 - Speech & Lang Devel	3 Credits
CSD 221N - Fundamentals of Acoustics	3 Credits
CSD 222 - Intro to Audiology	3 Credits
LING 270S - Intro to Ling	3 Credits
PSYX 100S - Intro to Psychology	4 Credits
PSYX 120 - Research Methods I	3 Credits
Minimum Required Grade: C-	22 Total Credits Required

Upper Core Courses

Rule: All courses listed are required

Course	Credits
BIOH 330 - Anat & Phys Speech Mech	3 Credits
CSD 320 - Phono Devel & Phonetics	3 Credits
CSD 340 - Speech Disorders	3 Credits
CSD 360 - Language Disorders	3 Credits
CSD 405 - The Clinical Process	3 Credits
CSD 411 - Neuroanatomy & Physiology	3 Credits
CSD 420 - Speech Science	3 Credits
CSD 430 - Sr. Capstone I	3 Credits
CSD 450 - Intro to Aural Rehabilitation	3 Credits
Minimum Required Grade: C-	27 Total Credits Required

Degree Electives

Rule: Must complete the following subcategories

18 Total Credits Required

Biological Science Requirement

Rule: Choose 1 of the listed courses

—	Course	Credits
	BIOB 101N - Discover Biology	3 Credits
	BIOB 160N - Principles of Living Systems	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science Requirement

Rule: Choose 1 of the listed courses

Note: Student may take another approved physical science course.

—	Course	Credits
	ASTR 131N - Elementary Astronomy I	3 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 122 - Intro to Gen Chem Lab	1 Credits
	GEO 101N - Intro to Physical Geology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Statistics Requirement

Rule: Choose 1 of the listed courses

—	Course	Credits
	PSYX 222 - Psychological Statistics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Psychology Requirement

Rule: Choose 1 of the listed courses

Course	Credits
PSYX 230 - Developmental Psychology	3 Credits
PSYX 233 - Fund of Psychology of Aging	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Modern and Classical Language Requirement

Rule: Choose a sequence of 2 semesters

Note: Student must take a sequence (2 semesters) of a modern or classical language.

Suggested Course of Study

First Year	A	S
CSD 110 The Field of CSD	3	-
PSYX 100S (PSYC100S) Introduction to Psychology	-	4
M 115 (MATH 117) Probability and Linear Math	-	3
WRIT 101 (ENEX 101) College Writing I	3	-
LING 270 Introduction to Linguistics	-	3
BIOB 101N (BIOL 100N) Discovery Biology or BIOB 160N (BIOL 110N) Principles of Living Systems	3	-
General Education/Electives	6	6
Total Credits	15	16
Second Year		
BIOH 330 (CSD 330) Anat & Phys Speech Mech	3	-
CSD 210 Speech & Language Development	3	-
CSD 221N Foundations of Acoustics	-	3
CSD 222 Introduction to Audiology	3	-

PSYX 230S (PSYC 240S) Developmental Psychology or PSCX 233 (PSYC 245) Fundamentals of Psychology of Aging	3	-
PSYX 120 (PSYC 120) Research Methods I	-	3
General Education/Electives	3	9
Total Credits	15	15
Third Year		
STAT 216 (MATH 241) Introduction to Statistics or PSYX 222 (PSYC 220) Psychological Statistics or SOCI 202 (SOC 202) Social Statistics	4	-
CSD 320 Phonological Development & Phonetics	3	-
CSD 340 Speech Disorders	-	3
CSD 360 Language Disorders	-	3
General Education/Electives (Students must complete 9 total upper-division credits outside of the CSD major)	9	9
Total Credits	16	15
Fourth Year		
CSD 405 The Clinical Process	-	3
CSD 411 Neuroanatomy & Physiology for Communication	-	3
CSD 420 Speech Science	-	3
CSD 430 Senior Capstone I	3	-
CSD 440 Senior Capstone II	-	3
CSD 450 Introduction to Aural Rehabilitation	-	3
CSD 480 Multicultural Issues in Speech Language and Hearing	3	-
Electives (Students must complete 9 total upper-division elective credits)	9	-
Total Credits	15	15

Georgia Cobbs, Chair

The Department of Curriculum and Instruction offers the Bachelor of Arts degree in elementary education and teaching licensure in elementary education. The department also offers teaching licensure at both the secondary and K-12 levels for students who are earning or have already completed the baccalaureate degree (teaching major or teaching minor) in one of the following state-approved content areas: Art, Biology, Business Education, Chemistry, Earth Science, Economics, English, English as a Second Language, French, General Science Broadfield Major, Geography, German, Government, Health and Human Performance, History, Latin, Library Media, Mathematics, Music, Physics, Psychology, Reading, Russian, Social Studies Broadfield, Sociology, Spanish, Special Education, and Theatre. (See specific requirements for each in the following pages.) At the graduate level, the department offers master and doctoral degrees in Curriculum and Instruction. Programs across all degree levels are organized to foster the development of learning communities and incorporate three essential themes: integration of ideas; cooperative endeavors; and respect for diversity and individual worth. The web address for the Department of Curriculum and Instruction is <http://coehs.umt.edu/departments/currinst/default.php>.

Graduate Programs

The department offers the Master of Education (M.Ed.) in curriculum and instruction. Students select from one of the following options: curriculum studies, library media services, literacy education, and special education. Students may earn the master's degree in combination with requirements for initial teacher licensure at the elementary and secondary levels. This option is further explained below. The department also offers the Doctor of Education (Ed.D.) in curriculum and instruction. Information about these graduate programs is available from the department office, UM Graduate Programs and Admissions Catalog, and online: <http://coehs.umt.edu/departments/currinst/masterofed/default.php>.

Teacher Preparation

Elementary Education

Individuals preparing to teach in elementary schools (license for grades K-8) complete a major in elementary education. Prior to their admission to the Teacher Education Program, usually at the end of the sophomore year, students are pre-education majors in the College of Education and Human Sciences. All pre-education and elementary education majors are advised by full-time advisors within the Department of Curriculum and Instruction.

Secondary licensure

Students preparing to teach at the middle or high school levels (license for grades 5-12) will declare a major in the subject area(s) they wish to teach, e.g., English, mathematics, or any other of the state-approved major content endorsement areas listed previously. They are advised within their major department(s) and, upon admission to the Teacher Education Program, they also are advised within the Department of Curriculum and Instruction regarding the requirements necessary to earn secondary licensure. All secondary licensure students seek admission to the Teacher Education Program, usually at the end of the sophomore year, and complete course work required for licensure in Curriculum and Instruction and in their major content area(s).

Applicants for Montana teaching licensure must: (1) satisfy all degree and licensure requirements as outlined below; and (2) be at least 18 years of age. Information about the Teacher Education Program is available in the department office and online at: <http://www.coehs.umt.edu/>

Master's Degree and Initial Licensure

Individuals who have completed a degree may elect to apply to the department's Graduate Program and combine the master's degree in curriculum and instruction (curriculum studies option) with licensure to teach. At the secondary licensure level, the combined program may be completed in a summer-autumn-spring-summer sequence provided the student previously has completed most of the content courses listed on the following pages by subject area. At the elementary licensure level, the program typically takes two academic years.

Technology in Education

Grades K-12. Area of Permissive Special Competency only. This minor leads to an area of permissive special competency in technology in education for those attaining or holding a Montana teaching license. It does not qualify as a teaching endorsement in Montana.

- C&I 515 Computer & Other Technological Apps in Education 3 cr.

- C&I 570 Instruction Technology Foundations 3 cr.
- C&I 571 Planning, Preparing and Assessing Educ Tech Media 3 cr.
- C&I 580 Distance Learning Theory and Implementation 3 cr.
- C&I 581 Planning & Mgmt for Tech in Education 3 cr.
- C&I 582 Educational Technology: Trends and Issues 3 cr.
- C&I 584 Authentic App in Instructional Design for Tech 3 cr.
- Total 21 cr.

Equivalent courses from MSU-Bozeman, MSU-Billings and MSU-Northern may substitute for C&I 515, 570, 571, 580, 581, 582 and 584. Please consult an advisor for approved courses.

Assessment at Admission to the Undergraduate Teacher Education Program

Individuals seeking licensure to teach must apply for admission to the professional Teacher Education Program. Admission is limited to approximately 125 elementary and 125 secondary candidates per year. Deadlines for application are September 15 and February 15. Individuals are eligible for consideration for admission if they have:

- been admitted to the University of Montana;
- completed at least 30 semester credits;
- earned a minimum cumulative GPA (including all transfer credits) of 2.75;
- completed an English composition course (WRIT 101) with a grade of C- or better in each;
- demonstrated evidence of writing ability as in an application essay;
- documented appropriate experience in working with children or youth;
- secured supportive recommendations from two faculty members;
- presented results of a national fingerprint-based background check; and
- demonstrated appropriate professional behaviors and dispositions associated with success in the profession in a small group interview process.

The Teacher Education Program Admission Application packet includes a policy and procedures handbook and can be downloaded from the website: <http://coehs.umt.edu/departments/currinst/forms.php>.

Once admitted, licensure candidates must maintain a minimum GPA of 2.75 each semester to continue in the program. Candidates who interrupt their studies for more than two years are placed on inactive status and must apply for readmission to both the University and the Teacher Education Program.

Candidates seeking a K-12 endorsement in library media, literacy, or special education must have full admission to the Teacher Education Program or be a licensed teacher before applying to one of these specialized programs.

Degree-holding individuals are invited to submit transcripts for review to determine how previous course work applies. They may earn a second baccalaureate degree and/or a teaching license or they may combine elementary or secondary licensure with a master's degree. They should enroll with the Admissions Office as "post-baccalaureate" unless pursuing a graduate degree.

Admission Policy for Minority Students and Students with Disabilities

The Teacher Education Program is committed to providing opportunities for teacher preparation for members of groups that have been historically disadvantaged and subject to discrimination. The criteria for admission are the same for students with disabilities and for members of racial, ethnic and other minorities, as for other students; however, students who do not meet one or more of the criteria for admission are encouraged to describe in their applications any special circumstances, experiences, skills and/or special talents that may compensate for unmet criteria. The physical, social, economic, and cultural circumstances that may have influenced a student's ability to achieve minimum eligibility for admission will be considered. A special effort will be made to determine the student's abilities and potential to overcome disadvantage or discrimination and become a successful beginning teacher. Upon entry to the program, the candidate will be assigned to a faculty mentor. The candidate and mentor will design a course of study appropriate for the candidate's progression toward the degree and/or licensure.

»Assessment at Application for Student Teaching

Candidates begin planning for student teaching two semesters prior to placement. Candidates are eligible to student teach if they have:

- full admission into the Teacher Education Program;
- a grade of C- or better in all required licensure courses;
- a minimum cumulative GPA of 2.75 (and 2.75 in each field of licensure);
- results of a current national fingerprint-based background check (candidates with misdemeanors or felonies may be subject to further review by the Field Experience Committee);
- a completed application to student teach and the consent of the Director of Field Experiences;
- for elementary education majors, student should be enrolled in the Professional Methods Block, and have completed all coursework in all previous levels.
- for secondary licensure candidates, all methods courses, two thirds of content course work, and approval by departments in the major/minor content area.

Consult the Teacher Education Policy Handbook for application deadlines and procedures. The Student Teaching Application is available on the Field Experiences website at <http://coehs.umt.edu/tes/fieldexp/default.php>.

Internships and practica in library media, reading, and special education do not substitute for the student teaching semester required for licensure in a subject field.

Assessment at Program Completion:

As active participants in this learning community, candidates are expected to assume roles as both learners and teachers in course work and clinical performance. Through personal disposition, classroom performance, and professional action, candidates who complete the Teacher Education Program at the University of Montana will be able to:

- demonstrate knowledge of the disciplines and subject matter related to curriculum;
- design interdisciplinary and discrete subject area instruction to achieve curriculum goals;
- use appropriate technologies and resources to enhance instruction and student performance;
- select and design appropriate, authentic means of assessing student learning and progress;
- implement instructional and behavioral management strategies to promote a safe and positive learning environment;
- engage students in learning activities that promote critical and creative thinking;
- design and organize learning environments to accommodate learners;
- communicate clearly, accurately and professionally with students and their families, colleagues, and community members;
- reflect on professional practices and demonstrate commitment to fairness and the ability of all to learn.

Indian Education for All

It is Montana's constitutional intent that the state's education system will recognize the distinct and unique cultural heritage of American Indians and will be committed in its education goals to the preservation of their cultural heritage. The intent of the legislature as expressed in MCA20-1-501, Indian Education for All, is that every Montanan, whether Indian or non-Indian, be encouraged to learn about the distinct and unique heritage of American Indians in a culturally responsive manner. It is also intended that educational personnel provide means by which school personnel will gain an understanding for the American Indian people.

Candidates preparing for teaching licensure in all endorsement areas are required to complete a minimum of one course in Native American Studies. Candidates also may choose ANTY 323X (ANTH 323X), Indians of Montana, to meet this requirement. Throughout their programs of study candidates must demonstrate a) ability to integrate into their content areas knowledge of the history, cultural heritage, and contemporary status of American Indians and tribes in Montana; b) knowledge of how students within different populations, including Montana American Indians, differ in their approaches to learning; and c) ability to create instructional opportunities that are adapted to diverse learners, including situations where concentrated generational poverty has affected student academic achievement.

Department Faculty

Professor

Trent Atkins, Professor
Lisa Blank, Professor

Julie Bullard, Professor
Georgia Cobbs, Department Chair / Professor
David Erickson, Professor
Jan LaBonty, Professor
Rick Van den Pol, Director and Project Principal Investigator

Associate Professor

Morgen Alwell, Associate Professor
Fletcher Brown, Associate Professor
Ann Garfinkle, Associate Professor
Martin Horejsi, Associate Professor
Adrea Lawrence, Associate Professor and Associate Chair
Matthew Schertz, Associate Professor
Sandra Williams, Associate Professor

Assistant Professor

Kate Brayko, Assistant Professor
Jessica Gallo, Assistant Professor
Tracy Missett, Assistant Professor
Lucila Rudge, Assistant Professor
Jingjing Sun, Assistant Professor of Educational Psychology

Adjunct

Scott Hohnstein, Adjunct Assistant Professor

Course Descriptions

Curriculum and Instruction

- **C&I 160 - Lrng Strat Higher Ed**
Credits: 1 TO 2. Offered autumn and spring. Instruction and application of college study skills including lecture note taking, time management, reading textbooks, test taking, and critical thinking. Elective credit only. **Course Attributes:** Study Skills Course
- **C&I 195 - Special Topics**
Credits: 1 TO 5. (R-15) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **C&I 287 - Business Communications**
Credits: 3. Offered autumn and spring. Prereq., WRIT 101 College Writing I. Emphasis on consistent and logical approaches to solving communication problems and creating successful communication products. **Course Attributes:** Writing Course-Approved
Writing Course-Intermediate
- **C&I 295 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Offerings of visiting professors, new courses, or current topics.
- **C&I 296 - Independent Study**
Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of advisor and instr.
- **C&I 298 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of advisor, instructor, and director of field experiences. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internship graduation limit 6

- **C&I 341 - Information Managemnt & Design**

Credits: 3. Offered spring. Prereq., CSCI 172. Emphasis on the development and maintenance of a file management system, application of effective design concepts in the creation of professional print and digital images and documents, and the creation of digital videos for use in education and/or business.

- **C&I 394 - Seminar**

Credits: 1 TO 9. (R-9) Offered intermittently. Group analysis of problems in specific areas of education.

- **C&I 395 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **C&I 498 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of chair. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internship graduation limit 6

- **C&I 501 - Curriculum Design**

Credits: 3. Underlying principles of design, factors affecting implementation, and evaluation and assessment of K-12 curricula at the student and program levels. Level: Graduate

- **C&I 502 - Philosophy of Education**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as EDLD 502. Major philosophical schools of thought and leading proponents of each. Concepts of society, the educative process, and the role of education. Level: Graduate

- **C&I 504 - Hist of American Education**

Credits: 3. Same as EDLD 504. Exploration of the ideas, individuals, and events that have influenced the curriculum, pedagogy, and operation of the American public school, from colonial America to the present time. Level: Graduate

- **C&I 506 - Comparative Education**

Credits: 3. How the American educational system compares with those in selected other countries. Level: Graduate

- **C&I 508 - Sociology of Education**

Credits: 3. Modern public education as it affects and is affected by religious, economic, and political systems and other social institutions. Level: Graduate

- **C&I 510 - Adv Educational Psychology**

Credits: 3. The exploration of theoretical and empirical issues in psychology (e.g., learning theory and intelligence). Level: Graduate

- **C&I 514 - Education Across Cultures**

Credits: 3. Educational foundations of the study of diversity in American schools. Level: Graduate

- **C&I 515 - Computer/Tchnlgcl Appl in Educ**

Credits: 3. Prereq., a basic computer course or demonstrated computer literacy. Computer systems and other hardware utilizing various software applications by administrators, counselors,

librarians, teachers, and students. Level: Graduate

- **C&I 518 - Inclusion and Collaboration**

Credits: 3. Offered autumn even-numbered years; offered summer. Legal and ethical issues involved in the responsible inclusion of all individuals with disabilities through multi-disciplinary and collaborative efforts. Level: Graduate

- **C&I 519 - Authentic Assessment**

Credits: 3. Focus on assessment practices in K-12 classrooms including a wide variety of assessments that meet curricular objectives as well as nationally required standardized exams to meet NCLB mandates. Level: Graduate

- **C&I 520 - Educational Research**

Credits: 3. Offered every term. Same as EDLD 520. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. An understanding of basic quantitative and qualitative research methodology and terminology, particularly as they are used in studies presented in the professional literature. Level: Graduate

- **C&I 521 - Found Environmental Educ**

Credits: 3. Offered autumn. Prereq., graduate standing in environmental studies. Same as ENST 521. Problem-solving approach to environmental education; problem identification, research and design and implementation of an educational approach to selected environmental issues. Level: Graduate

- **C&I 523 - Early Childhood Spec. Ed.**

Credits: 3. Focuses on the relationship between assessment and individualized educational planning young children who qualify for Special Education services. A variety of assessments and assessment techniques will be taught, with a strong emphasis on the use of ecologically valid assessment tools. Emphasis on instructional techniques for young children will be covered with particular attention to the DEC recommended practices. A field experience is required. Level: Graduate

- **C&I 524 - Family and Diversity Issues**

Credits: 3. An overview of different approaches, current issues, and problems involved in working with and supporting families including families from diverse backgrounds. Emphasis is placed on how a child with disabilities affects and is affected by parents, siblings, the extended family, and the community. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Level: Graduate

- **C&I 525 - Tchg Environmen Science**

Credits: 1 TO 3. (R-6) Offered spring even-numbered years. Prereq., consent of instr. Same as ENST 525. Identification and examination of potential solutions to environmental problems and their impact on society. Major emphasis on teaching methods as they apply to environmental science. Level: Graduate

- **C&I 526 - Transition & Comm Support**

Credits: 3. Focus on issues and strategies for preparing adolescents and young adults with disabilities for the transition from school to future careers. These issues are discussed within the context of more global efforts to create school-to-career programs in school settings for all students. Level: Graduate

- **C&I 527 - Discip Literacy Strat**

Credits: 3. Offered autumn. Prereq., teaching experience. Advanced theories, models, instructional approaches for using reading/writing for learning in content fields. Emphasis on research, instructional practice, classroom assessment. Level: Graduate

- **C&I 530 - Trends & Rsch in Read and Writ**

Credits: 3. Offered summer odd-numbered years. Survey of current research related to literacy

practices in schools/communities. Theories, models, politics of literacy in K-12/Adult education.
Level: Graduate

- **C&I 533 - Asmt & Inst for Div Lit Lrnrs**
Credits: 3. Offered summer odd-numbered years. Reading specialist candidates will explore a range of research and current issues related to assessment; develop a framework for assessing students with diverse strengths and learning needs; and practice leveraging information gained from assessments in the design of meaningful learning experiences. Level: Graduate
- **C&I 540 - Lang Arts Ped and Prac**
Credits: 3. Offered summer even-numbered years. Prereq., teaching experience. Advanced theories and instructional approaches for teaching and assessing literacy. Level: Graduate
- **C&I 541 - Genre Studies**
Credits: 3. Offered even summers. The purpose of this course is to explore, in depth, several literary genres and to move from a survey approach to an intense focus on the variety of books and poems written for children and young adults. Particular attention will be given to research, authors, and awards in each of the following genres: science fiction, historical fiction, contemporary fiction, modern fantasy, non-fiction, graphic novels and poetry Level: Graduate
- **C&I 542 - Superv/Tchg Math**
Credits: 3. Offered spring even-numbered years and summer odd-numbered years. Curriculum trends, instructional materials, research and supervisory techniques relevant to a modern school mathematics program. Level: Graduate
- **C&I 545 - Social Studies Education**
Credits: 3. Historical trends and curriculum issues related to social studies instruction. Emphasis on current research concerning social studies curriculum design, instructional practices, and use of resources. Level: Graduate
- **C&I 548 - Super Tchg Envir Ed**
Credits: 3. Offered spring. Prereq., ENST 521 or C&I 521. Design, selection, and evaluation of materials for the teaching of environmental education. Level: Graduate
- **C&I 552 - Models of PD Math/Sci**
Credits: 3. Offered spring even years on-line. Exploration of various models of professional development and the development of implementation plans for workshops and in-service professional development in science and mathematics. Level: Graduate
- **C&I 555 - Workshop**
Credits: 1 TO 6. (R-6) Offered intermittently. Special courses experimental in nature dealing with a relatively narrow, specialized topic of particular current interest. Credit not allowed toward a graduate degree. Level: Graduate
- **C&I 556 - Methods Low Incidence Disabil**
Credits: 3. Offered spring and odd summers. Focus on research-based methods of instruction for students with low incidence disabilities in basic communication, mobility, sensory, and social skills, as well as academic skills (especially literacy and general education curricular access). An introduction to augmentative and alternative communication and life quality today and in the future. An introduction to augmentative and alternative communication (AAC) and assistive technology (AT) is also addressed. A field experience is required. Level: Graduate
- **C&I 557 - Graduate Literacy Practicum**
Credits: 6. Offered intermittently in summer. Prereq., C&I 433 or 533. Based on readers' literacy strengths and needs, practitioners diagnose, devise, and implement instructional strategies for students in grades K-12. Level: Graduate
- **C&I 560 - Response to Intervention**

Credits: 3. Prereq., C&I 458. Review of evidence-based assessment and instruction techniques in all basic academic areas. Advanced application of general outcome and curriculum-based measures and alignment of these assessments to interventions. Preparation in service as a leader for the implementation of school-wide prevention models. A practicum is required. Level: Graduate

- **C&I 570 - Instructional Technology Found**

Credits: 3. Same as EDLD 570. General introduction to the field, theory, and profession of instructional technology. Definition of instructional technology; history of the field. Level: Graduate

- **C&I 571 - Educ Tech Media**

Credits: 3. Same as EDLD 571. Principles and practices of instructional design for integration of educational technology. Emphasis on role of technology in contemporary teaching/learning/assessing theory and practice, including learning styles and multiple intelligences. Level: Graduate

- **C&I 580 - Dist Lrng Theory & Implem**

Credits: 3. Same as EDLD 580. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Introduction to distance learning models and exploration of satellite and computer-mediated course development, implementation, and evaluation. Level: Graduate

- **C&I 581 - Plng & Mgt for Tech in Edu**

Credits: 3. Same as EDLD 581. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Creating, implementing, maintaining, and evaluating technology plans for educational institutions, including budgets, facilities, and hardware planning. Level: Graduate

- **C&I 582 - Ed Tech Trends & Issues**

Credits: 3. Same as EDLD 582. Exploration of trends and issues in the use of educational technology in a variety of settings. Level: Graduate

- **C&I 584 - Authentic App Inst Design**

Credits: 3. Same as EDLD 584. Development of practical competencies in such components of instructional technology as development, production, materials evaluation, and project management and implementation. Level: Graduate

- **C&I 585 - Unit Crs in BITE**

Credits: 1 TO 6. (R-6) Each unit course will carry a special title designating topic covered that is related to improvement of instruction. Level: Graduate

- **C&I 588 - Action Research in Classroom**

Credits: 3. Readings in research in teaching/learning. Strategies to implement all components of an action research project in a classroom including planning/research design, action, reflection, and sharing. Level: Graduate

- **C&I 589 - Professional Project**

Credits: 3. Culminating course in online master's program. Students demonstrate connections across content areas through a mini-thesis, research-based product that is shared with other professionals through a publication and/or presentation at a conference or workshop. Level: Graduate

- **C&I 590 - Supervised Internship**

Credits: 1 TO 3. (R-9) Offered autumn and spring. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate

- **C&I 594 - Seminar: Prof Portfolio**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

- **C&I 595 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
- **C&I 596 - Independent Study**
Credits: 1 TO 6. (R-18) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
- **C&I 597 - Research**
Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **C&I 598 - Internship**
Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. Supervised field experience. Level: Graduate
- **C&I 618 - Educational Statistics**
Credits: 3. Offered spring. Prereq., EDU 421 or equiv., or consent of instr. Same as EDLD 583. Same as EDLD 618. Advanced statistical methods and use of the mainframe computer and microcomputer for data analysis. Use of a recognized statistical package (e.g., SPSS-X) for research applications. Level: Graduate
- **C&I 620 - Qualitative Research**
Credits: 3. Offered autumn. Prereq., C&I 520 or 618, or equiv. Same as EDLD 620. Same as EDLD 583. In-depth review of descriptive, experimental, historiographic, ethnographic, and other qualitative research methods, designs, and approaches. Includes the development of a research proposal. Level: Graduate
- **C&I 625 - Quantitative Research**
Credits: 3. Offered spring. Prereq., C&I 520 and 486 or equiv. and coreq., C&I 618. Same as EDLD 583. Same as EDLD 625. Principles and techniques of quantitative research in educational settings. Students prepare a draft of a research proposal and experience an abbreviated dissertation proposal defense. Level: Graduate
- **C&I 630 - Spec Topics in Literacy**
Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Should be taken in conjunction with or immediately prior to comprehensive examinations. In-depth coverage of selected topics in reading and writing related to current literacy issues and practices. Level: Graduate
- **C&I 652 - Issues Curr & Instr**
Credits: 3. Offered autumn odd-numbered years. Prereq., C&I 501 or consent of instr. Curricular and instructional decision making and process, innovation and change, trends and reforms. Controversial issues in education and society related to K-12 curriculum and motivation. Level: Graduate
- **C&I 694 - Adv Sem Curr & Instr**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate
- **C&I 697 - Adv Rsrch Curr & Instr**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **C&I 699 - Thesis/Dissertation**
Credits: 1 TO 10. (R-10) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Early Childhood Education

- **EDEC 408 - Early Childhood Principles and Practices**

Credits: 3. Offered spring odd numbered years. This course is an overview of principles and practices in early childhood education (ages birth through eight). The main topics to be covered will include: the sociological, professional, and theoretical perspectives of early childhood education with a focus on developmentally appropriate practice (DAP); the skills and dispositions needed in planning and implementing early care and education programs for all children; and education models in early childhood. Students must plan for a minimum of 45 hours in an early childhood setting to meet requirements for the application of course content. Co-convened course with EDEC 508. **Course Attributes:** Co-Convened Course

- **EDEC 410 - Families, Communities, Culture**

Credits: 3. Offered Spring even numbered years. This on-line course explores the dynamics of working together with families of young children (birth - 8) in early childhood programs using a family-centered approach that places the child in the context of family and community. Students will explore developmental relationship building, communication, needs-based assessment and cultural diversity through readings, online discussion groups, an independent service-learning project and field-work. Co-convened with EDEC 510. **Course Attributes:** Co-Convened Course

- **EDEC 420 - Meeting Standards Through Play-Based Environments**

Credits: 3. Offered fall odd numbered years. This course features an in-depth examination of how early learning standards in all content areas (math, science, literacy, technology, physical education, and the arts) can be met through the design and facilitated use of play-based environments. Also examined will be the role of the teacher as environmental designer and facilitator of learning. Students must plan for a minimum of 45 hours in an early childhood setting to meet requirements for the application of course content. This course is co-convened with EDEC 520. **Course Attributes:** Co-Convened Course

- **EDEC 430 - SocEmot Dvlpmnt in Yng Child**

Credits: 3. Offered autumn even numbered years. This on-line course examines the development, components, and influences of social competence in the early childhood years (birth - 8). Positive guidance techniques that enhance children's self-esteem and pro-social skills will be taught. Students will examine developmental theories, current literature, researched-based teaching strategies and assessment tools. Students must plan for a minimum of 45 hours in an early childhood setting to meet requirements for the application of course content. Co-convened with EDEC 530. **Course Attributes:** Co-Convened Course

- **EDEC 495 - EC Fieldwork/Practicum**

Credits: 3. Offered every semester. This course provides students the opportunity to participate in planning and facilitating learning activities in a multi-age early childhood program while also participating in an on-line seminar. Students will observe and facilitate learning in a model early childhood setting and participate in on-going written and verbal reflection to explore key teaching and learning issues. The course will focus on promoting student knowledge, skills, and dispositions in the areas of child observation and assessment, curriculum planning, child guidance, and integration of curriculum using a broad repertoire of teaching strategies. Students are required to be based in an approved licensed and/or accredited early childhood program for a minimum of 8 hours/week. Co-convened with EDEC 595. **Course Attributes:** Co-Convened Course

- **EDEC 508 - Early Childhood Principles and Practices**

Credits: 3. Offered spring odd numbered years. This on-line course presents the foundation principles and practices of early childhood education (ages birth through eight). The main topics to be covered will include: the sociological, professional, and theoretical perspectives of early childhood education with a focus on developmentally appropriate practice (DAP); the skills and dispositions needed in planning and implementing early care and education programs for all children; and education models in early childhood. Students will assume a leadership role in this co-convened course (EDEC 408) to include class presentations of research papers. Level: Graduate **Course Attributes:** Co-Convened Course

- **EDEC 510 - Families, Communities, Culture**

Credits: 3. Offered Spring even numbered years. This on-line course explores the dynamics of working together with families of young children (birth - 8) in early childhood programs using a family-centered approach that places the child in the context of family and community. Through readings, online discussion groups, an independent service-learning project, field-work, and creation of a term paper of publishable quality, students will explore developmental relationship building, communication, needs-based assessment and cultural diversity. Co-convened with EDEC 410. Level: Graduate **Course Attributes:** Co-Convened Course

- **EDEC 515 - Early Childhood Professional Working with Families Experiencing Adversity**

Credits: 3. Offered spring even numbered years. In this course, students will become familiar with the major theories and research regarding family crisis, resiliency, protective factors, and coping skills with an emphasis on the risk factors of poverty, addiction, violence, and disabilities. These will be examined through an early childhood lens and will include the impact of family adversity on early development and learning, the role of early childhood programs in supporting families facing adversity, and an in-depth examination of how the NAEYC Code of Ethics provides guidance in meeting the needs of children and families facing adversity. Students will select and implement an evidence-based family strengthening intervention and evaluate the effectiveness. Level: Graduate

- **EDEC 520 - Meeting Standards Through Play-Based Environments**

Credits: 3. This course features an in-depth examination of how early learning standards in all content areas (math, science, literacy, technology, physical education, and the arts) can be met through the design and facilitated use of play-based environments. Also examined will be the role of the teacher as environmental designer and facilitator of learning. This course is co-convened with EDEC 420. In addition to advanced outcomes and assessment, students enrolled in EDEC 520 will develop and present information at an early childhood conference. Level: Graduate **Course Attributes:** Co-Convened Course

- **EDEC 530 - Social and Emotional Development in Young Children**

Credits: 3. Offered fall even numbered years. This on-line course examines the development, components, and influences of social competence in the early childhood years (birth – 8). Positive guidance techniques that enhance children's self-esteem and pro-social skills will be taught. Students will examine and critique developmental theories, current literature, researched-based teaching strategies and assessment tools. Activities will focus on providing students opportunity to discuss, debate, analyze, and practice key foundations and skills. Students must plan for a minimum of 45 hours in an early childhood setting as well as planning and presenting a training session for parents/families. Co-convened with EDEC 430. Level: Graduate **Course Attributes:** Co-Convened Course

- **EDEC 540 - Neuroscience and Its Impact on Child Development**

Credits: 3. Offered spring odd years. This course is an overview of research and methods in developmental cognitive neuroscience, including examination of typical and atypical brain development in the early childhood years. The role of experience, the range of plasticity, and influences such as early intervention will be some of the topics explored specific to early childhood teachers and professionals. Also examined will be neuroscientific claims and whether research supports, contradicts, or does not provide enough evidence to determine the accuracy of the claim. Level: Graduate

- **EDEC 550 - EC Curriculum Analysis, Design, and Assessment**

Credits: 3. Offered fall even years. Prereq., C&I 514, C&I 518. This course will examine the underlying principles of curriculum design, implementation, and assessment. Students will complete an in-depth critique of a published early childhood curriculum, determining if the curriculum is evidence based, developmentally and culturally appropriate, comprehensive, aligned with appropriate early learning standards, and if the curriculum can easily be modified to meet the needs of all learners including those who may have special needs. Additionally, students will use a backward design model to create, implement, and assess a curriculum for young children including those who are culturally, linguistically, and ability diverse. Level: Graduate

- **EDEC 560 - Public Policy, Advocacy, and Leadership in ECE**

Credits: 3. Offered fall semester odd numbered years. Participants in this course will critically examine key policy issues facing early childhood and determine ways to engage in and lead others in informed, effective advocacy. The theories, research, and approaches to early care and education advocacy, leadership, and change will be studied and applied through the implementation of an advocacy project. Level: Graduate

- **EDEC 595 - Early Childhood Fieldwork/Practicum**

Credits: 3. Offered every semester. This course provides students the opportunity to participate in planning, facilitating, and evaluating learning activities in an early childhood setting. Through the fieldwork and on-line seminar, course activities will focus on promoting student inquiry and analysis in the areas of child observation and assessment, curriculum planning, child guidance, and integration of curriculum using a broad repertoire of teaching strategies. Students are required to be based in an approved, accredited early childhood program for a minimum of 8 hours/week where they will video and present a teaching presentation in class. Co-convened with EDEC 495.
Level: Graduate Course Attributes: Co-Convened Course

Education K-12: Special Edu

- **EDSP 401 - Intro Early Intervention**

Credits: 3. Offered autumn odd-numbered years. Restricted to Curriculum & Instruction and Certification majors. This course covers issues relevant to serving very young children and their families. Topics include: ecological systems theory, typical and atypical development, family and child advocacy, naturalist environments, policies and procedures, models of intervention, transdisciplinary service delivery, Individual family service plans, and transition to preschool services. This course requires a 45-hour practicum.

- **EDSP 403 - Curric/Mthds Early Spec Educ**

Credits: 3. Offered autumn even-numbered years. Principles in selecting and adapting early childhood curriculum materials for young children with disabilities; development, implementation and evaluation of individualized education programs; and appropriate teaching strategies for the early childhood special education classroom. Includes a practicum.

- **EDSP 405 - Assess of Students with Excep**

Credits: 3. Focus on a variety of assessment procedures for students who qualify for Special Education services. A variety of assessments and assessment techniques will be taught, with a strong emphasis on the use of ecologically valid assessment tools. Specific measurement skills will be taught including observation skills. Field experience is required.

- **EDSP 426 - Intro Transition & Community**

Credits: 3. Introduction to issues and strategies for preparing adolescents and young adults with disabilities for the transition from school to future careers, post-secondary education, and other post-school environments. These issues are discussed within the context of more global efforts to create school-to-career programs in school settings for all students. A field experience is required.

- **EDSP 454 - Adv Academic Interventions**

Credits: 3. Evidence-based assessment and instruction techniques in all basic academic areas. Particular focus on general outcome and curriculum-based measures and the alignment of these and other assessments to interventions. A field experience is required.

- **EDSP 456 - Intro Mthds Low Incidence Dis**

Credits: 3. Offered spring and odd summers. Introduction to research-based methods of instruction for students with low incidence disabilities in basic communication, mobility, sensory, and social skills, as well as academic skills (especially literacy and general education curricular access). An introduction to augmentative and alternative communication (AAC) and assistive technology (AT) is also addressed. A field experience is required.

- **EDSP 461 - Positive Behavior Supports**

Credits: 3. Offered spring and odd-numbered summers. In-depth study of the principles and procedures for managing problem behaviors with an emphasis on prevention and classroom management. A field experience is required.

- **EDSP 462 - Spec Ed Law, Policy, Practice**

Credits: 3. Offered autumn and even-numbered summers. Historic and current perspectives on laws, policies and practices of the special education and related fields. Coverage of all aspects of the special education process including collaborative practices.

- **EDSP 495 - Student Teaching: Special Educ**

Credits: 1 TO 10. Offered autumn and spring. Prereq., completion of all courses in the special education minor with a grade of B or higher and consent of advisor and Director of Field Experiences. Supervised field experience in special education.

Education-K-12

- **EDU 162 - NCAA Student-Athlete Exp.**

Credits: 1. This course is designed to assist students in the development of necessary skills to be a successful college student-athlete. Topics will include a wide variety of areas including study skills, an introduction to campus resources, and personal and career development. Students will identify and discuss specific issues that pertain to them as student-athletes.

- **EDU 163 - Student-Athlete Success**

Credits: 1. This seminar is designed to assist student-athletes in developing necessary life skills that will help them in their remaining years at the University of Montana. Topics will include a wide variety of areas such as: financial management, nutrition, career development and planning, healthy relationship skills, social responsibility, social etiquette, conflict resolution, and leadership.

- **EDU 202 - Early Field Experience**

Credits: 1. Offered autumn and spring. Prereq., admission to Teacher Education Program. Guided introductory field experience for students committed to teaching as a profession. Connects field experience to content of co-requisite theory classes. Seminars include professional development portfolio, developmental level of students, diversity, learning/teaching strategies, motivation, classroom management, and assessment of learning.

- **EDU 210 - New Student Athlete Seminar**

Credits: 2. Offered autumn. This course is designed to assist students in the development of necessary skills to be a successful college student-athlete. Topics will include a wide variety of areas including study skills, an introduction to campus resources, and personal and career development. Students will identify and discuss specific issues that pertain to them as student-athletes.

- **EDU 221 - Ed Psych & Measurement**

Credits: 3. Offered autumn and spring. Prereq., admission to Teacher Education program; recommended prereq. or coreq., EDU 202. Analysis of fundamental psychological concepts underlying classroom teaching and management, learning and evaluation including educational measurement. Emphasis on cognition, developmental, and motivational aspects of learning.

- **EDU 222 - Educational Psych Child Dev**

Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program. This course must be taken concurrently with Level 1 courses. This course will examine the classroom practices that impact elementary aged children's learning, motivation and development. The content is closely aligned with co-requisite courses and initial field experience, allowing opportunities for observation and practice of principles covered in class.

- **EDU 331 - Lit & Literacy for Children**

Credits: 3. Offered autumn and spring. Prereq., WRIT 101; open to majors in elementary education, secondary education or pre-education. Genre survey, including cross-cultural literature, that

focuses on responding to children's literature through reading, writing, listening, speaking, and activities that emphasize selecting literature, teaching critical thinking, and integrating literature into the elementary curriculum.

- **EDU 338 - Academic Interventions**

Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program. This course must be taken concurrently with Level 1 courses. This course prepares pre-service teachers to work with all students including those who are struggling learners and high achievers. The course is focused on school-wide assessment and instruction methods with particular focus on working with individual children and small groups in core academic areas.

- **EDU 339 - Tchg Assess PK-8 Lang Arts**

Credits: 3. Offered autumn and spring. Prereq., admission to the Teacher Education Program. This class must be taken concurrently with Level 2 courses and is restricted to students who have been admitted to the Elementary Education program. Language development and primary and secondary language acquisition, theory and application of teaching and assessing listening, speaking, writing, and viewing in a PK-8 setting. **Course Attributes:**
Writing Course-Advanced

- **EDU 340 - Classroom Management**

Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program. This course must be taken concurrently with Level 3 courses and is restricted to students who have completed coursework in Level 1 and 2. This course is designed to prepare pre-service teachers to set up a classroom, establish classroom policies and procedures and routines, establish and maintain cooperative relationships with parents, effectively provide feedback to students, motivate desired student behavior, and research professional literature to seek best classroom management practices to hone the craft of effective instruction.

- **EDU 345 - Excpntlty & Clsrm Mgmt**

Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program. Recommended pre- or co-requisite of EDU 202. Focus on classroom management and the characteristics and instructional adaptations for exceptional students in the regular classroom. Addresses the Individuals with Disabilities Education Act and subsequent reauthorizations, presents practices for working with students who are at-risk and students with disabilities in inclusive settings, and includes technological considerations.

- **EDU 346 - Exceptionalities**

Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program. This course must be taken concurrently with Level 2 courses and is restricted to students who have completed coursework in Level 1. This course will focus on characteristics and strategies for optimizing learning for children with exceptionalities in the regular education classroom. Addresses the Individuals with Disabilities Education Act and subsequent reauthorizations, presents practices for working with students who are at-risk and students with disabilities in inclusive settings, and includes technological considerations.

- **EDU 370 - IntegTech into Educ**

Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program and general computer literacy skills. Recommended pre- or co-req., EDU 202. Integration and use of computer and other technologies in education.

- **EDU 392 - Independent Study**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **EDU 395 - Clinical Experience**

Credits: 1. (R-4) Offered autumn and spring. Prereq., admission to the Teacher Education Program. Arranged field experience and seminar focusing on applying content from the co-requisite courses. This course number is used for multiple clinical experiences. Check the class schedule or with your advisor regarding the appropriate section. Elementary Education Majors: EDU 395 Clinical

Experience Level 1 must be taken concurrently with Level 1 courses. EDU 395 Clinical Experience Level 2 must be taken concurrently with Level 2 courses. Secondary and K-12 Licensure Students: EDU 395 Clinical Experience K-8 and EDU 395 Clinical Experience 9-12 have a prerequisite of an initial field experience and should be taken concurrently with a secondary or K-12 methods course. **Course Attributes:** Internships/Practicums

- **EDU 397 - Methods: Teaching & Assessing**

Credits: 3. (R-15) Offered autumn and spring. Prereq., admission to the Teacher Education Program. This course number is used for multiple methods courses. Check the class schedule or with your advisor regarding appropriate sections. PK-4 Early Numeracy: Offered autumn and spring. This class must be taken concurrently with Level 1 courses and is restricted to students who have been admitted to the Elementary Education program. Students will learn mathematics concepts, methods of instruction, and the use of instructional materials appropriate for grades K-4 including the use of state and national standards for mathematics, appropriate technology, and manipulatives. Additionally, students will learn techniques for assessing the effectiveness of the counting and cardinality, operations and algebraic thinking, numbers and operations, measurement and data, and geometry. PK-3 Early Literacy: Offered autumn and spring. This class must be taken concurrently with Level 1 courses and is restricted to students who have been admitted to the Elementary Education program. The purpose of this course is to develop an understanding of emergent literacy and beginning reading and to examine developmentally appropriate methods of teaching and assessing reading to children in grades K-3. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **EDU 407E - Ethics & Policy Issues**

Credits: 3. Offered every term. Prereq., admission to Teacher Education Program and EDU 202 or EDU 395. Practical application of ethical principles of the teaching profession. Analysis of the American public school and major policy issues from historical, legal, political, social as well as ethical perspectives. **Course Attributes:** Ethical & Human Values Course

- **EDU 411 - Impl IEFA K-12 Classroom**

Credits: 3. Offered intermittently. This course is designed to equip educators with the essential skills, knowledge, and cultural awareness to implement Indian Education for All (IEFA) in the k-12 classroom and to assume a leadership role in IEFA programming.

- **EDU 421 - Statistical Procedures in Educ**

Credits: 3. Prereq., M 115 or equiv. or consent of instr. Same as HHP 486. Concepts and procedures characterizing both descriptive and inferential statistics. Awareness of common statistical errors.

- **EDU 432 - Lit & Literacy for Yng Adlts**

Credits: 3. Offered spring. Genre surveys; extensive reading, and analyzing of literature, authors and media addressed to students ages 12-18. Emphasizes effective teaching strategies for using high quality literature with middle school and secondary students. Not a substitute for EDU 331.

- **EDU 438 - Ltrcy Asmnt, Diagnosis & Instr**

Credits: 3. Offered spring. Prereq., EDU 397 or 481 for education students. Based on the analytic process, emphasis on assessing, identifying, and devising instructional strategies to meet students' reading/writing strengths and needs.

- **EDU 441 - Leadership and Advocacy**

Credits: 3. Offered autumn. Prereq., EDU 397 or EDU 481. Emphasis on teaching writing across the curriculum and supervising the school-wide writing program. Planning, implementing, and assessing writing, and connecting reading and writing will be addressed.

- **EDU 451 - Clinical Exp:L3 Pedagogy Cntnt**

Credits: 1. (R-2) Offered autumn and spring. Prereq., Admission to the Teacher Education Program. This class must be taken concurrently with Level 3 courses and is restricted to students who have completed coursework in Levels 1 & 2. Arranged field experience in an elementary or middle school classroom completed with Elementary Professional Methods Block.

- **EDU 456 - Applictn of Literacy Modls K12**
Credits: 6. Offered summer. Prereq., EDU 438 or C&I 533. Provides classroom teaching experience under direct supervision. Candidates teach reading and writing and apply knowledge of assessing and correcting reading and writing difficulties in grades K-12.
- **EDU 472 - Dev Digital Rich Workplace**
Credits: 3. Offered spring. Prereq., CSCI 172. Project-based course to gain understanding and the ability to use web development tools to create a functional, well-designed web project. Additional topics/projects include: Web 2.0+ tapping the potential of digital tool; social media—educational and business uses; gamification in education and business, and introductory electronic game development for the classroom and the boardroom.
- **EDU 481 - Content Area Literacy**
Credits: 3. Offered autumn and spring. Prereq., Admission to the Teacher Education Program. Theories, models, instructional approaches for using literacy for learning in content fields. Emphasis on research, instructional practice, classroom assessment, multicultural and discipline integration.
- **EDU 491 - Special Topics/Exp Courses**
Credits: 1 TO 6. (R-6) Offered intermittently. Special courses experimental in nature dealing with a relatively narrow, specialized topic of particular current interest. Credit not allowed toward a graduate degree.
- **EDU 492 - Independent Study**
Credits: 1 TO 6. (R-6) Offered every semester. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **EDU 494 - Seminar:Refl Pract & App Rsrch**
Credits: 1 TO 9. (R-9). Required seminar during student teaching. Focuses on learning to conduct research on P-12 student performance to determine teaching effectiveness. Includes on-campus and/or on-line planning, conducting, and analyzing classroom practice.
- **EDU 495 - Student Teaching**
Credits: 1 TO 14. (R-14) Offered autumn and spring. Arranged capstone clinical experience required for all professional licensure students. Prereq., admission to the Teacher Education Program, completion of all required field experiences and methods courses, an application to student teach, and the consent of the Director of Field Experiences. In addition, elementary education majors must complete all coursework in all previous levels. Secondary and K-12 licensure students must complete at least two-thirds of content coursework and receive approval by departments in their major and minor content areas. **Course Attributes:** Internships/Practicums
- **EDU 497 - Teaching and Assessing**
Credits: 0 TO 4. (R-15) Offered autumn and/or spring. Prerequisite: Admission to the Teacher Education Program. This course number is used for multiple elementary and secondary methods courses. Check the class schedule or with your advisor regarding appropriate sections. 5-8 Mathematics: 3 cr. Offered autumn and spring. This class must be taken concurrently with Level 3 courses and is restricted to students who have completed coursework in Levels 1 & 2. Methods of teaching, assessing, and evaluating mathematics in the 5-8 middle grades including number and operations, rational numbers, ratio and proportion, measurement, algebra, expressions and equations, geometry, probability, statistics, and functions. K-8 Social Studies: 3 cr. Offered autumn and spring. This class must be taken concurrently with Level 3 courses and is restricted to students who have completed coursework in Levels 1 & 2. Emphasis on developing teaching and assessing social studies teaching/learning opportunities that incorporate literature, primary sources and other developmentally appropriate activities. Overarching themes address diversity, integration across the curriculum and understanding state and national curriculum standards. K-8 Science: 3 cr. Offered autumn and spring. This class must be taken concurrently with Level 3 courses and is restricted to students who have completed coursework in Levels 1 & 2. Emphasis on developing, teaching, and assessing science teaching/learning opportunities that are inquiry-based, developmentally appropriate, integrated across the curriculum, and aligned with state and national

curriculum standards. 4-8 Reading: 3 cr. Offered autumn and spring. This class must be taken concurrently with Level 3 courses and is restricted to students who have completed coursework in Levels 1 & 2. Preparation for teaching reading in a 4-8 setting so that all students are successful. Emphasis on reading to learn. Focus on using assessment to guide instruction, learning from trade books, textbooks, and electronic texts, activating prior knowledge, studying texts, and developing student enthusiasm for reading. 5-12 Science: 3 cr. Offered autumn. Methods of teaching science in the middle and secondary school. This course emphasizes the use of inquiry, problem-solving, appropriate use of technology, and assessment techniques that align with state and national curriculum standards. 5-12 Social Studies: 3 cr. Offered autumn. Foundations and purpose of the middle and secondary social studies curriculum. Elements of curricular design, including instructional methods, materials and assessment. 5-12 Mathematics: 4 cr. Offered autumn. Methods for teaching mathematics in grades 5-12 focusing on presentation of mathematics concepts and procedures through models, problem solving, and technology. Development of instructional strategies and classroom organizational models, discourse in the classroom, and multiple means for assessing student progress. 5-12 Business Subjects: 4 cr. Offered autumn. Methods for teaching business subjects in grades 5-12 focusing on content-specific topics in business, marketing, and information technology to include: instructional planning; effective teaching strategies (F2F & online); multiple means for assessing student progress; classroom management; and the relationship of the content area to standards-based curricula.

Education K-12: Library Media

- **LIBM 463 - Library Collection Dev**

Credits: 3. Offered autumn. Focus on building and maintaining a foundation print and non-print media collection; devising a selection policy; demonstrating media use in support of the curriculum; and compiling annotated bibliographies.

- **LIBM 464 - Reference Resources**

Credits: 3. Offered intermittently. Evaluation, selection, and use of basic reference resources. Teaching of media skills, information negotiation, search strategies, database use, and information services.

- **LIBM 465 - Lib Media Tech Proc**

Credits: 3. Coreq., C&I 488. Focus on the technical processing and organization of print and non-print materials utilizing descriptive cataloging, application of AACR2 and the Dewey Decimal System, Library of Congress subject headings, and MARC21 records.

- **LIBM 466 - Libraries & Technology**

Credits: 3. Offered Summer. Uses of digital technologies in all aspects of library operations, including cataloging and circulation, collection development, reference services, and administration. Level: Undergraduate, Graduate.

- **LIBM 468 - Admin & Assess of Lib Med**

Credits: 3. Administrative and management procedures; assessment in terms of state, regional, and national guidelines for library media programs and services.

- **LIBM 491 - Special Topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Undergraduate, Graduate.

- **LIBM 492 - Independent Study**

Credits: 1 TO 3. (R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **LIBM 495 - Practicum**

Credits: 3. Offered spring and summer. Prereq., 19 credits in library Media and consent of instr. Supervised field experience in selected phases of library media center operations, including

Elementary Education B.A.

Bachelor of Arts - Education; Elementary Education Option

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 116

Required Cumulative GPA: 2.75

Note: Admission to the Teacher Education Program is required to enroll in any EDU courses.

Language Arts Content Courses

Rule: All courses are required.

Minimum Required Grade: C-

9 Total Credits Required

Literature

Rule: Complete one of the following.

Note: Other literature courses may meet this requirement. Please consult with the Education Advisor for approval.

—	Course	Credits
	LIT 110L - Intro to Lit	3 Credits
	LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
	LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

College Writing

Rule: Complete the following course.

Note: null

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits

Minimum Required Grade: C-	3 Total Credits Required
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Children's Literature

Rule: Complete the following course.

—	Course	Credits
	EDU 331 - Lit & Literacy for Children	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Mathematics Content Courses

Rule: Complete all of the following.

—	Course	Credits
	M 135 - Mathematics for K-8 Teachers I	5 Credits
	M 136 - Math for K-8 Teachers II	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Science Content Courses

Rule: Complete all of the following.

Note: Other science courses may meet the requirements. Please consult with the Education Advisor.

—	Course	Credits
	SCI 225N - General Physical/Chem Sci	5 Credits
	SCI 226N - General Earth/Life Science	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Social Studies Content Courses

Rule: Complete all of the following.

Note: null

Minimum Required Grade: C-

16 Total Credits Required

Geography

Rule: Complete one of the following.

—	Course	Credits
	GPHY 121S - Human Geography	3 Credits
	GPHY 141S - Geography of World Regions	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

American History

Rule: Complete one of the following.

Note: Other history courses may fulfill this requirement. Please consult with the Education Advisor.

—	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Other Social Studies Courses

Rule: Complete all of the following courses.

Note: Other Native American Studies courses may fulfill the NASX 105H requirement. Please consult with the Education Advisor.

—	Course	Credits
	HSTA 255 - Montana History	3 Credits
	NASX 105H - Intro Native Amer Studies	3 Credits
	PSCI 210S - Intro to American Government	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Health and Physical Education

Rule: Complete all of the following.

—	Course	Credits
	HEE 233 - Health Issues Child/Adol	3 Credits
	HEE 302 - Meth of Inst Strat in Elem PE	3 Credits

Minimum Required Grade: C-

6 Total Credits Required

The Arts

Rule: Complete all of the following.

—	Course	Credits
	ARTZ 302A - Elementary School Art	2 Credits
	MUSE 397 - Methods: K-8 Music	2 Credits
	THTR 239 - Creative Drama/Dance: K-8	2 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teacher Education Program Professional Licensure Courses

Rule: All courses are required.

Minimum Required Grade: C-

60 Total Credits Required

Level 1

Rule: All courses must be completed concurrently.

Note: Students are required to complete EDU 397 Methods: Early Numeracy K-4 (3 credits) and EDU 397 Methods: PK-3 Early Reading (3 credits).

—	Course	Credits
	EDU 222 - Educational Psych Child Dev	3 Credits
	EDU 338 - Academic Interventions	3 Credits
	EDU 395 - Clinical Experience	1 Credits
	EDU 397 - Methods: Teaching & Assessing	3 Credits
Minimum Required Grade: C-		13 Total Credits Required

Level 2

Rule: All courses must be completed concurrently.

Note: Students are required to complete EDU 397 Methods: PK-8 Language Arts (3 credits).

—	Course	Credits
	EDU 346 - Exceptionalities	3 Credits

	EDU 370 - IntegTech into Educ	3 Credits
	EDU 395 - Clinical Experience	1 Credits
	EDU 397 - Methods: Teaching & Assessing	3 Credits
	EDU 407E - Ethics & Policy Issues	3 Credits
	ENST 472 - Gen Sci: Conserv Ed	3 Credits
Minimum Required Grade: C-		16 Total Credits Required

Level 3

Rule: All courses must be completed concurrently.

Note: Students must complete EDU 495 Clinical Experience: Level 3 (1 credit).

Students must complete four EDU 497 methods courses, including 5-8 Mathematics (3 credits), K-8 Social Studies (3 credits), K-8 Science (3 credits), 4-8 Reading (3 credits).

—	Course	Credits
	EDU 340 - Classroom Management	3 Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		16 Total Credits Required

Level 4

Rule: All courses must be completed concurrently.

Note: EDU 494 is completed for 1 credit and EDU 495 is completed for 14 credits.

—	Course	Credits
	EDU 494 - Seminar:Refl Pract & App Rsrch	1 To 9 Credits
	EDU 495 - Student Teaching	1 To 14 Credits
Minimum Required Grade: C-		15 Total Credits Required

Administrative Systems Management Minor

Minor - Administrative System Mgmt (Minor)

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Note: This is a non-teaching minor offered with the Department of Curriculum & Instruction in the College of Education and Human Sciences. Admission to the Teacher Education Program is NOT required.

Administrative Systems Management Minor Required Courses

Rule: Complete all of the following courses.

Course	Credits
ACTG 201 - Principles of Fin Acct	3 Credits
BGEN 235 - Business Law	3 Credits
BMGT 340 - Mgmt & Organization Behavior	3 Credits
C&I 287 - Business Communications	3 Credits
C&I 341 - Information Managemnt & Design	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
EDU 472 - Dev Digital Rich Workplace	3 Credits
M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-	27 Total Credits Required

Teaching Library Media Licensure

Teaching Licensure - Education; Track: Teaching Library Media

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 2.75

Note: This program of study can only be completed as a teaching minor for those pursuing a teaching major in another content area or by currently licensed teachers. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. This program is offered jointly online with UM-Missoula and UM-Western. Some courses will be taken through UM-Western.

Library Media Minor Courses

Rule: Complete all of the following courses.

Note: Students will also complete LIBM 461 Information Literacy (3 credits) through UM-Western. Students may choose to substitute EDU 391 Children's and Young Adult Literature (4 credits) online through UM-Western in place of EDU 331 and EDU 432.

Course	Credits
EDU 331 - Lit & Literacy for Children	3 Credits
EDU 432 - Lit & Literacy for Yng Adlts	3 Credits
EDU 488 - Libraries and Technology	3 Credits
LIBM 463 - Library Collection Dev	3 Credits
LIBM 464 - Reference Resources	3 Credits
LIBM 465 - Lib Media Tech Proc	3 Credits
LIBM 468 - Admin & Assess of Lib Med	3 Credits
Minimum Required Grade: C-	24 Total Credits Required

Library Media Practicum

Rule: Complete the following course.

Note: All library media coursework must be completed prior to enrolling in the library media practicum.

Course	Credits
LIBM 495 - Practicum	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Reading Licensure

Teaching Licensure - Education; Track: Teaching Reading

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 2.75

Note: This program of study can only be completed as a teaching minor for those pursuing a teaching major in another content area or by currently licensed teachers. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information.

Reading Teaching Minor Courses

Rule: Complete all of the following courses.

Note: The EDU 397 course number is used for multiple courses. Students should register for EDU 397 Teaching and Assessing PK-8 Language Arts. The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Teaching and Assessing K-8 Reading.

Course	Credits
EDU 331 - Lit & Literacy for Children	3 Credits
EDU 397 - Methods: Teaching & Assessing	3 Credits
EDU 432 - Lit & Literacy for Yng Adlts	3 Credits
EDU 438 - Ltrcy Asmnt, Diagnosis & Instr	3 Credits
EDU 441 - Orgnzng Reading/Writing Prgms	3 Credits
EDU 481 - Content Area Literacy	3 Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	21 Total Credits Required

Reading Teaching Minor Practicum

Rule: Complete the following course.

Note: All reading coursework must be complete prior to enrolling in the reading practicum.

Course	Credits
EDU 456 - Applctn of Literacy Modls K12	6 Credits
Minimum Required Grade: C-	6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Teaching Special Education Licensure

Teaching Licensure - Education; Track: Teaching Special Education

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 34

Required Cumulative GPA: 3.0

Note: This program of study can only be completed as a teaching minor for those pursuing a teaching major in another content area or by currently licensed teachers. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information.

Early Childhood Special Education

Rule: Select one of the following courses.

—	Course	Credits
	EDSP 401 - Intro Early Intervention	3 Credits
	EDSP 403 - Curric/Mthds Early Spec Educ	3 Credits
Minimum Required Grade: B		3 Total Credits Required

Special Education Requirements

Rule: Complete all of the following courses.

—	Course	Credits
	EDSP 405 - Assess of Students with Excep	3 Credits
	EDSP 426 - Intro Transition & Community	3 Credits
	EDSP 454 - Adv Academic Interventions	3 Credits
	EDSP 456 - Intro Mthds Low Incidence Dis	3 Credits
	EDSP 461 - Positive Behavior Supports	3 Credits

	EDSP 462 - Spec Ed Law, Policy, Practice	3 Credits
	EDU 438 - Ltrcy Asmnt, Diagnosis & Instr	3 Credits
Minimum Required Grade: B		21 Total Credits Required

Special Education Student Teaching

Rule: Complete the following course.

Note: All special education coursework must be completed prior to the special education student teaching experience. An application is required to determine special education student teaching eligibility. See Teacher Education Services or the Office of Field Experiences for deadlines.

—	Course	Credits
	EDSP 495 - Student Teaching: Special Educ	1 To 10 Credits
Minimum Required Grade: B		10 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Technology in Education Licensure

Teaching Licensure - Education; Track: Technology in Education

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.75

Note: Technology in Education is an Area of Permissive Special Competency. This minor leads to an area of permissive special competency in technology in education for those holding or attaining a Montana teaching license. It does not qualify as a teaching endorsement in Montana. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for additional information.

Technology in Education Requirements

Rule: Complete all of the following courses.

Note: Equivalent courses from MSU-Bozeman, MSU-Billings and MSU-Northern may substitute. Please consult a C&I advisor for approved courses.

—	Course	Credits
	C&I 515 - Computer/Tchnlgcl Appl in Educ	3 Credits

	C&I 570 - Instructional Teach Found	3 Credits
	C&I 571 - Educ Tech Media	3 Credits
	C&I 580 - Dist Lrng Theory & Implem	3 Credits
	C&I 581 - Plng & Mgt for Tech in Edu	3 Credits
	C&I 582 - Ed Tech Trends & Issues	3 Credits
	C&I 584 - Authentic App Inst Design	3 Credits
Minimum Required Grade: C-		21 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Secondary Licensure

Students preparing to teach at the middle or high school levels (license for grades 5-12) will declare a major in the subject area(s) they wish to teach, e.g., English, mathematics, or any other of the state-approved major content endorsement areas listed previously. They are advised within their major department(s) and, upon admission to the Teacher Education Program, they also are advised within the Department of Curriculum and Instruction regarding the requirements necessary to earn secondary licensure. All secondary licensure students seek admission to the Teacher Education Program, usually at the end of the sophomore year, and complete course work required for licensure in Curriculum and Instruction and in their major content area(s).

Applicants for Montana teaching licensure must: (1) satisfy all degree and licensure requirements as outlined below; and (2) be at least 18 years of age. Information about the Teacher Education Program is available in the department office and online at: <http://www.coehs.umt.edu/>

Teaching Licensure - Secondary Certification

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 41

Required Cumulative GPA: 2.75

Note: Teacher Education Program coursework is completed in addition to a teaching major and leads to secondary (5-12) or K-12 teaching licensure in that content area. Individuals must be admitted to the Teacher Education Program to enroll in any EDU courses. See the Curriculum and Instruction website for additional information regarding admission.

Teacher Education Program Prerequisite

Rule: This course must be completed before applying to the Teacher Education Program

	Course	Credits
—		

WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional Licensure Requirements

Rule: Complete all of the following courses.

Note: Students may take any NASX course to fulfill this requirement. If you choose to take a course with a Native American focus outside of the Native American Studies Department, please consult with your C&I advisor for approval.

Course	Credits
HEE 233 - Health Issues Child/Adol	3 Credits
NASX 105H - Intro Native Amer Studies	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Education Coursework

Rule: Admission to the Teacher Education Program is required to enroll in the following courses.

Note: Math and Business majors are not required to complete EDU 370. They meet the technology requirement through departmental requirements. Music majors do not complete EDU 370 nor EDU 481. They meet the technology and literacy requirements through departmental requirements. English majors do not complete EDU 481. They meet the literacy requirement through departmental requirements. All students must complete major and/or minor teaching methods courses specific to their content areas. These methods course requirements are listed within the requirements for each program of study.

Course	Credits
EDU 221 - Ed Psych & Measuremnt	3 Credits
EDU 345 - Excptnlty & Clsrn Mgmt	3 Credits
EDU 370 - IntegTech into Educ	3 Credits
EDU 407E - Ethics & Policy Issues	3 Credits
EDU 481 - Content Area Literacy	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Education Field Experiences

Rule: Admission to the Teacher Education Program is required to enroll in the following courses.

Note: EDU 202 is a prerequisite to EDU 395. EDU 395 is taken concurrently with the content-specific methods course.

Course	Credits

	EDU 202 - Early Field Experience	1 Credits
	EDU 395 - Clinical Experience	1 Credits
Minimum Required Grade: Pass		2 Total Credits Required

Student Teaching Field Experience

Rule: All content, methods, and education courses must be completed prior to enrolling in the student teaching semester.

Note: An application is required to determine student teaching eligibility. See Teacher Education Services or the Office of Field Experiences for deadlines. The EDU 494 course is completed for 1 credit and the EDU 495 course is completed for 14 credits.

	Course	Credits
	EDU 494 - Seminar:Refl Pract & App Rsrch	1 To 9 Credits
	EDU 495 - Student Teaching	1 To 14 Credits
Minimum Required Grade: C-		15 Total Credits Required

Teaching ESL Licensure

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure - Education; Track: Teaching ESL

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Core Courses

Rule: Must complete the following subcategories

16 Total Credits Required

Required Courses

Rule: All courses are required

Note: Those completing the teaching minor in ESL must take Ling 495 ESL Practicum for 3 credits.

Course	Credits
LING 470 - Linguistic Analysis	3 Credits
LING 471 - Phonetics and Phonology	3 Credits
LING 472 - Generative Syntax	3 Credits
LING 480 - Tchg Engl as For Lang	3 Credits
LING 495 - ESL Practicum	1 To 3 Credits
Minimum Required Grade: C-	13 Total Credits Required

Core Options

Rule: Complete 1 of the following courses

Course	Credits
LING 477 - Bilingualism	3 Credits
LING 478 - Second Language Development	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Elective Courses

Rule: Complete 2 of the following courses

Note: Ling 477 or Ling 478 may be taken as an Elective if not taken as a Required Course.

Course	Credits
LING 466 - Pedagogical Grammar	3 Credits
LING 473 - Language and Culture	3 Credits
LING 481 - The ESL Professional	3 Credits
LING 489 - Morphology	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

John Matt, Chairman, Educational Leadership

The **Educational Leadership** knowledge base emphasizes the realities of the workplace, blending practical tasks with the conceptual models of effective leadership. The model uses leadership assessment and problem-based learning throughout nine curricular strands: change/future, leadership, research community, communication, assessment/program evaluation, management, diversity, curriculum, and professionalism/socialization. Students at both degree levels experience integrated coursework, performance-based assessment, and exit interviews on completion of the degree programs.

Programs: The M.Ed., Ed.S., Administrative Licensure, and Ed.D. are offered in education administration and supervision. Information regarding specific requirements and program options is available from the Phyllis J. Washington College of Education and Human Sciences. For more information, please refer to the University of Montana Graduate Programs and Admissions Catalog. Graduate programs are accredited by The National Council for Accreditation of Teacher Education (NCATE) and The Montana Board of Public Education (BPE).

Admission to Educational Leadership: The Program Admissions Committee has established policies and standards for admission which include the GRE (verbal and quantitative); three letters of recommendation (one from an immediate supervisor); official transcripts for all undergraduate and graduate coursework; qualifying examination; and interviews (doctoral). Contact the Department for details.

Certification Requirements: Education Leadership degree and administrative licensure programs lead to Montana Class 3 Administrative Licensure with either a K-12 Principal or Superintendent endorsement. Please note that in addition to the coursework and degree requirements, the State of Montana also requires licensed teaching, school counseling, or administrative experience for the Class 3 license.

Courses (Check master schedule for availability of all courses)

R- before the course description indicates the course may be repeated for credit to the maximum indicated after the R. Credits beyond this maximum do not count toward a degree.

Department Faculty

Professor

William Mccaw, Professor

Associate Professor

Patty Kero, Associate Professor
John Matt, Department Chair / Associate Professor
Frances O'Reilly, Associate Professor

Assistant Professor

Daniel Lee, Assistant Professor

Course Descriptions

Educational Leadership

- EDLD 295 - Special Topics in Ed Amin

Credits: 1 TO 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **EDLD 495 - Special Topics**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **EDLD 502 - Philosophy of Education**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 502. Major philosophical schools of thought and leading proponents of each. Concepts of society, the educative process, and the role of education. Level: Graduate
- **EDLD 512 - Educational Futures**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Predicting and projecting the near and more distant future of education. The changing place and nature of education and leadership in tomorrow's society. Level: Graduate
- **EDLD 519 - Analysis of Ed Data**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Explanation and practice in measurement and statistical analysis of educational data. Preparation in measurement and statistical analysis for educational research. Level: Graduate
- **EDLD 520 - Educational Research**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I and HHP 520. An understanding of basic quantitative and qualitative research methodology and terminology, particularly as they are used in studies presented in the professional literature. Level: Graduate
- **EDLD 540 - Higher Education Finance**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Overview of how colleges and universities make financial and budgetary decisions; current trends in state and federal policy related to finance; contemporary problems in finance of education. Level: Graduate
- **EDLD 542 - The College Student**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Survey of today's college student including discussion of demographics, student development theories, learning theories, and contemporary issues on college campuses related to college students. Level: Graduate
- **EDLD 544 - The College Curriculum**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Historical and contemporary development of college and university curriculum. Includes overview of pedagogical strategies, assessment, evaluation, and curricular change. Level: Graduate
- **EDLD 546 - Fed & State Higher Ed Pol**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Overview of policies at the local, state, and national levels that affect the conduct of higher education; current trends in higher education policy; changes in educational policy; how policies affect different institutional types. Level: Graduate
- **EDLD 550 - Found Educational Leadersh**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Basic functions of K-12 administration and supervision and how contemporary views have evolved; models of leadership style and practice compared; responsibilities and relationships of school boards and chief school officers. Level: Graduate

- **EDLD 551 - Found Curric Leadership**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. The history and theoretical bases of current K-12 curriculum and instructional leadership. Level: Graduate
- **EDLD 552 - Sup Eval Pub Sch Educators**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Conflicting views and models of supervision; supervision in relation to administration and evaluation. Development of instruments for the formative and summative evaluation of teaching and their use in simulated cases. Level: Graduate
- **EDLD 554 - School Law**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Key Montana and national legislation regarding public education. Landmark cases of the U.S. Supreme Court and other federal, regional, and state courts as they affect the operation of public schools and the rights of school board members, administrators, teachers, students, and parents. Level: Graduate
- **EDLD 556 - Finance of Publ Education**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Revenue sources for K-12 public schools; proper expenditures; Montana's foundation program and related legislation; major court cases and how they have affected ways of funding schools; developing effective school and district budgets. Level: Graduate
- **EDLD 559 - School Pub Rel-Prins**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Investigation of the appropriate leadership and management roles of the modern school principal as they relate to public relations. Understanding of political theory as it relates to developing and maintaining relationships with internal and external publics. Level: Graduate
- **EDLD 567 - K-12 Leadership**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Examination of the roles responsibilities, and relationships of educators relative to management and leadership considerations at all levels of the educational organization (elementary, middle, secondary, and central office). Level: Graduate
- **EDLD 568 - K-12 Curriculum**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Major aspects of curriculum related to the duties and responsibilities of school administrators. Issues related to the development, review and evaluation o curriculum. Exploration of issues related to selected instructional models and practices; school improvement. Level: Graduate
- **EDLD 581 - Plng & Mgmt For Tech In Edu**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 581. Creating, implementing, maintaining, and evaluating technology plans for educational institutions, including budgets, facilities, and hardware planning. Level: Graduate
- **EDLD 583 - Strategic Plng For Tech**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 583. Leadership and strategic planning processes for technology integration within schools. Level: Graduate
- **EDLD 585 - Fieldwork Ed Admin & Super**
Credits: 2 TO 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Fieldwork at the school level (when the student is not completing an

internship), with the cooperation of the principal and under the guidance of a University of Montana professor. Level: Graduate

- **EDLD 594 - Seminar**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Group analysis of problems in specific areas of education. Level: Graduate
- **EDLD 595 - Special Topics**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
- **EDLD 596 - Independent Study**
Credits: 1 TO 6. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
- **EDLD 597 - Research**
Credits: 1 TO 9. (R-10) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **EDLD 598 - Internship**
Credits: 1 TO 12. (R-10) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate
- **EDLD 599 - Professional Paper**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
- **EDLD 618 - Educational Statistics**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 618. Advanced statistical methods and use of the mainframe computer and microcomputer for data analysis. Use of a recognized statistical package for research applications. Level: Graduate
- **EDLD 620 - Qualitative Research**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 620. In-depth review of qualitative research methods, designs, and approaches. The development of a research proposal. Level: Graduate
- **EDLD 625 - Quantitative Research**
Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 625. Principles and technique of quantitative research in educational settings. Students prepare a draft of a research proposal and experience an abbreviated dissertation proposal defense. Level: Graduate
- **EDLD 653 - School Personnel Admin**
Credits: 3. Prereq., consent of instructor required. Administration of classified and certificated school employees; personnel-related laws, functions, and decisions; unions, bargaining contracts, grievances, etc. Level: Graduate
- **EDLD 656 - The Economics of Education**
Credits: 3. Prereq., consent of instructor required. School finance from a national perspective; alternative budgeting and school-revenue models; equity considerations. Level: Graduate

- **EDLD 657 - Facil Plng/Schl Bus Func**

Credits: 3. Prereq., consent of instructor required. Working with architects, school personnel, and others on educationally and financially sound plans for new and remodeled facilities; the school business official's responsibilities regarding buildings and grounds, maintenance and custodial services, transportation, food services, and the administration of classified personnel. Level: Graduate

- **EDLD 658 - School Pub Rel-Supts**

Credits: 3. Prereq., consent of instructor required. Enhancing site- and district-level internal and external relations; conducting needs assessments, inservice workshops, and funding campaigns; improving administrators' writing, listening, and speaking skills; composing press releases and newsletters; working with the media. Level: Graduate

- **EDLD 660 - Adult Continuing Education**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Adult learning theory and the special needs and motivations of adult learners in postsecondary institutions; principles and practices of administering postsecondary continuing education programs. Level: Graduate

- **EDLD 662 - History of Higher Educ**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Survey of the historical roots of higher education from world and comparative perspectives; examination of the historic and contemporary missions, organizational structures, governance, and administration of various types of postsecondary and higher education institutions in America and abroad. Level: Graduate

- **EDLD 664 - The Community College**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. The organization and administration of American postsecondary education in two-year collegiate institutions; current trends in governance, finance, curriculum, faculty and students. Level: Graduate

- **EDLD 667 - American College Professor**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Investigation of the prevailing curriculum and instruction in American undergraduate and graduate education and consideration of reform reports. Level: Graduate

- **EDLD 668 - College & University Admin**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Administration of college and university programs, departments, and schools; the roles of program director or coordinator, department chairperson, dean, vice president, provost, president, chancellor, and commissioner. Level: Graduate

- **EDLD 670 - Best Practices in IPL**

Credits: 3. Students explore the field of International Programs at the college or university level and seek current best practices. This course is designed to give students an understanding of the leadership and management activities required of leaders in the field of international programs. Level: Graduate

- **EDLD 672 - Intl Prog Dev**

Credits: 3. This course prepares professionals with the knowledge and practical skills needed to develop programs, seek external funding, and write proposals to support student and professional exchanges, study abroad, ESL and intensive language programs, internships, student services, partnership agreements, and other education and training activities in the international field. Level: Graduate

- **EDLD 673 - Lead./Cultures**

Credits: 3. The course introduces a methodology to support the emerging field of international and

comparative educational leadership and management and is instrumental for students of educational leadership and management. Level: Graduate

- **EDLD 674 - Internship in College Tchg**

Credits: 1 TO 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Provides an opportunity for guided and supervised teaching at the college level and assistance to the aspiring college teacher in meeting the needs of a diverse student population; assistance provided in methods of teaching at the college level, theories of learning, use of technology, and evaluation and assessment techniques. Level: Graduate

- **EDLD 676 - Internship Higher Ed Admin**

Credits: 1 TO 3. (R-6) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Supervised and guided work in an administrative unit/department at the college/university level. Level: Graduate

- **EDLD 677 - Globalization in Education**

Credits: 3. Course explores globalization of education from the perspective of International Programs at the post-secondary level. This course is designed to prepare students for leadership positions in the field of International Programs and other related fields. Level: Graduate

- **EDLD 678 - Cultural Proficiency**

Credits: 3. Course explores the area of cultural proficiency through a variety of lenses. Students use interviews and self-reflection to develop a framework for understanding cultural issues and ethical approaches cultural issues. Level: Graduate

- **EDLD 679 - Linguistic Diversity**

Credits: 3. Course explores policy issues related to linguistic diversity. This course is designed to help students develop a framework of global issues as they relate to, and are impacted by, linguistic diversity. Level: Graduate

- **EDLD 680 - Pol./Int.I Ed.**

Credits: 3. Course explores political issues related to International Programs. This course is designed to prepare students for the dynamic nature of political arena surrounding the development and implementation of postsecondary International Programs. Level: Graduate

- **EDLD 681 - Comp. Int.I Ed.**

Credits: 3. Course explores the field of international programs at the college or university level through a study of comparative education. This course is designed to familiarize students with the similarities and differences between educational systems across the globe. Level: Graduate

- **EDLD 682 - Cross-Cultural Competence**

Credits: 3. Blending both the practical and theoretical, this course offers you the requisite knowledge, the appropriate motivations, and the relevant skills to function competently with culturally-different others. Level: Graduate

- **EDLD 683 - Int.I Persp.**

Credits: 3. This course primarily focuses on international students sharing their perspectives (including international academics and experienced practitioners). Topics include adaptation challenges, and the role that international students and faculty play in broader internationalization and diversity agendas within US higher education. Level: Graduate

- **EDLD 694 - Adv Sem: Ed Admin/Superv**

Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. A review and discussion of current research. Topics vary. Level: Graduate

- **EDLD 697 - Adv Research Ed Ad Super**

Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or

Curriculum and Instruction majors. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate

- **EDLD 699 - Prof Sem/Dissertation**

Credits: 1 TO 12. (R-12) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. A review and discussion of current research. Topics vary. Level: Graduate

Health and Human Performance Department

Scott Richter, Chair

Vision

*Health and Human Performance Professionals
Creating a Healthy, Progressive Global Community*

Mission

In pursuit of our vision, the Department of Health and Human Performance (HHP) prepares quality graduates to be ethical and competent entry level professionals in health and human performance related occupations or candidates for advanced study in related disciplines. Within the liberal arts tradition of the University of Montana and the mission of the College of Education and Human Sciences, the Department of Health and Human Performance engages in professional education, scholarly activity, and meaningful public service. The department emphasizes mental, social, spiritual, and physical dimensions of health to promote healthy lifestyle choices and enhanced quality of life.

The Health and Human Performance Department has established the following goals in support of our vision and mission:

- **Promote** an understanding and appreciation for the scope of the profession
- **Enhance** student awareness of the departmental mission and goals
- **Coordinate** student development of the basic skills germane to effective practice as health and human performance professionals or successful pursuit of advanced studies
- **Cultivate** higher-order thinking skills that increase students' involvement and interest in their own learning, promoting a lifelong quest for knowledge
- **Nurture** cognition of the multiple dimensions of health (physical, intellectual, emotional, spiritual, social and environmental)
- **Advocate** respect for the uniqueness and dignity of others.

Undergraduate students choose between two majors: Athletic Training or Health & Human Performance (HHP). HHP majors also choose from one of the following options: Exercise Science, Health Enhancement, or Community Health.

The **Exercise Science option** has three tracks: Pre-Professional, Applied, and Pre-Athletic Training. The **Pre-Professional track** is designed to provide students with an in-depth science background and prepares students for post-baccalaureate study in exercise physiology and related health sciences such as medical school, physical therapy, physician's assistant or other medical programs. Successful graduates of this option should possess the knowledge and skills to qualify for the ACSM Exercise Specialist Certification (requires additional clinical hours). The Pre-Professional option is for students planning to continue on in higher education. The **Applied track is designed to prepare students for jobs** as strength and conditioning coaches, athletic coaches, personal trainers, elderly services providers, corporate wellness personnel and directors, fitness center directors and other fitness related jobs. Successful graduates of this track should possess the knowledge and skills to qualify for the American College of Sport Medicine-Fitness Instructor and/or National Strength and Conditioning Association Certified Strength and Conditioning Specialist. The **Pre-Athletic Training Track** is designed for students interested in applying for the Master's in Athletic Training Program (see information below).

The **Health Enhancement option** prepares students to use a variety of educational strategies designed to facilitate the adoption of healthy behaviors in K-12 students. Upon acceptance into the College of Education and Human Sciences, and successful completion of the course requirements, students will be eligible for a Montana K-12 teaching license. See Admission Policies below.

The **Community Health option** prepares students with knowledge and skills related to assessing individual and community needs prior to planning, implementing, and evaluating programs designed to encourage healthy lifestyles and environments. Individuals who will be most successful in the community health option are those who are deeply interested in the interrelationship among all aspects of health (social, emotional, mental, spiritual and physical) and in the life and behavioral sciences. In addition, success in this field requires imagination and creativity in applying scientific knowledge to strategies for individual and community change through a wide range of educational, environmental and political approaches. Graduates of this program will be prepared to take the National Certification Exam for Health Education Specialists.

The **Master's in Athletic Training** Program prepares competent entry-level athletic trainers for employment in educational and clinical settings or post-graduate study. The Athletic Training curriculum is designed to help students develop competency in evidence based medicine, prevention and health promotion, clinical examination and diagnosis, acute care of injury and illness, therapeutic interventions, psychosocial strategies and referral, healthcare administration and professional development and responsibility. Successful graduates should possess the knowledge and skills to qualify for the Board of Certification Examination.

The graduate curriculum in Health and Human Performance at the University of Montana prepares post-graduates to become effective health and human performance professionals or competitive candidates for advanced study in related disciplines through a comprehensive program of study and guided research.

Development of the following is considered essential in achieving a graduate degree:

1. Oral and written communication skills,
2. An understanding of current research literature in one's chosen specialization and the independent pursuit of learning beyond the confines of curricular requirements,
3. Appropriate technological skills,
4. Ability to design, conduct, and report research in a scholarly fashion,
5. Personal characteristics, sense of responsibility, and professional behavior requisite for effective functioning as an advanced health and human performance professional.

Graduate options include Exercise Science, Health Promotion, Athletic Training, and Health and Human Performance. For more information regarding the department's graduate program refer to either:

The University of Montana Graduate Programs and Admissions catalog: <http://www.umt.edu/grad/>

The College of Education and Human Sciences Graduate website:http://coehs.umt.edu/departments/hhp/graduate_programs/default..php

Activity Classes

The HHP department also provides a large activity program (ACT classes numbered 100-287 and HHP 172-174) which includes instruction in a wide variety of individual, team, recreational, and fitness activities. Goals of this program include helping students:

1. Develop and maintain long-term health-related fitness,
2. Develop motor performance skills that facilitate regular and continuous participation in physical activity, and
3. Develop the adult "inner athlete" who continually strives to reach optimal potential through involvement in challenging endeavors.

Any University of Montana student may elect to apply up to four credits toward a baccalaureate degree. For descriptions of the activity classes offered, refer to the website at http://coehs.umt.edu/departments/hhp/activity_classes/default.php.

Special Degree Requirements

Refer to graduation requirements listed previously in the catalog. See index.

Students must fulfill the requirements listed below. All HHP majors must earn a minimum grade of a C- in all required courses, including prerequisites, except for special cases of higher requirements in Athletic Training and Health Enhancement noted below. In-department and out-of-department courses specifically listed in this catalog as requirements for Health and Human Performance majors must be taken for a traditional letter grade.

The University of Montana symbolic systems requirement is met by completing one of the following statistics courses and any pre-requisite courses: STAT 216. Introduction to Statistics or PSYX 222 Psychological Statistics or SOCI 202 Social Statistics or WILD 240 Wildlife Monitoring & Biostatistics or EDU 421. All options must meet this

requirement.

Admission Policies for Health Enhancement Option

The Health Enhancement option is designed for individuals who wish to teach in K-12 school systems. Application for admission to the College of Education must be made (refer to <http://coehs.umt.edu/departments/hhp/default.php>). Applications are accepted twice a year; however, the number of students admitted into the program is limited. Application is made no sooner than after the completion of 30 hours of course work. A cumulative GPA of 2.75 is necessary for application.

To successfully complete the program in Health Enhancement, a student must receive a grade of C (2.00) or above in every course in the following areas: teaching major, professional education courses, a drug abuse course, PSYX 100S, WRIT 101, and EDU 481. These courses must be taken as a traditional letter grade.
Admission Policies for the Masters in Athletic Training Degree Program

Admission Policies for the Athletic Training Degree

Athletic Training Program (ATP)

The University of Montana-Missoula offers an accelerated entry level Master's in Athletic Training program housed within the Health and Human Performance Department. The program meets the standards established by the Commission on Accreditation of Athletic Training Education (CAATE). The current undergraduate Athletic Training Program is accredited by CAATE; however the Master's in Athletic Training Program will undergo review in 2013-2014. The ATP is a demanding curriculum which requires dedication and commitment. Upon completion there are a variety of professional career opportunities.

The University of Montana offers an accelerated Master's in Athletic Training Program. This program allows students to take three years of pre-requisite courses and general education requirements, followed by 2 years full time in a Master's in Athletic Training program, including summers. There are two ways in which a student may attain a Master's Degree in Athletic Training:

Option 1: A five-year program in which students earn a Bachelor of Science Degree in Health and Human Performance and a Master's Degree in Athletic Training.

Option 2: A two-year master's program designed for students who already have a baccalaureate degree

Upon completion of the Master's in Athletic Training Program, students will be eligible to sit for the Board of Certification (BOC) Exam. (Pending accreditation from CAATE Fall 2014)

*Both the Bachelor's degree and Master's degree will be officially awarded at the time of graduation.

Following are the requirements for application, admission, and retention of the Athletic Training Program (ATP). Academic advisors are available to assist students with this interesting and challenging professional program.

Admission. Students who desire admission into the Master's in Athletic Training Program must submit a formal application. This application must be submitted by the deadline (February 15th) prior to your proposed admission into the professional program. If the application deadline falls on a weekend, applications may be submitted the next business day by 5pm. Applications received after the deadline will be considered on a rolling admissions basis if available slots exist.

A review board consisting of the Athletic Training Program Director, Clinical Director, Preceptors, professional students and possibly other professionals, will evaluate each student applying for admission to the professional program. Formal notification of admission to the Master's program will be made in writing.

Candidates who are NOT admitted to the program will also receive written notification of this decision. Students may be selected as alternates and if a vacancy should become available prior to summer semester, these students will be informed. Not all qualified candidates may be admitted to the Master's program due to limited enrollment in clinical experiences.

For more information on applying to the professional program, please go to <http://coehs.umt.edu/umat/applications.php>.

ADMISSION REQUIREMENTS FOR PROFESSIONAL PROGRAM

1. Students must apply and be accepted to the University of Montana's Graduate

School <http://www.umt.edu/grad/Apply/Graduate%20Degree%20Admission.php>

2. Students must have a minimum GPA of 3.0 for all college coursework (a GPA below 3.0 may be considered)
3. Completed pre-requisite courses (students may be enrolled in pre-requisite courses at time of application)
4. Documentation of 75 hours of observation under a Certified/Licensed Athletic Trainer and completion of athletic training modules located in the professional handbook
5. Official transcript(s) of all college coursework

Professional-ATP

As a student in the Athletic Training Program at the University of Montana, students must meet the following retention standards:

- Enroll as a full-time student (unless approved by Program Director)
- Maintain a cumulative grade point average of 3.0 or higher
- Achieve no more than 2 "C" grades in graduate courses
- Achieve satisfactory evaluations in each Clinical Phase before progressing
- Successfully complete coursework in the sequence indicated by the program of study unless approved by Athletic Training Program Director
- Abide by the Code of Ethics of the University and those established by the National Athletic Trainers' Association

Students are expected to complete at least 200-250 hours of clinical experience each semester and many of those hours are during evenings and weekends. Students who fail to meet the retention criteria will be placed on probation in the Athletic Training Program for a maximum of two semesters. This may limit progress of course sequencing and clinical phases. If standards are not met by the end of the probationary period, the student will be dismissed from the Athletic Training Program. Students who are placed on probation may require remediation as deemed appropriate by the Program Director.

For further information on clinical education requirements, please visit the athletic training website.

Additional Costs Associated with Program

There will be additional costs (above tuition and fees) for the clinical rotations. Program fee: There is an additional fee of \$925/semester in addition to regular tuition of fees. This fee will help cover the cost of lab equipment, accreditation costs, adjunct teaching, and software. Other costs may include, but are not limited to: Criminal Background Check (\$55), Initial NATA Membership Fee (\$60 approximately), Polo Shirts (\$30), and Medical Pack/Kit (\$30).

Transportation is needed for all off-campus clinical sites. Each student will have a minimum of one off-campus site.

General Program Requirements

First Aid and CPR Exit Certifications

All Health and Human Performance students are required to have the appropriate certification in first aid/emergency care and CPR at graduation. The following certifications will meet this competency:

Any one of the following current first aid/emergency care certifications:

- American Academy of Orthopedic Surgeons (AAOS) - Emergency Medical Responder
- National Safety Council Level - First Responder
- Wilderness First Responder
- First Responder - American Heart Association

Plus one of the following CPR certifications:

- American Heart Association (Health Care Provider)
- American Red Cross (Professional Rescuer)

Or Certification as an Emergency Medical Technician

Health and Human Performance students may use available elective credits to take ECP 120/121, First Responder and CPR, to meet this competency, or they may elect to fulfill the competency through one of the department approved agencies. Academic credit for ECP 120/121 will not be awarded for certifications earned at off-campus approved agencies other than the Health and Human Performance Department at the University of Montana.

Upper-division Writing Expectation

The HHP Department offers three upper-division writing courses to fulfill the General Education writing requirements; KIN 447, HHP 472 and HEE 301. Exercise Science and Applied Health Science students are required to complete KIN 450 (Analytical and Communication Techniques), and Health Enhancement Students are required to complete HEE 301 (Instructional Strategies in Secondary Physical Education).

Undergraduate students must complete requirements for a minimum of one of the options listed below. The typical student may take more than four years to complete these requirements, especially in the Health Enhancement option.

Department Faculty

Professor

Blakely Brown, Professor
Clarence Burns, Professor
Charles Dumke, Professor
Laura Dybdal, Professor
Steven Gaskill, Professor
Arthur Miller, Professor
Brent Ruby, Professor
Annie Sondag, Ph.D.

Associate Professor

Matthew Bundle, Associate Professor
Valerie Moody, Professor
Charles Palmer, Associate Professor
Scott Richter, Department Chair / Associate Professor

Assistant Professor

Jessica Moore, Clinical Adjunct Instructor

Course Descriptions

Educational Leadership

- **EDLD 295 - Special Topics in Ed Amin**
Credits: 1 TO 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **EDLD 495 - Special Topics**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **EDLD 502 - Philosophy of Education**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 502. Major philosophical schools of thought and leading proponents of each. Concepts of society, the educative process, and the role of education. Level: Graduate

- **EDLD 512 - Educational Futures**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Predicting and projecting the near and more distant future of education. The changing place and nature of education and leadership in tomorrow's society. Level: Graduate

- **EDLD 519 - Analysis of Ed Data**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Explanation and practice in measurement and statistical analysis of educational data. Preparation in measurement and statistical analysis for educational research. Level: Graduate

- **EDLD 520 - Educational Research**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I and HHP 520. An understanding of basic quantitative and qualitative research methodology and terminology, particularly as they are used in studies presented in the professional literature. Level: Graduate

- **EDLD 540 - Higher Education Finance**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Overview of how colleges and universities make financial and budgetary decisions; current trends in state and federal policy related to finance; contemporary problems in finance of education. Level: Graduate

- **EDLD 542 - The College Student**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Survey of today's college student including discussion of demographics, student development theories, learning theories, and contemporary issues on college campuses related to college students. Level: Graduate

- **EDLD 544 - The College Curriculum**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Historical and contemporary development of college and university curriculum. Includes overview of pedagogical strategies, assessment, evaluation, and curricular change. Level: Graduate

- **EDLD 546 - Fed & State Higher Ed Pol**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Overview of policies at the local, state, and national levels that affect the conduct of higher education; current trends in higher education policy; changes in educational policy; how policies affect different institutional types. Level: Graduate

- **EDLD 550 - Found Educational Leadersh**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Basic functions of K-12 administration and supervision and how contemporary views have evolved; models of leadership style and practice compared; responsibilities and relationships of school boards and chief school officers. Level: Graduate

- **EDLD 551 - Found Curric Leadership**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. The history and theoretical bases of current K-12 curriculum and instructional leadership. Level: Graduate

- **EDLD 552 - Sup Eval Pub Sch Educators**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Conflicting views and models of supervision; supervision in relation to administration and evaluation. Development of instruments for the formative and summative evaluation of teaching and their use in simulated cases. Level: Graduate

- **EDLD 554 - School Law**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Key Montana and national legislation regarding public education. Landmark cases of the U.S. Supreme Court and other federal, regional, and state courts as they affect the operation of public schools and the rights of school board members, administrators, teachers, students, and parents. Level: Graduate

- **EDLD 556 - Finance of Publ Education**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Revenue sources for K-12 public schools; proper expenditures; Montana's foundation program and related legislation; major court cases and how they have affected ways of funding schools; developing effective school and district budgets. Level: Graduate

- **EDLD 559 - School Pub Rel-Prins**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Investigation of the appropriate leadership and management roles of the modern school principal as they relate to public relations. Understanding of political theory as it relates to developing and maintaining relationships with internal and external publics. Level: Graduate

- **EDLD 567 - K-12 Leadership**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Examination of the roles responsibilities, and relationships of educators relative to management and leadership considerations at all levels of the educational organization (elementary, middle, secondary, and central office). Level: Graduate

- **EDLD 568 - K-12 Curriculum**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Major aspects of curriculum related to the duties and responsibilities of school administrators. Issues related to the development, review and evaluation o curriculum. Exploration of issues related to selected instructional models and practices; school improvement. Level: Graduate

- **EDLD 581 - Plng & Mgmt For Tech In Edu**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 581. Creating, implementing, maintaining, and evaluating technology plans for educational institutions, including budgets, facilities, and hardware planning. Level: Graduate

- **EDLD 583 - Strategic Plng For Tech**

Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 583. Leadership and strategic planning processes for technology integration within schools. Level: Graduate

- **EDLD 585 - Fieldwork Ed Admin & Super**

Credits: 2 TO 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Fieldwork at the school level (when the student is not completing an internship), with the cooperation of the principal and under the guidance of a University of Montana professor. Level: Graduate

- **EDLD 594 - Seminar**

Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Group analysis of problems in specific areas of education. Level: Graduate

- **EDLD 595 - Special Topics**
 Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
- **EDLD 596 - Independent Study**
 Credits: 1 TO 6. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
- **EDLD 597 - Research**
 Credits: 1 TO 9. (R-10) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **EDLD 598 - Internship**
 Credits: 1 TO 12. (R-10) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate
- **EDLD 599 - Professional Paper**
 Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Consent of instructor. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
- **EDLD 618 - Educational Statistics**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 618. Advanced statistical methods and use of the mainframe computer and microcomputer for data analysis. Use of a recognized statistical package for research applications. Level: Graduate
- **EDLD 620 - Qualitative Research**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 620. In-depth review of qualitative research methods, designs, and approaches. The development of a research proposal. Level: Graduate
- **EDLD 625 - Quantitative Research**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Same as C&I 625. Principles and technique of quantitative research in educational settings. Students prepare a draft of a research proposal and experience an abbreviated dissertation proposal defense. Level: Graduate
- **EDLD 653 - School Personnel Admin**
 Credits: 3. Prereq., consent of instructor required. Administration of classified and certificated school employees; personnel-related laws, functions, and decisions; unions, bargaining contracts, grievances, etc. Level: Graduate
- **EDLD 656 - The Economics of Education**
 Credits: 3. Prereq., consent of instructor required. School finance from a national perspective; alternative budgeting and school-revenue models; equity considerations. Level: Graduate
- **EDLD 657 - Facil Plng/Schl Bus Func**
 Credits: 3. Prereq., consent of instructor required. Working with architects, school personnel, and others on educationally and financially sound plans for new and remodeled facilities; the school business official's responsibilities regarding buildings and grounds, maintenance and custodial services, transportation, food services, and the administration of classified personnel. Level: Graduate

- **EDLD 658 - School Pub Rel-Supts**
 Credits: 3. Prereq., consent of instructor required. Enhancing site- and district-level internal and external relations; conducting needs assessments, inservice workshops, and funding campaigns; improving administrators' writing, listening, and speaking skills; composing press releases and newsletters; working with the media. Level: Graduate
- **EDLD 660 - Adult Continuing Education**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Adult learning theory and the special needs and motivations of adult learners in postsecondary institutions; principles and practices of administering postsecondary continuing education programs. Level: Graduate
- **EDLD 662 - History of Higher Educ**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Survey of the historical roots of higher education from world and comparative perspectives; examination of the historic and contemporary missions, organizational structures, governance, and administration of various types of postsecondary and higher education institutions in America and abroad. Level: Graduate
- **EDLD 664 - The Community College**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. The organization and administration of American postsecondary education in two-year collegiate institutions; current trends in governance, finance, curriculum, faculty and students. Level: Graduate
- **EDLD 667 - American College Professor**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Investigation of the prevailing curriculum and instruction in American undergraduate and graduate education and consideration of reform reports. Level: Graduate
- **EDLD 668 - College & University Admin**
 Credits: 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Administration of college and university programs, departments, and schools; the roles of program director or coordinator, department chairperson, dean, vice president, provost, president, chancellor, and commissioner. Level: Graduate
- **EDLD 670 - Best Practices in IPL**
 Credits: 3. Students explore the field of International Programs at the college or university level and seek current best practices. This course is designed to give students an understanding of the leadership and management activities required of leaders in the field of international programs. Level: Graduate
- **EDLD 672 - Intl Prog Dev**
 Credits: 3. This course prepares professionals with the knowledge and practical skills needed to develop programs, seek external funding, and write proposals to support student and professional exchanges, study abroad, ESL and intensive language programs, internships, student services, partnership agreements, and other education and training activities in the international field. Level: Graduate
- **EDLD 673 - Lead./Cultures**
 Credits: 3. The course introduces a methodology to support the emerging field of international and comparative educational leadership and management and is instrumental for students of educational leadership and management. Level: Graduate
- **EDLD 674 - Internship in College Tchg**
 Credits: 1 TO 3. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Provides an opportunity for guided and supervised teaching at the college level and assistance to the aspiring college teacher in meeting the needs of a diverse student

population; assistance provided in methods of teaching at the college level, theories of learning, use of technology, and evaluation and assessment techniques. Level: Graduate

- **EDLD 676 - Internship Higher Ed Admin**
Credits: 1 TO 3. (R-6) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Supervised and guided work in an administrative unit/department at the college/university level. Level: Graduate
- **EDLD 677 - Globalization in Education**
Credits: 3. Course explores globalization of education from the perspective of International Programs at the post-secondary level. This course is designed to prepare students for leadership positions in the field of International Programs and other related fields. Level: Graduate
- **EDLD 678 - Cultural Proficiency**
Credits: 3. Course explores the area of cultural proficiency through a variety of lenses. Students use interviews and self-reflection to develop a framework for understanding cultural issues and ethical approaches cultural issues. Level: Graduate
- **EDLD 679 - Linguistic Diversity**
Credits: 3. Course explores policy issues related to linguistic diversity. This course is designed to help students develop a framework of global issues as they relate to, and are impacted by, linguistic diversity. Level: Graduate
- **EDLD 680 - Pol./Int.I Ed.**
Credits: 3. Course explores political issues related to International Programs. This course is designed to prepare students for the dynamic nature of political arena surrounding the development and implementation of postsecondary International Programs. Level: Graduate
- **EDLD 681 - Comp. Int.I Ed.**
Credits: 3. Course explores the field of international programs at the college or university level through a study of comparative education. This course is designed to familiarize students with the similarities and differences between educational systems across the globe. Level: Graduate
- **EDLD 682 - Cross-Cultural Competence**
Credits: 3. Blending both the practical and theoretical, this course offers you the requisite knowledge, the appropriate motivations, and the relevant skills to function competently with culturally-different others. Level: Graduate
- **EDLD 683 - Int.I Persp.**
Credits: 3. This course primarily focuses on international students sharing their perspectives (including international academics and experienced practitioners). Topics include adaptation challenges, and the role that international students and faculty play in broader internationalization and diversity agendas within US higher education. Level: Graduate
- **EDLD 694 - Adv Sem: Ed Admin/Superv**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. A review and discussion of current research. Topics vary. Level: Graduate
- **EDLD 697 - Adv Research Ed Ad Super**
Credits: 1 TO 9. (R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate
- **EDLD 699 - Prof Sem/Dissertation**
Credits: 1 TO 12. (R-12) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. A review and discussion of current research. Topics vary. Level: Graduate

Community Health B.S.

Bachelor of Science - Health & Human Performance; Community Health Option

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 106

Required Cumulative GPA: 2.0

Lower Division Required Courses

Rule: All courses are required.

Note: Students should take ECP 120 and ECP 121 within two years of graduation in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

—	Course	Credits
	ECP 120 - Emergency Medical Respondr Lec	2 Credits
	ECP 121 - Emergency Medical Respondr Lab	1 Credits
	HTH 110 - Personal Health and Wellness	3 Credits
	KIN 201 - Basic Exercise Prescription	3 Credits
	KIN 205 - Foundations of HHP	3 Credits
	NUTR 221N - Basic Human Nutrition	3 Credits
	Minimum Required Grade: C-	15 Total Credits Required

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160 as an elective course prior to taking Anatomy and Physiology. Students may take any other Statistics course pre-approved by their adviser in place of STAT 216. Students may substitute WRIT 121 or WRIT 201 for WRIT 222. Note: BIOH 201N and 202N are co-requisites completed for a total of 4 credits and BIOH 211N and 212N are co-requisites completed for a total of 4 credits.

—	Course	Credits
	BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits

BIOH 202N - Human Anat and Phys I Lab	4 Credits
BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
BIOH 212N - Human Anat Phys II Lab	4 Credits
BIOL 265 - Human Sexuality	3 Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
CHMY 121N - Intro to General Chemistry	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
ENST 225 - Community & Environment	3 Credits
M 115 - Probability and Linear Math	3 Credits
PSYX 100S - Intro to Psychology	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
WRIT 222 - Technical Approach to Writing	2 Credits
Minimum Required Grade: C-	39 Total Credits Required

Upper Division Departmental Required Courses

Rule: All courses are required.

Course	Credits
CHTH 355 - Theory Pract Comm Hlth Ed	3 Credits
CHTH 445 - Prgrm Plan in Comm Health	3 Credits
CHTH 485 - Theories of Hlth Behav and Cou	3 Credits
CHTH 498 - Internship	2 To 6 Credits
HTH 370 - Peer Health Education	3 Credits
HTH 395 - Peer Health Practicum	1 To 3 Credits
HTH 430 - Hlth and Mind/Body/Spirit	3 Credits
HTH 465 - Leading Hlth, Hmn Perform Orgs	3 Credits

	HTH 475E - Leg Eth Issues Hlth Ex Pro	3 Credits
	KIN 447 - Analytical & Comm Techniques	3 Credits
Minimum Required Grade: C-		28-33 Total Credits Required

Outside Major Upper Division Required Courses

Rule: All courses are required.

—	Course	Credits
	ANTY 426 - Culture, Health and Healing	3 Credits
	S W 423 - Addiction Studies	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Elective Courses

Rule: Elective courses require adviser pre-approval.

Note: Electives require adviser consent. Students should take an appropriate number of Upper Division Electives to achieve 39 Upper Division Credits, per UM graduation requirements.

Minimum Required Grade: C-

18-24 Total Credits Required

Applied Exercise Science B.S.

Bachelor of Science - Health & Human Performance; Exercise Science - Applied Option

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 105

Required Cumulative GPA: 2.0

Lower Division Departmental Required Courses

Rule: All courses are required.

Note: Students should take ECP 120, ECP 121 within two years of graduation, in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

—	Course	Credits

AHAT 210 - Prev and Care Athletic Injur	2 Credits
AHAT 213 - Prev and Care Athletic Injur L	1 Credits
ECP 120 - Emergency Medical Responldr Lec	2 Credits
ECP 121 - Emergency Medical Responldr Lab	1 Credits
HTH 110 - Personal Health and Wellness	3 Credits
KIN 201 - Basic Exercise Prescription	3 Credits
KIN 205 - Foundations of HHP	3 Credits
NUTR 221N - Basic Human Nutrition	3 Credits
Minimum Required Grade: C-	18 Total Credits Required

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: Students interested in Medical School should pay special attention to those additional requirements. Please meet with the Medical School Adviser in the HHP Department if you intend to also major in Pre-Medical studies.

Note: Students may substitute BGEN 235 for BGEN 105. One semester of General and one semester of Organic Chemistry is required. Students may substitute M 151 in place of M 121, M 122 series. Students may take any other Statistics course that is pre-approved by their adviser. Students may substitute WRIT 121 or WRIT 201 for WRIT 222.

Course	Credits
BGEN 105S - Introduction to Business	3 Credits
CHMY 121N - Intro to General Chemistry	3 Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
COMX 111A - Intro to Public Speaking	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PSYX 100S - Intro to Psychology	4 Credits

	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
	WRIT 222 - Technical Approach to Writing	2 Credits
Minimum Required Grade: C-		38 Total Credits Required

Upper Division Departmental Required Courses

Rule: All courses are required.

Note: Students take KIN 498 for 3 to 6 credits.

Course	Credits
COA 405 - Adv Concepts in Coaching	3 Credits
HTH 465 - Leading Hlth, Hmn Perform Orgs	3 Credits
HTH 475E - Leg Eth Issues Hlth Ex Pro	3 Credits
KIN 320 - Exercise Physiology	3 Credits
KIN 321 - Exercise Physiology Lab	1 Credits
KIN 322 - Kinesiology	3 Credits
KIN 323 - Anatomical Kinesiology Lab	1 Credits
KIN 325 - Biomechanics	3 Credits
KIN 330 - Motor Learning and Control	3 Credits
KIN 410 - Adv Strength Training & Cond	3 Credits
KIN 447 - Analytical & Comm Techniques	3 Credits
KIN 498 - Internship	2 To 6 Credits
NUTR 411 - Nutrition For Sprts & Exercise	3 Credits
Minimum Required Grade: C-	35-38 Total Credits Required

Outside Major Upper Division Required Courses

Rule: All courses are required.

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160 prior to taking Anatomy and Physiology.

Students may substitute BIOH 201/202 and BIOH 211/212 for their Anatomy and Physiology requirements. BIOH 112 OR BIOH 113 OR BIOB 160 AND CHMY 121 are prerequisites for the 300 level Anatomy and Physiology Series.

Course	Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits
BIOH 370 - Human AP II for Health Profsns	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Elective Courses

Rule: Electives require adviser pre-approval.

Note: Electives require adviser pre-approval.

Students may use any pre-approved Math and Science Elective courses in this category. At least 3 must be Upper Division Credits. Special care should be taken if BIOH 201/202 and BIOH 211/212 were used for Anatomy and Physiology requirements, as more Upper Division Credits may need to be used in this category.

Minimum Required Grade: C-

6 Total Credits Required

Pre-Professional Exercise Science B.S.

Bachelor of Science - Health & Human Performance; Exercise Scn - PreProfessional Option

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 103

Required Cumulative GPA: 2.0

Major Lower Division Departmental Required Courses

Rule: All courses are required.

Note: Students should take ECP 120, ECP 121 within two years of graduation in order to ensure current certification. Students may also substitute outside Emergency Medical Responder Certification for these courses.

Course	Credits
ECP 120 - Emergency Medical Respondr Lec	2 Credits
ECP 121 - Emergency Medical Respondr Lab	1 Credits

KIN 201 - Basic Exercise Prescription	3 Credits
KIN 205 - Foundations of HHP	3 Credits
NUTR 221N - Basic Human Nutrition	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: Students interested in Medical School should pay special attention to those additional requirements. Please meet with the Medical School Adviser in the HHP Department if you intend to also major in Pre-Medical studies.

Note: One semester of General and one semester of Organic Chemistry are required. Students may substitute M 151 in place of M 121, M 122 series. Students may take any other Statistics course that is pre-approved by an adviser. Students may substitute WRIT 121 or WRIT 201 for WRIT 222.

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
COMX 111A - Intro to Public Speaking	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
PSYX 100S - Intro to Psychology	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
WRIT 222 - Technical Approach to Writing	2 Credits
Minimum Required Grade: C-	40 Total Credits Required

Major Upper Division Departmental Required Courses

Rule: All courses are required.

Note: Students should take either KIN 498 for 3 to 6 credits OR KIN 499 for 3 credits.

Course	Credits
HTH 475E - Leg Eth Issues Hlth Ex Pro	3 Credits
KIN 320 - Exercise Physiology	3 Credits
KIN 321 - Exercise Physiology Lab	1 Credits
KIN 322 - Kinesiology	3 Credits
KIN 323 - Anatomical Kinesiology Lab	1 Credits
KIN 325 - Biomechanics	3 Credits
KIN 330 - Motor Learning and Control	3 Credits
KIN 447 - Analytical & Comm Techniques	3 Credits
KIN 460 - ECG Assessment	1 Credits
KIN 483 - Exercise Disease & Aging	3 Credits
KIN 484 - Exercise Disease & Aging Lab	1 Credits
KIN 498 - Internship	2 To 6 Credits
KIN 499 - Capstone	1 To 3 Credits
NUTR 411 - Nutrition For Sprts & Exercise	3 Credits
Minimum Required Grade: C-	31-34 Total Credits Required

Outside Major Upper Division Required Courses

Rule: All courses are required.

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160 prior to taking Anatomy and Physiology.

Students may substitute BIOH 201/202 and BIOH 211/212 for their Anatomy and Physiology Requirements. BIOH 112 OR BIOH 113 OR BIOB 160 AND CHMY 121 are prerequisites for the 300 level Anatomy and Physiology Series.

Course	Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits

BIOH 370 - Human AP II for Health Profsns	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Elective Courses

Rule: Must be approved by adviser

Note: Electives require adviser pre-approval.

It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160 in this category prior to taking either Anatomy and Physiology.

Students can use any pre-approved Math and Science Elective courses in this category. 6 must be Upper Division Credits. Special care should be taken if BIOH 201/202 and BIOH 211/212 were used for Anatomy and Physiology requirements, as more Upper Division Credits may need to be used in this category.

Minimum Required Grade: C-

12 Total Credits Required

Health Enhancement B.S.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program
- Licensure Degree Requirements

Bachelor of Science - Health & Human Performance; Health Enhancement Option

College of ED & Human Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 93

Required Cumulative GPA: 2.0

Note: The Bachelor of Science degree in HHP with the Health Enhancement option requires 130 total credits to graduate. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for information. A major GPA of 2.75 is required to be eligible for student teaching.

Lower Division Departmental Required Courses

Rule: All courses are required.

Note: Students should take ECP 120 and ECP 121 within two years of graduation in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

Course	Credits
AHAT 210 - Prev and Care Athletic Injur	2 Credits
AHAT 213 - Prev and Care Athletic Injur L	1 Credits
ECP 120 - Emergency Medical Respondr Lec	2 Credits
ECP 121 - Emergency Medical Respondr Lab	1 Credits
HEE 203 - Professional Activities I	2 Credits
HEE 204 - Professional Activities II	2 Credits
HEE 233 - Health Issues Child/Adol	3 Credits
HTH 110 - Personal Health and Wellness	3 Credits
KIN 201 - Basic Exercise Prescription	3 Credits
KIN 205 - Foundations of HHP	3 Credits
NUTR 221N - Basic Human Nutrition	3 Credits
Minimum Required Grade: C-	25 Total Credits Required

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: Students may take any adviser approved Statistics course in place of STAT 216. Students may substitute WRIT 121 or WRIT 201 for WRIT 222. Note: BIOH 201N and 202N are co-requisites completed for a total of 4 credits and BIOH 211N and 212N are co-requisites completed for a total of 4 credits.

Course	Credits
BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits
BIOH 202N - Human Anat and Phys I Lab	4 Credits
BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
BIOH 212N - Human Anat Phys II Lab	4 Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
CHMY 121N - Intro to General Chemistry	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
M 115 - Probability and Linear Math	3 Credits

	NASX 105H - Intro Native Amer Studies	3 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	PSYX 230 - Developmental Psychology	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
	WRIT 222 - Technical Approach to Writing	2 Credits
Minimum Required Grade: C-		39 Total Credits Required

Upper Division Departmental Required Courses

Rule: All courses are required.

—	Course	Credits
	HEE 301 - Meth of Secondary HE	3 Credits
	HEE 302 - Meth of Inst Strat in Elem PE	3 Credits
	HEE 340 - Methods of Health Education	3 Credits
	HTH 465 - Leading Hlth, Hmn Perform Orgs	3 Credits
	HTH 475E - Leg Eth Issues Hlth Ex Pro	3 Credits
	KIN 320 - Exercise Physiology	3 Credits
	KIN 321 - Exercise Physiology Lab	1 Credits
	KIN 322 - Kinesiology	3 Credits
	KIN 323 - Anatomical Kinesiology Lab	1 Credits
	KIN 330 - Motor Learning and Control	3 Credits
Minimum Required Grade: C-		26 Total Credits Required

Outside Major Upper Division Required Courses

Rule: Complete the following course.

Note: Students may substitute BIOE 172 for ENST 472.

—	Course	Credits

ENST 472 - Gen Sci: Conserv Ed	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Global Youth Development Department

Lindsey Nichols, Assistant Professor of Counselor Education, Director

Housed in the Department of Counselor Education, this interdisciplinary master's degree program is designed for students who wish to engage in culturally-relevant volunteer work or paid employment in the realm of child and family assistance. It is affiliated with the United States Peace Corps as a partner school for their master's international program. Requirements include one year of full-time instruction at UM, a significant period of time engaging in internship work in an applied intercultural setting, and a final professional paper or thesis. Internships will typically be 1-2 years and will involve work in a culture other than one's own. Students participating in this program are expected to gain the following background and competencies:

- important interculturally-informed helping skills for working with youth, women, families and communities in culture other than their own
- a solid background in issues, concerns, and critiques regarding assistance and interventions across culture, both historically and currently
- the opportunity to pursue and participate in a significant field experience, working with an established helping agency in another culture or country

Course Descriptions

Global Youth Development

- **GYD 495 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **GYD 501 - Intercultural Dev't -I**
Credits: 3. Offered autumn. Explorations of child rearing practices, parenting beliefs, and cultural variations in infancy and early child development. Level: Graduate
- **GYD 502 - Intercultural Dev't -II**
Credits: 3. Offered spring. Explorations of cultural variations in later childhood, adolescence and adulthood, with particular focus on issues such as multicultural adoption, identity, and the role of poverty. Level: Graduate
- **GYD 510 - Intercultural Skills**
Credits: 3. Offered autumn. Focus on applied skills in two areas: crosscultural negotiation and conflict management; program development and grant writing. Level: Graduate
- **GYD 520 - Critical Issues**
Credits: 3. Exploration of psychological, political, spiritual, ethical, and practical dimensions of offering assistance cross-culturally. This course includes discussion of ethical and personal issues related to intercultural work, gender and development, trauma, program evaluation, etc. Level: Graduate
- **GYD 595 - Special Topics**
Credits: 2 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **GYD 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Directed readings and other individualized study topics guided by faculty. Level: Graduate

- **GYD 598 - Internship**

Credits: 1 TO 6. (R-6) Offered every term. Introduction to service learning in applied settings, usually local. Level: Graduate

- **GYD 599 - Professional Projects**

Credits: 1 TO 2. (R-2) Offered every term. Final Master's project related to internship; may be presented as a grant proposal, policy analysis, or portfolio. Level: Graduate

- **GYD 695 - Special Topics**

Credits: 1 TO 4. (R-4) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **GYD 698 - Intercultural Internship**

Credits: 1 TO 4. (R-4) Offered every term. Supervised intercultural experience through Peace Corps, VISTA, or other organization approved by program faculty. Level: Graduate

- **GYD 699 - Thesis**

Credits: 1 TO 2. (R-2) Offered every term. Final master's thesis based on research related to internship placement. Level: Graduate

Human and Family Development Minor

Minor - Human and Family Development (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Note: To earn a minor the student must complete 24 credits, with 11 at the 300 level or above. All students are required to take a 12-credit core curriculum and, with the help of a faculty advisor, to develop a written statement of goals and interests along with a planned curriculum that includes 12 additional credits of electives consistent with the stated goals and interests. At least 6 credits of electives must be outside of the student's major.

Core Courses

Rule: Must complete the following subcategories

12 Total Credits Required

Subcategory 1

Rule: Must complete 1 of the following courses

—	Course	Credits
	PSYX 230 - Developmental Psychology	3 Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 2

Rule: Must complete all of the following courses:

Note: HFD 494 may be taken for 1 credit. HFD 498 must be taken for a minimum of 2 credits. Education majors may take EDEC 396 to fulfill this requirement.

—	Course	Credits
	HFD 494 - Seminar in Human Development	1 To 3 Credits
	HFD 498 - Internship	1 To 4 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 3

Rule: Must complete 1 of the following courses

—	Course	Credits
	COMX 311 - Family Communication	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 4

Rule: Must complete 1 of the following courses

—	Course	Credits
	C&I 520 - Educational Research	3 Credits
	COMX 460 - Research Methods	3 Credits
	PSYX 120 - Research Methods I	3 Credits

PSYX 320 - Research Methods III	3 Credits
S W 400 - Social Work Research	3 Credits
SOCI 318 - Sociological Research Methods	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Elective Courses

Rule: Must complete 12 credits from any of the courses listed in the subcategories below; at least 6 credits must be taken outside of the student's major

Note: The list of electives is categorized to assist the student wishing to focus on one of these areas. Students may plan curricula which do not correspond to these categories, but should choose among courses from this list. Occasionally "special topics" courses are offered. Students may use these as electives with the consent of their advisors.

Check with departments regarding variable-credit 395 and 495-Special Topics listings.

12 Total Credits Required

Early Childhood

Rule: May complete any of the following courses

Note: Must complete all course work prior to taking HFD 498

Course	Credits
C&I 421 - Issues in Early Intervention	3 Credits
CSD 210 - Speech & Lang Devel	3 Credits
EDEC 310 - Child in the Family	3 Credits
EDEC 330 - Early Childhood Education	3 Credits
EDEC 396 - EC Fieldwork/Practicum	3 Credits
EDSP 403 - Curric/Mthds Early Spec Educ	3 Credits
EDSP 462 - Spec Ed Law, Policy, Practice	3 Credits
EDU 345 - Excptnlty & Clsrm Mgmt	3 Credits
EDU 491 - Special Topics/Exp Courses	1 To 6 Credits
EDU 494 - Seminar:Refl Pract & App Rsrch	1 To 9 Credits
HFD 498 - Internship	1 To 4 Credits

PSYX 290 - Supervised Research	1 To 6 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
Minimum Required Grade: C	0-12 Total Credits Required

School-Age

Rule: May complete any of the following courses

Course	Credits
EDU 221 - Ed Psych & Measuremnt	3 Credits
EDU 345 - Excptnlty & Clsrm Mgmt	3 Credits
PHAR 110N - Use & Abuse of Drugs	3 Credits
PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
S W 300 - Hum Behav & Soc Environ	3 Credits
S W 420 - Child Abuse/Child Welfare	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C	0-12 Total Credits Required

Adolescence

Rule: May complete any of the following courses

Course	Credits
EDSP 462 - Spec Ed Law, Policy, Practice	3 Credits
EDU 221 - Ed Psych & Measuremnt	3 Credits
EDU 345 - Excptnlty & Clsrm Mgmt	3 Credits
PHAR 110N - Use & Abuse of Drugs	3 Credits

	PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
	PSYX 345 - Child & Adolescent Psych Dis	3 Credits
	PSYX 376 - Prin Cognit Behav Mod	3 Credits
	PSYX 378 - Intro to Clinical Psyc	3 Credits
	S W 300 - Hum Behav & Soc Environ	3 Credits
	S W 450 - Children and Youth at Risk	3 Credits
	SOCI 330 - Juvenile Delinquency	3 Credits
Minimum Required Grade: C		0-12 Total Credits Required

Gerontology

Rule: May complete any of the following courses

—	Course	Credits
	AHHS 325 - Introduction to Gerontology	3 Credits
	AHHS 327 - MGS Meeting	1 Credits
	AHHS 430 - Health Aspects of Aging	3 Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
	PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
	S W 455 - Social Gerontology	3 Credits
Minimum Required Grade: C		0-12 Total Credits Required

Family Development

Rule: May complete any of the following courses

—	Course	Credits
	COMX 311 - Family Communication	3 Credits
	COMX 414 - Comm in Personal Relationships	3 Credits
	EDEC 310 - Child in the Family	3 Credits

	PSYX 348 - Psychology of Family Violence	3 Credits
	S W 423 - Addiction Studies	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C		0-12 Total Credits Required

Bachelor of Science - Forestry; Forest Operations Option

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 82

Required Cumulative GPA: 2.0

Major Required Courses

Rule: Must take all courses

Course	Credits
FORS 130 - Intro Forestry Field Skills	2 Credits
FORS 201 - Forest Biometrics	3 Credits
FORS 202 - Forest Mensuration	3 Credits
FORS 240 - Tree Biology	2 Credits
FORS 241N - Dendrology	3 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-	22 Total Credits Required

Outside Major Courses Required

Rule: Must take all courses

Note: Can take THTR 120A Intro to acting in place of COMX 111A; Can take M 121 College Algebra AND M 122 College Trigonometry to satisfy M 151; Can take PHSX 205/206 College Physics I and Lab in place of M 162

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
CHMY 121N - Intro to General Chemistry	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	22-24 Total Credits Required

Major Required Courses

Rule: Must take all courses

Course	Credits
FORS 320 - Forest Environmental Economics	3 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 340 - Forest Product Manufacturing	2 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 434 - Advanced Forest Roads	2 Credits
FORS 435 - Advanced Timber Harvesting	2 Credits
FORS 436 - Project Appraisal	3 Credits
FORS 440 - Forest Stand Management	3 Credits
NRSM 385 - Watershed Hydrology	3 Credits
NRSM 422 - Nat Res Policy/Administration	3 Credits
Minimum Required Grade: C-	30 Total Credits Required

Forest Management Elective

Rule: Must take at least one course

Course	Credits
FORS 230 - Forest Fire Management	2 Credits
FORS 232 - Forest Insects & Diseases	2 Credits
NRSM 265 - Elements of Ecological Restora	3 Credits
PTRM 217S - Wildland Recreation Management	3 Credits
WILD 275 - Wildlife Conservation	2 Credits
Minimum Required Grade: C-	2-3 Total Credits Required

Resource Protection Electives

Rule: Must take one course from the list below

Course	Credits
FORS 331 - Wildland Fuel Management	3 Credits
NRSM 360 - Rangeland Mgt (equiv 260)	3 Credits
NRSM 415 - Environmental Soil Science	3 Credits
NRSM 455 - Riparian Ecology & Management	3 Credits
NRSM 485 - Watershed Management	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethics and Social Science Elective

Rule: Must take one course from the list below

Course	Credits
NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 425 - Nat Res & Envir Economics	3 Credits

	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Writing Within Major

Rule: Must complete the following subcategories

15 Total Credits Required

Lower Division Writing

Rule: Need to take all listed

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Writing

Rule: Must take at least three courses

—	Course	Credits
	FORS 330 - Forest Ecology	3 Credits
	FORS 341 - Timber Harvesting & Roads	3 Credits
	FORS 349 - Practice of Silviculture	3 Credits
	FORS 440 - Forest Stand Management	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Math within Major

Rule: All are required

Note: Two courses can be substituted for M 151: M 121 College Algebra AND M 122 College Trig

—	Course	Credits
	M 151 - Precalculus	4 Credits

Minimum Required Grade: C-

4-6 Total Credits Required

Symbolic Systems

Rule: Must take the following course

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Expressive Arts within Major

Rule: Must take one of the following courses

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science within Major

Rule: Must take the following course

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: Can take the following elective course

—	Course	Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Science within Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits

	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

College of Forestry and Conservation

James Burchfield, Dean

Mike Patterson, Associate Dean

The undergraduate curricular programs at the College of Forestry and Conservation (CFC) provide the knowledge and skills for students to become effective natural resource professionals. They offer a sequence of learning experiences that build the necessary confidence and critical thinking capabilities to help solve some of humanity's most pressing problems in the stewardship of our shared natural heritage.

Undergraduate programs at the College of Forestry and Conservation have evolved into a unique action-oriented, interdisciplinary experience where students integrate real-world issues into their coursework. Students will utilize the latest technologies in the assessment and analysis of natural resource challenges, and they will simultaneously apply this learning in multiple field settings across the unparalleled natural settings of Montana.

The five undergraduate majors in the College are science degrees, leading to a Baccalaureate of Science (B.S.) degree. These majors are: Forestry; Parks, Tourism, and Recreation Management; Wildlife Biology; Resource Conservation; and Wildland Restoration. These majors provide a strong foundation in knowledge about natural systems, science, analytical skills, and policy, but each is tailored to the specialized needs of a particular career track or research discipline in the natural resources management professions. Students have an opportunity to emphasize the disciplinary concentration of their choosing, but all students will receive a balance of ecological, physical, and social sciences.

Students uncertain about which specific major best meets their interests and needs will find that the ability to move between majors early in their student career is facilitated by a common foundational core of coursework. Each major's curricular program is designed to fulfill the broad educational goals for all graduates of the University of Montana, as well as the specific disciplinary requirements of civil service and professional accrediting organizations.

Preparation to Enter the College of Forestry and Conservation

Students planning to enter the College of Forestry and Conservation should attain a sound background in English, social studies, mathematics, biology, and other sciences. Entering freshmen and non-resident transfer students will be admitted in accordance with general university admission requirements listed previously in this catalogue. Resident transfer students or current UM students wanting to change their major to the College of Forestry and Conservation must have a grade point average of 2.0 or higher to be admitted.

Educational Framework at the College of Forestry and Conservation

Students at the College of Forestry and Conservation are expected to demonstrate a range of capabilities before graduation so they can better address the multiple demands facing modern natural resource managers. The College fosters learning through a combination of innovative teaching and scholarship with a focus on state of the art knowledge in the major fields and emerging natural resource challenges. Each major's curriculum follows a similar seven part structure that encourages the sequenced development of foundational knowledge, applied skills, and creative problem-solving. The following description illustrates how the curricula are organized to present the most efficient and engaging pathway to the full development of student capabilities:

Foundations of Science

Students will be required to have a solid understanding of the primary physical, chemical, and biological drivers of natural systems. Required for all students are an introductory course in inorganic chemistry and a basic biological science course (there are several introductory biology classes that will apply, depending on a student's major). Students in the Wildland Restoration major and the Forest Operations option within the Forest Management major will also take an introductory course in physics. Parks, Tourism, and Recreation Management majors will take introductory coursework in psychology or sociology to understand social drivers in relation to natural systems. Additionally, all students are encouraged to take one of the four introductory courses offered by the College that draw together multiple disciplines to demonstrate the historical and cultural dimensions of conservation: The Nature of Montana (NRSM 121S (RSCN 121S)); Careers in Natural Resources (NRSM 180 (WBIO/FOR 180)); Wildlife and People (WILD 105N (WBIO 105N)); or International Forestry (NRSM 170 (RSCN/FOR 170)). In the sophomore year most students will take an introductory course in soils to become familiar with the cycling of energy and nutrients in terrestrial ecosystems while students in the Wildlife Biology major will take coursework in molecular biology and genetics. In their junior year all students take an upper division ecology class. The University's general education requirements and specific College majors ensure all students take additional natural and social science classes to provide the foundations necessary to understand and manage the natural and social systems underlying human uses of natural resources.

Quantitative and Analytical Skills

All students at the College will attain the quantitative analytical and measurement foundations needed for their professional or research career path. The freshmen level quantitative requirement rests on a proficiency in mathematics that is obtained through one of two routes depending on major: a college algebra/linear math/probability track or an introductory calculus track. All sophomore students take a statistics class which many fulfill through a special course in the analysis of multiple forms of measurement of natural resource characteristics, called Biometrics. Although not required for all majors, most students decide to take a special course in mapping that combines the common applications of geographic information systems (GIS) and the basic attributes of spatial analysis.

Applied Field Skills

A tremendous advantage of an education at the College of Forestry and Conservation is the proximity of an unlimited field laboratory in both the managed and untrammled landscapes of Montana. All undergraduates will have multiple opportunities to learn in field settings as a part of lab sections associated with many of CFC's courses. Some specific academic opportunities, such as the College's Wilderness and Civilization Program, will take students on extended backcountry trips to gain first-hand knowledge of wild settings. Exceptional hands-on learning experiences are provided at the College's Lubrecht Experimental Forest located less than 30 miles from campus on the Blackfoot River. Since students must demonstrate competency and confidence in outdoor field work to be a successful natural resource professional, students are required to select a sophomore-level field measurements course within their major. Although advanced transfer students (>59 transfer credits) to the College; Parks, Tourism, and Recreation Students; and Wildlife Biology students may apply other relevant experiences to their field training requirement, completion of a field measurements course is expected before students may enroll in upper division courses, as the needed skills to succeed in subsequent, more advanced field labs depend on a solid core of field capabilities.

Communication

Effectiveness in addressing our shared problems in natural resource management depends on a person's ability to communicate. College of Forestry and Conservation students will graduate with considerable training in written communication with both lower-division requirements at the 200-level and a series of upper division courses where writing constitutes the major part of course expectations. Each major in the College provides a "distributed writing" menu for students entering into upper-division courses, such that each student will take at least three classes where writing skills are evaluated. Students will also fulfill university-wide writing requirements, including the successful passage of the Writing Proficiency Examination prior to entering into upper division coursework. All students take a public speaking class. Students wishing to gain more experience in public speaking and communication can also take a special class Natural Resources Interpretation (PTRM 310 (RECM 310)).

Professional Specialization

Each academic major in the College contains a sequence of courses and learning experiences tailored to the student's specific professional aspirations. Clusters of courses within a major prepare students to obtain the necessary knowledge and professional competencies to perform the tasks of a modern resource manager or research scientist. Course work combines biophysical and social science training to allow students to recognize and navigate the complexities and context of conservation sciences and natural resources management. Thus, each major has courses representing both ecological and policy development processes, as well as a progression of classes covering the knowledge areas and topics of major natural resources disciplines. Students will take a core of required courses (described in the sections below) as well as a balanced selection of "professional electives" to acquire sufficient balance and depth in their chosen field to emerge with an identified professional specialty.

Work Experience and Service Learning

Students at the College of Forestry and Conservation will apply what they have learned in real-world settings prior to graduation. This work experience can be obtained in many ways, via internships, summer employment, study abroad opportunities, or specially designed "service learning" courses. Service experiences will allow students to obtain credit, learn new material, and offer critical work to established organizations to advance conservation goals. In general, requirements for work experience or internships will be counted based on the number of hours worked over the course of a student's entire undergraduate career, with 400 hours or more of work necessary for graduation.

Capstone Experience

Each academic major in the College offers an opportunity for students to synthesize previous learning in a real-world project via either an undergraduate research project or the completion of a special, integrative "capstone" course. Undergraduate research projects are designed through close supervision of a student's academic advisor, while the capstone courses bring together a team of faculty who facilitate student oriented problem solving through a focus on an applied management problem or real world case studies that offer vital experience in the preparation of students for their professional careers.

Other University-wide Requirements for Academic Achievement

The University of Montana has established standards for graduation of all students that include demonstrated proficiencies in oral and written communication and symbolic systems as well as a selection of diverse learning experiences identified as "general education courses." The College's expectations for writing and quantitative skills more than fulfill university-wide requirements for communication and symbolic systems, and many of the courses offered by CFC also fulfill the categories within general education requirements. All CFC majors also offer sufficient opportunity for students to choose among the full range of UM courses as "free electives," such that each person might be able to explore new areas of learning at their own discretion.

Student Advising

All College of Forestry and Conservation students will have a full-time faculty advisor as well as the extensive advising support provided by the College's Office of Student Services. Students are paired with a faculty advisor who matches their academic and professional interests and serves as a mentor and advocate for students as they progress through individual academic achievements. Students may change their advisor at any time as their specific interests develop or change. New students needing an advisor and current students who wish to change advisors should contact the College's Office of Student Services. Students are required to consult with their advisors before each registration period but remain responsible for ensuring they fulfill the published requirements for graduation.

Graduation Auditing

All students will complete a graduation audit in the semester prior to their graduation to make sure that they have a sure pathway for successful completion of their chosen major.

Forestry and Conservation Course Listing

Forestry

- **FORS 130 - Intro Forestry Field Skills**

Credits: 2. Offered autumn. Prereq., Forestry major or consent of instructor. This course is focused on developing introductory forestry field skills through experiential learning at the College's Lubrecht Experimental Forest. Classroom lecture and experiences that introduce students to orienteering, map reading, GPS, tree measurements, fire and fuels management, recreation, human dimensions, hydrology, wood products, and the careers possible with a Forestry degree.

- **FORS 140 - Urban Forestry**

Credits: 2. Offered spring. An introduction to urban forestry principles and practices. Benefits of the urban forest. Topics covered include plant species selection, site design, site assessment, planting, watering, fertilization, insects and diseases, pruning and tree care, inventory of property values, and community forestry development.

- **FORS 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FORS 192 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Problems course designed to allow individual research at the undergraduate level.

- **FORS 200 - Forest Res Measurements Camp**

Credits: 2. Offered summer. Intensive two-week resident camp at the Lubrecht Experimental Forest. Introduction to the common measurements and skills used in identifying, quantifying, and understanding natural resources.

- **FORS 201 - Forest Biometrics**

Credits: 3. Offered autumn. Prereq., M 115 or M 121 or M 122 or M 151 or M 162 or M 171 or M 172. Introduction to probability and statistical methods for forestry and environmental sciences covering natural resource applications of common probability distributions, data analysis, hypothesis testing, and regression.

- **FORS 202 - Forest Mensuration**

Credits: 3. Offered spring. Prereq., FORS 201 or STAT 216 or SOCI 202 or WILD 240; and M 121 and M 122 or M 151 or M 162 or M 171 or M 172. The theory and practice of timber inventory and growth projection, including field measurements, sampling procedures, statistical methods, inventory compilation, and stand growth simulation under specified management prescriptions. Stand growth under specified management prescriptions.

- **FORS 230 - Forest Fire Management**

Credits: 2. Offered spring. Fire as an ecological factor in Western forests is presented. Fire weather, the measurement of fire weather, and the factors of fuel, weather and topography that influence fire behavior, and fire management decisions are included. NFDRS, state and national fire policy evolutions are discussed. Basic fire suppression tactics are also presented.

- **FORS 232 - Forest Insects & Diseases**

Credits: 2. Offered spring. Identification, significance of and remedies for insect infestations and infectious and non-infectious diseases of forests and forest products.

- **FORS 235 - Prob Solving for Forest Oper**

Credits: 4. Offered intermittently. Prereq., M 115 or M 121 or M 151 or M 162 or M 171 or M 172. Introduction to problem solving including the fundamentals of statics and mechanics of materials

presented in the context of forest operations.

- **FORS 240 - Tree Biology**

Credits: 2. Offered autumn and spring. Suggested coreq., FORS 241N. The physical and biological requirements for the growth and development of trees. Discussions of: identification, classification, range, and economic importance of the major tree species of North America.

- **FORS 241N - Dendrology**

Credits: 3. Offered autumn and spring. Suggested coreq., FORS 240. Methods and techniques for identifying the major families of North American trees, based on gross morphological and anatomical features. Building and use of identification keys. **Course Attributes:**
Natural Science Lab Course Natural Science Course

- **FORS 250 - Intro to GIS for Forest Mgt**

Credits: 3. Offered every term. Open to sophomores or juniors or with consent of instructor. This course is designed as a practical introduction to the use of Geographic Information Systems (GIS) for storing, retrieving, analyzing and displaying spatial data. It will also cover the history of cartography and the conventions of the modern map-making process.

- **FORS 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors; new courses or one-time offerings of current topics.

- **FORS 292 - Independent Study**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr. Individual research at the undergraduate level.

- **FORS 308 - Fire Ecology Field Studies**

Credits: 3. This course introduces students to all aspects of forest demography and forest community ecology in the field. Particular attention is given to the agents of woody plant mortality, including beetle gallery identification, pathogenic fungi, density-dependent mortality, fire, and the effects of landscape position. Students learn how data are collected to maximize information used to answer scientific questions, including the relationships between accuracy, precision, uncertainty, and cost (in time and money). Students learn how to measure fuel loading at landscape scales according to federal standards. In addition to specific measurements in ponderosa pine and larch/mixed-conifer forest types, students visit and compare Engelmann spruce/subalpine forests and riparian cottonwood forests. Students will also study forest-river interactions and the modification thereof by fire.

- **FORS 310 - Field Methods in Forest Ecology**

Credits: 3. This course introduces students to all aspects of forest demography and forest community ecology in the field. Particular attention is given to the agents of woody plant mortality, including beetle gallery identification, pathogenic fungi, spatially explicit density-dependent mortality, fire, and the effects of landscape position. Students learn how data are collected to maximize information used to answer scientific questions, including the relationships between accuracy, precision, uncertainty, and cost (in time and money). Students then collect tree demography data within the Yosemite Forest Dynamics Plot. Students learn how to measure fuel loading at landscape scales according to federal standards. In addition to specific measurements in one forest type (white fir/sugar pine), students visit and compare the other principal forest types of the Sierra Nevada and White Mountains (ponderosa pine, red fir, Jeffrey pine, lodgepole pine, whitebark pine, pinyon/juniper, and bristlecone pine).

- **FORS 320 - Forest Environmental Economics**

Credits: 3. Offered autumn. Prereq., ECNS 201S; and M 121 and M 122 or M 151 or M 162 or M 171 or M 172. Economic techniques to support decision making about the allocation of scarce resources, and management of forests for timber and other ecosystem services.

- **FORS 330 - Forest Ecology**

Credits: 3. Offered autumn and spring. Prereq., FORS 210 or ENSC 245N or NRSM 210N; and BIOC

105N or BIOB 170N or BIOE 172 or BIOB 160N or FORS 240; and FORS 201 or STAT 216 or SOCI 202 or WILD 240 or PSYX 222. Examination of physical and biological factors affecting forest structure, composition, and function, including biodiversity, disturbance, and nutrient cycling. Field labs throughout Northern Rockies including developing skills in field observation, data interpretation and problem solving.

- **FORS 331 - Wildland Fuel Management**

Credits: 3. Offered autumn. Prereq., FORS 230 or consent of instr. The fire ecology of some western vegetation types is discussed. Elements of the principles of wildland fuel management are presented. Prescribed fire use and mechanical manipulation are matched to historic ecosystem processes. Smoke management considerations and health issues are also presented.

- **FORS 333 - Basic&Applied Fire Ecology**

Credits: 3. Offered spring. Prereq., FORS 230. A detailed, analysis of fire ecology in terrestrial ecosystems with a focus on the Rocky Mountains, including fire history, fire effects, landscape pattern, land use legacies, and management implications.

- **FORS 340 - Forest Product Manufacturing**

Credits: 2. Offered autumn. Survey of the manufacture of wood-based products generated from timber harvest. Laboratory field trips to several local manufacturing facilities. **Course Attributes:** Writing Course-Upper-Division

- **FORS 341 - Timber Harvesting & Roads**

Credits: 3. Offered spring. Prereq., NRSM 200 or WRIT 222. An overview of harvesting system capabilities and selection for multiple resource objectives. Fundamentals of forest road management. Best management practices as they apply to forest operations in Montana and the western United States.

- **FORS 342 - Wood Anatomy, Properties, & ID**

Credits: 3. Offered spring. Prereq., BIOO 105N or FORS 240 or FORS 241N. Lecture and laboratory investigation of the structure, identification and physical and mechanical properties of the commercial tree species of North America.

- **FORS 347 - Multiple Resource Silviculture**

Credits: 3. Offered spring. Prereq., FORS 330 or BIOE 370. Credit not allowed for both FORS 347 and 349. An introduction to the concepts and application of silvicultural techniques to forest ecosystems to meet multiple resource objectives.

- **FORS 349 - Practice of Silviculture**

Credits: 3. Offered fall. Prereq., FORS 202 or FORS 302 and FORS 241. Coreq., FORS 330. Practice of Silviculture is designed primarily for Forestry majors (open to others with appropriate prerequisites), and will consider the conceptual foundations behind various silvicultural practices and techniques, as well as and their application in forest ecosystems to meet multiple resource objectives. The course will cover natural stand dynamics, stand assessment and site classification schemes, even- and uneven-aged silvicultural systems, thinning/stand density concepts, regeneration practices, stand diagnosis and prescription development, vegetative management strategies for diverse objectives, along with quantitative assessment and modeling of alternative prescriptions.

- **FORS 350 - Forestry Apps of GIS**

Credits: 3. Offered spring. Prereq., FORS 250 or FORS 284 or GPHY 284. Introduction to the basic concepts and techniques of computerized spatial data management and analysis systems and application to natural resource management.

- **FORS 351 - Env Remote Sensing**

Credits: 3. Offered spring. The theory and application of photo- and electro-optical remote sensing for mapping resources and developing information systems.

- **FORS 391 - Special Topics**

Credits: 0 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FORS 392 - Independent Study**

Credits: 1 TO 3. (R-10) Offered every term. Prereq., consent of instr. Individual study or research problems.

- **FORS 398 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **FORS 434 - Advanced Forest Roads**

Credits: 3. Offered autumn. Prereq., FORS 341. The purpose of this course is to help students understand the principles and skills of forest road design and the concepts of forest transportation planning. The course will cover the basic topics of road location, design, construction, and maintenance and provide students with techniques to identify the combination of roads, facilities and transport systems which minimize costs and negative environmental impacts.

- **FORS 435 - Advanced Timber Harvesting**

Credits: 3. Offered autumn. Prereqs., FORS 341. This course covers the fundamentals of logging feasibility and cost analyses of various timber harvesting systems including the characteristics and performance of ground vehicles, cable and aerial systems; cost factors and cost analysis procedures; safety issues; and environmental impacts of harvesting systems .

- **FORS 436 - Project Appraisal**

Credits: 3. Offered autumn. Prereq., FORS 320 or consent of instructor. A suite of techniques, collectively referred to as project appraisal methods, facilitate evaluation of alternative projects. In this applied, computer laboratory-based course, students will become familiar with the use of discounted cash flow analysis and mathematical programming to evaluate proposed courses of action and recommend the economically efficient alternative. Skills will be developed applying these techniques to problems faced by natural resource managers and policy-makers.

- **FORS 440 - Forest Stand Management**

Credits: 3. Offered autumn. Prereq., FORS 202 or 302; FORS 341; FORS 347 or 349. The management and manipulation of forest stands to reach multiple objectives, with a focus on the planning of forest operations for a community partner.

- **FORS 444 - Applied Methods in Forest Restoration and Utilization**

Credits: 1 TO 3. (R-9) Meeting all day on Saturdays, and some Sundays, this course involves training students to safely and efficiently identify forest stands to be restored through appropriately-planned management activities including both live and dead timber felling operations, manufacture of sawlogs and pulpwood, proper management of slash and residuals, grapple skidding and the production of lumber using both circular sawmill and bandsaw mill.

- **FORS 447 - Advanced Silviculture**

Credits: 3. Offered intermittently. Prereq., FORS 347 or FORS 349 or consent of instr. Examination of silvicultural topics such as regeneration practices, thinning/stand density concepts, and silvicultural systems at an advanced level.

- **FORS 481 - Forest Planning**

Credits: 3. Offered spring. Prereq., FORS 320; FORS 347 or FORS 349 or consent of instr. Integrated multiple use planning at the forest-wide level: defining multi-resource management goals, generating management alternatives, projecting outcomes, assessing environmental impacts, and implementing preferred option.

- **FORS 491 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FORS 492 - Independent Study**

Credits: 1 TO 3. (R-10) Offered every term. Prereq., consent of instr. Individual study or research problems.

- **FORS 495 - Wildland RxFire Practicum**

Credits: 3. Offered wintersession. Co-convened with FORS 544. Prereq. Fire experience and Consent of Instructor. An intensive field course providing students with technical training, practical applications, and theoretical foundations in ecological burning for restoration purposes. Class is typically held in southeastern United States. **Course Attributes:** Co-Convened Course

- **FORS 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off-campus. Prior approval must be obtained from faculty advisor and Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **FORS 499 - Senior Thesis**

Credits: 1 TO 3. Offered autumn and spring. Prereq., senior standing and consent of instr. Preparation of a major paper based on study or research in a field selected according to the needs and objectives of the student.

- **FORS 505 - Sampling Methods**

Credits: 3. Offered spring. Prereq., consent of instr. Fundamentals of statistical sampling emphasizing natural and environmental resource applications. Principles of inferences and alternative estimators are studied in the context of simple random, systematic, unequal probability, stratified, and 3P/Poisson designs. Variable radius plot sampling, line intersect sampling, and other probability proportional to size designs used in forest and ecological inventories are also covered. Level: Graduate

- **FORS 521 - Heur. Opt. for For. Plan.**

Credits: 3. Offered spring even-numbered years. Prereq. FORS 481 or equiv. and consent of instr. Modern heuristic optimization techniques and their applications to solving spatially explicit forest planning problems. Level: Graduate

- **FORS 533 - Use Fire Wildland Mgmt**

Credits: 3. Offered autumn. Prereq., consent of instr. Evolution of federal fire policy is discussed. Western fire ecology and the planned use of fire for wildlife, range, and forest applications of prescribed fire are presented. Fire behavior and a fire science vocabulary are introduced. Students review literature, present seminars, and lead discussions. Level: Graduate

- **FORS 535 - Applied Forest Ecology**

Credits: 3. Prereq., graduate status or consent of instructor. This course covers the use of ecological theory and data in the design of silvicultural treatments to achieve multiple management objectives, with particular emphasis on forest restoration and climate change adaptation. We examine methods of silvicultural design, including use of historical and contemporary reference conditions, and climate adaptation strategies. Analysis exercises use the open source statistical program and language R for data analysis, visualization, and modeling, especially of spatial point pattern data. Introduction to monitoring and adaptive management of silvicultural treatments. Level: Graduate

- **FORS 538 - Ecological Statistics**

Credits: 3. Offered in the Fall. Prerequisites: STAT451/452 or equivalent. This is an applied course covering advanced statistical modeling techniques using examples from forestry, ecology, and the environmental sciences. Covers data management, visualization, and scripting with R, an open source data analysis and statistics platform. Explores various parametric and semi-parametric

modeling strategies that allow for non-linear response functions and/or non-Gaussian response distributions. Estimation and inference in the context of generalized linear models, generalized additive models, and classification and regression trees are discussed using examples from the scientific literature. Lays the foundation for subsequent graduate-level analytic coursework. Level: Graduate

- **FORS 540 - Disturbance Ecology**

Credits: 3. Prereq., graduate status or consent of instructor. This course covers foundational disturbance ecological concepts; examines important and influential disturbance ecology theories; and introduces important disturbance agents and processes operating in temperate and boreal forest ecosystems. Level: Graduate

- **FORS 544 - Adv. Wildland RXFire Practicum**

Credits: 3. Offered wintersession. Co-convened with FORS 495. Prereq. Consent of Instructor. An intensive field course providing students with technical training, practical applications, and theoretical foundations in ecological burning for restoration purposes. Students will practice leadership skills by supervising and training fire personnel in application of prescribed fire. Class typically held in southeastern United States. Credit is not allowed for both FORS495 Wildland Prescribed Fire Practicum and FORS544 Prescribed Fire Practicum. Level: Graduate **Course Attributes:** Co-Convened Course

- **FORS 545 - Silviculture Research**

Credits: 1. (R-6) Offered intermittently. Prereq., consent of instr.; prereq. or coreq., FOR 347 or equiv. Reading and discussion of scientific literature related to silvicultural practice and science. Different topic each semester. Students become familiar with silviculture literature, develop skills for scrutinizing scientific literature, and examine silvicultural topics in detail. Level: Graduate

- **FORS 551 - Digital Image Processing**

Credits: 4. Offered intermittently. Prereq., FORS 351 or consent of instr. Fundamentals of electro-optical digital remote sensors, data compilation, preprocessing, and pattern recognition. Level: Graduate

- **FORS 594 - Graduate Seminar**

Credits: 1. (R-12). Offered Spring. Prereq. graduate standing. Presentations by students, faculty, and professionals on issues and topics in their field. Level: Graduate

- **FORS 595 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **FORS 596 - Independent Study**

Credits: 1 TO 3. (R-10) Offered every term. Prereq., consent of instr. Individual study or research problems. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **FORS 598 - Internship**

Credits: 1 TO 15. (R-15) Offered every term. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

- **FORS 599 - Professional Paper**

Credits: 1 TO 15. (R-15) Offered autumn and spring. Preparation of Master of Ecosystem Management professional paper. Level: Graduate

- **FORS 697 - Graduate Research**

Credits: 1 TO 15. (R-15) Offered every term. Independent graduate research in forest management, wood science, soils, wildlife management, silviculture, recreation and other topic areas. Level:

Graduate

- **FORS 699 - Thesis**
Credits: 1 TO 15. (R-15) Offered every term. Preparation of thesis/dissertation. Level: Graduate

Nat Resourc Science & Mgmt

- **NRSM 121S - Nature of Montana**
Credits: 3. Offered autumn. An exploration of the major natural resource management issues facing the people of Montana and the social processes to manage environmental conflicts. Provides an introduction to the function of ecological systems and the impacts of human uses on the environment and looks at strategies for addressing global climate change, ex-urban population growth, and protecting environmental quality. **Course Attributes:** Social Sciences Course
- **NRSM 170 - International Envir. Change**
Credits: 3. Offered spring. An introduction to natural and anthropogenic environmental change from ancient to contemporary times. Exploration of the historical role and importance of ecological disturbance on the development and maintenance of terrestrial ecosystems around the world. Introduction to fields of study available in the College of Forestry and Conservation.
- **NRSM 180 - Careers in Natural Resources**
Credits: 2. Offered autumn and spring. Subject matter and fields of study within natural resources management. Topics include forestry, wildlife biology, range, water, recreation management, forest products production, and other opportunities for careers in natural resources.
- **NRSM 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **NRSM 200 - Nat.Resource Professional Wrtg**
Credits: 3. Offered fall and spring to College of Forestry and Conservation majors. Prereq., WRIT 101. Students synthesize scientific literature and, using appropriate evidence and APA style, write natural-resources-based documents appropriate for distribution to scientists, managers, and the public. **Course Attributes:** Writing Course-Approved Writing Course-Intermediate
- **NRSM 210N - Soils, Water and Climate**
Credits: 3. Prereq., M 115 or M 121 or M 122 or M 151 or M 162 or M 171 or M 172. The factors affecting earth's terrestrial ecosystems are rapidly changing, and understanding their impact on ecosystem services to humanity is becoming increasingly important and yet complex. In this course, students will explore how climate, water and soils interact to shape Earth's biosphere. We will introduce students to a number of fundamental concepts in climate, hydrology, and soil science to gain a comprehensive view of the factors that shape and affect all terrestrial ecosystems. Through a series of lectures and field-based laboratories, students will be introduced to the fundamental principles of climate and hydrology that influence soil development, how they vary across small spatial scales, and how these physical, chemical, and biological processes interact to affect soil development. Ultimately, this class will introduce students to intimate relationship between climate, water, and soils, and how they interact to affect patterns of vegetation we see across the biosphere. **Course Attributes:** Natural Science Lab Course
- **NRSM 215 - Field Studies in Conservation**
Credits: 1. Offered spring. Open to Resource Conservation Majors. Field study focusing on flora and fauna, history of land use and ecological change, contemporary forest management, conservation and community development in western Montana.
- **NRSM 265 - Elements of Ecological Restora**
Credits: 3. Offered autumn. Prereq., one course in the ecological or biological sciences: BIOO 105N, BIOB 160N, BIOB 170N, BIOB 172, BIOE 370, BIOE 428, BIOE 447 or BIOE 448; or FORS 330; or NRSM 271N or NRSM 462 or consent of instructor. Overview of the natural and social science

elements of ecological restoration, including the ecological foundations of restoration, practices used to restore terrestrial and aquatic habitats, philosophical and ethical challenges involved, and current initiatives in Montana and the United States. Includes Saturday field trips.

- **NRSM 271N - Conservation Ecology**

Credits: 3. Offered autumn. An overview of ecological concepts and how ecology is applied to further our understanding of ecosystems and conservation. Topics include: ecosystems functions and values, biomes, natural selection and speciation, biodiversity, succession, climate change, fragmentation, protected areas, impacts of exotic species and other human influences on ecosystem functions. **Course Attributes:** Natural Science Course

- **NRSM 273 - Wilderness/Civ Field Stds**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Field studies in ecology and conservation. Includes natural history, field journaling, ecological monitoring, protected area management, and community conservation. One-day trips as well as extended backcountry trips. Part of the Wilderness and Civilization program.

- **NRSM 281 - Science of Climate Change**

Credits: 3. This course provides an introduction to Earth's climate system and the scientific evidence of climate change. This course explores how past climate has shaped Earth's ecosystem and how humans are currently altering Earth's climate system, as well as potential future climate scenarios. Through this course students will gain a better understanding of Earth's energy budget, the global carbon cycle, and potential impacts of climate change. This class is open to all undergraduates, both science and non-science majors, and counts toward the Climate Change Studies minor.

- **NRSM 291 - Special Topics**

Credits: 1 TO 12. (R 12) Offered intermittently. Experimental offerings of visiting professors; new courses or one time offerings of current topics.

- **NRSM 311 - Field Stds ecol/Human Commun**

Credits: 2 TO 3. (R-12) Offered every term. Prereq., consent of instr. Via extended backcountry travel, experiential examination of the structure and function of the ecosystems occurring within the course area. Also investigates the relationship of those ecosystems with the people that manage, live, and work in the area. Offered by the Wild Rockies Field Institute.

- **NRSM 321 - Field Stds Energy Syst Montana**

Credits: 2 TO 3. Offered Summer. Via an extended bicycle tour of Montana, students examine a variety of energy developments and their environmental, social, and economic implications.

- **NRSM 335 - Environmental Entomology**

Credits: 3. Offered autumn odd years. An introduction to the importance of insects in ecosystem function and process, and their use in ecological monitoring as indicators of ecological change, degradation, and the efficacy of ecological restoration efforts. This course also covers the effects of climate change and biological invasions in the context of both pest and beneficial insect species.

- **NRSM 344 - Ecological Restoration Capstone**

Credits: 5. Offered spring. Prereq., junior or senior standing in Ecological Restoration and successful completion of NRSM 265 and one advanced ecology course: BIOE 370, BIOE 428, BIOE 447, BIOE 448, FORS 330, or NRSM 462.; and completion or concurrent enrollment in NRSM 465. This service-learning course teaches students about planning and designing and implementing restoration and monitoring projects. The course includes lectures, labs, and hands-on experience working with ecologists and restoration practitioners from local government agencies, NGOs, or other organizations.

- **NRSM 345 - Watershed Dynamics**

Credits: 3. Coreq. ENST 291, 391 392, NRSM 346. Offered each autumn by Northwest Connections. Via hands on application in rural Montana, students investigate watershed function; introductory stream hydrology and morphology; and fish, amphibian and aquatic furbearer habitat

characteristics. The course also explores impacts of road building, timber harvest, and watershed fragmentation on watershed and stream function, fish habitat, and fish populations.

- **NRSM 352 - Himalayan Environment and Dev**

Credits: 3. Offered summer only. Coreq., PTRM 353. This course covers the contentious issues surrounding environment and development in the Himalaya using the Garhwal region of India as the example.

- **NRSM 360 - Rangeland Mgt (equiv 260)**

Credits: 3. Offered autumn. Prereq., junior standing or consent of instr. An introduction to rangelands and their management, grazing influences, class of animal, grazing capacity, control of livestock distribution, improvements, competition and interrelationships with wildlife. Laboratory exercises to gain on-site experience on topics and concepts presented in lectures.

- **NRSM 370S - Wildland Conserv Pol/Govrnance**

Credits: 3. Offered autumn and spring. Examination of the historical, philosophical, and legislative background for development and management of our national system of wilderness areas, wild and scenic rivers, trails, and national parks; their place in our social structure. Part of the Wilderness and Civilization program. **Course Attributes:** Social Sciences Course

- **NRSM 374 - Yellowstone Studies**

Credits: 1. Offered spring. Ecological and sociopolitical perspectives on the greater Yellowstone ecosystem. Topics include winter ecology, biodiversity conservation, national park planning and management, winter recreation, fire, and wildlife. Field course in the Yellowstone area. Part of the Wilderness and Civilization Program.

- **NRSM 379 - Collab in Nat Res Decisions**

Credits: 3. Offered autumn. Political and social processes affecting natural resource decisions. Examination of cases of multi-party collaboration in forestry, range, and watershed management issues. **Course Attributes:** Writing Course-Upper-Division

- **NRSM 385 - Watershed Hydrology**

Credits: 3. Offered autumn and spring. Prereq., M 115 or M 121 or M 122 or M 151 or M 162 or M 171 or M 172. An introduction to physical and biological controls over water movement and storage in the environment, and how those controls are affected by land management practices.

- **NRSM 386 - Watershed Hydrology Lab**

Credits: 1. Offered autumn and spring. Coreq., NRSM 385 or consent of instr. An introduction to basic watershed measurement and analysis techniques. Lab exercises designed around the use of spreadsheets and computer graphics.

- **NRSM 391 - Special Topics**

Credits: 0 TO 12. (R 12) Offered intermittently. Experimental offerings of visiting professors; new courses or one time offerings of current topics.

- **NRSM 395 - Community-Based Approaches to Wildlife Conservation**

Credits: 1 TO 6. Offered each summer by Northwest Connections. Via field-based study in western Montana, students learn emerging strategies for reducing human-wildlife conflicts while considering ecological, economical, and societal impacts. Coreq., ENST 395 Wildlife Policy & Rural Communities and Field Ecology of Threatened & Endangered Species in the Northern Rockies. The course emphasizes the multiple perspectives of stakeholders and the importance of striving for collaborative solutions to conflicts over wildlife management and controversial species.

- **NRSM 398 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course**

Attributes: Internships/Practicums

- **NRSM 404 - Wilderness in American Context**

Credits: 4. An expansive treatment of the history of the wilderness preservation movement in the United States. Introduction to the successive influences of philosophy, science, art and politics on society's relationship with wilderness. Discussion of the Wilderness Act of 1964.

- **NRSM 408 - Global Cycles and Climate**

Credits: 3. Offered spring even-numbered years. Same as CCS 408. An analysis of the earth's major global biogeochemical cycles with a focus on the ways and extent to which each of them influences and interacts with the global climate system.

- **NRSM 415 - Environmental Soil Science**

Credits: 3. Offered spring odd-numbered years Prereq., ENSC 245N or NRSM 210N or consent of instr. A detailed analysis of the physical, chemical and biological properties of soils and how they function, with a focus on soil processes and how they affect, and are affected by human activities. Specific topics include element cycling, water quality, the effects of environmental change soil biogeochemistry, plant-soil interactions, and the consequences of large-scale disturbances on soil processes.

- **NRSM 418 - Ecosystem Climatology**

Credits: 3. Interactions between the biosphere and atmosphere to advanced undergraduate students and graduate students. This course will explore the interactions between Earth's biosphere and atmosphere and how they affect climate over a range of scales. We will focus on the exchange of energy, mass, and important elements between the biosphere and atmosphere and how this exchange can lead to fascinating feedbacks in Earth's climate system. Basic physics and math is not required but it is recommended.

- **NRSM 422 - Nat Res Policy/Administration**

Credits: 3. Offered autumn and spring. Policy formation in the United States and a survey of the major resource policies interpreted in their historical and political contexts.

- **NRSM 424 - Community Forestry & Conservtn**

Credits: 3. Offered spring. Co-convened with NRSM 524. In-depth examination of the history, theory and management issues faced in community-driven forestry and conservation in the United States and abroad. Cannot get credit for both NRSM 424 and NRSM 524. **Course Attributes:**

Co-Convened Course

- **NRSM 425 - Nat Res & Envir Economics**

Credits: 3. Offered alternate spring. Prereq., ENSC 201S or FORS 320; and M 115, M 121, M 122, M 151, M 162, M 171, or 172. Introduction to analytical approaches for economic analysis of management of non-renewable resources, fisheries, forests, threatened and endangered species, and the atmosphere.

- **NRSM 426 - Climate and Society**

Credits: 3. Offered spring. Co-convened with NRSM 526. This course examines the social and political aspects of climate change, with a focus on international and domestic processes and cases. Cannot get credit for both NRSM 426 and NRSM 526. **Course Attributes:**

Co-Convened Course

- **NRSM 449E - Climate Change Ethics/Policy**

Credits: 3. Offered autumn. Same as CCS 449E. This course focuses on the ethical dimensions of climate change policy. It will cover the following major topics: (1) climate change, personal and collective responsibilities, (2) ethics, climate change and scientific uncertainty, (3) distributive justice and international climate change negotiations, (4) intergenerational justice and climate change policy. **Course Attributes:** Ethical & Human Values Course

- **NRSM 455 - Riparian Ecology & Management**

Credits: 3. Offered intermittently. Prereqs., successful completion or concurrent enrollment in NRSM 385 and completion of one of the following introductory ecology courses: BIOE 172, BIOE 370, BIOE 428, BIOE 447, BIOE 448, FORS 330, or NRSM 462. Importance of riparian/wetland areas and the complexities associated with their management for short and long term benefits.

- **NRSM 462 - Rangeland Ecology**

Credits: 3. Offered spring. We will discuss the ecological principles and processes that drive the structure and function of rangeland ecosystems. We will focus on the intersections of plant, animal, ecosystem, and landscape ecology. We will weave in discussions of management to understand how rangeland dynamics contribute and respond to differing management paradigms.

- **NRSM 465 - Foundations of Restoration Ecology**

Credits: 3. Offered spring. Prereq., graduate or junior or senior standing and NRSM 265 and one 300-400 level ecology courses: BIOE 370, BIOE 428, BIOE 447, BIOE 448, FORS 330, or NRSM 462; or consent of instructor. This course covers the primary ecological theories that inform the practice of ecological restoration. Topics include the dynamic nature of ecological systems, community assembly, biodiversity and ecosystem functioning, food web dynamics, ecological engineering, macroecology, and statistical issues and study design.

- **NRSM 475 - Environment & Development**

Credits: 3. Offered spring. Co-convened with NRSM 575. Examines key social forces that influence how individuals, groups and nation-states understand and live within their bio-physical environments, especially policies and processes relating to development, corporate capitalism, globalization, culture, class and other forms of power and social relations. Pays close attention to ways both indigenous and introduced resource use and management practices (including conservation) variably impact people of different races, classes, genders, cultures and livelihood practices. Cannot get credit for both NRSM 475 and NRSM 575. **Course Attributes:**

Co-Convened Course

- **NRSM 489E - Ethics Forestry & Conservation**

Credits: 3. Offered autumn. Prereq., lower division course in Perspective 5 or consent of instr.; senior standing. Theoretical and practical ethical issues affecting the management of natural resources in national forests and on other public lands. **Course Attributes:**

Ethical & Human Values Course

- **NRSM 494 - Seminar in Ecol Restoration**

Credits: 1. Offered spring. Prereq., senior standing and successful completion or concurrent enrollment in NRSM 495; and consent of instr. This seminar provides a forum for students to share the results of practicum projects conducted in NRSM 495. Each student will lead at least one seminar during the semester.

- **NRSM 495 - Ecological Restor Practicum**

Credits: 1 TO 6. (R-6) Offered every semester. Prereq., senior standing in the WLR major and successful completion of NRSM 344, a faculty-approved practicum proposal; and consent of instructor. The goal of this service-learning practicum is for students to gain real-world experience in the practice of ecological restoration. Students will implement aspects of a restoration or monitoring plan for a local management agency, organization or other sponsor. **Course Attributes:** Internships/Practicums

- **NRSM 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off-campus. Prior approval must be obtained from faculty advisor and Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:**

Internship graduation limit 6

- **NRSM 499 - Senior Thesis**

Credits: 1 TO 3. (R-3) Offered autumn and spring. Prereq., senior standing and consent of instr. Preparation of a major paper based on study or research in a field selected according to the needs

and objectives of the student.

- **NRSM 501 - Research Methods**

Credits: 3. Offered autumn. Prereq., a course in statistics or consent of instr. The nature of scientific research, planning research projects, organization and presentation of research results. Emphasis on the development of study plans for specific research projects. Level: Graduate

- **NRSM 513 - Nat Res Conflict Resolution**

Credits: 3. Offered autumn. Same as ENST 513 and LAW 613. Examines the basic framework for preventing and resolving natural resource and environmental conflicts in America. Reviews the history of alternative approaches, emphasizes the theory and practice of collaboration, and considers future trends. This highly interactive course uses lectures, guest speakers, case studies, and simulations. Level: Graduate

- **NRSM 515 - Enviro Negotiation Mediation**

Credits: 3. Same as COMM 515 and ENST 515. This course prepares students to effectively engage in multiparty negotiation on natural resource and environmental issues. It is grounded in theory and provides an opportunity to develop practical skills in both negotiation and facilitation/mediation. Guest speakers, case studies, and simulations allow students to develop, test, and refine best practices. The course is face-paced, highly interactive, and serves as the second of three required courses in the Natural Resources Conflict Resolution Program. Level: Graduate

- **NRSM 520 - Forest Resource Economics**

Credits: 3. Offered intermittently. Prereq., FORS 320 or equiv., an upper-division or graduate level course in microeconomics, and consent of instr. The demand for, and supply of, commodity products from the forest, including characteristics of demand for stumpage, logs and processed products, forest management and harvesting decisions, and the supply of stumpage, intermediate and processed products. Level: Graduate

- **NRSM 524 - Community Forestry & Conservtn**

Credits: 3. Offered spring. Co-convened with NRSM 424. In-depth examination of agroforestry, community forestry, and opportunities and constraints to the use of trees in rural development and protected areas management. Level: Graduate **Course Attributes:** Co-Convened Course

- **NRSM 526 - Climate and Society**

Credits: 3. Offered spring. Co-convened with NRSM 426. This course applies relevant social and political theory to the problem of climate change and examines the social science of climate change. Cannot get credit for both NRSM 426 and NRSM 526. Level: Graduate **Course Attributes:** Co-Convened Course

- **NRSM 532 - Forest Ecosystem Analysis**

Credits: 3. Offered spring. Graduate standing only. Logical strategies for transforming ecosystem complexity into simplified simulation models with emphasis on space/time scaling and environmental policy relevance. Level: Graduate

- **NRSM 560 - Am Wilderness Phil & Policy**

Credits: 4. History of the American Wilderness idea and associated policies, including the Wilderness Act and implementing regulations. Current management challenges also covered. Level: Graduate

- **NRSM 561 - Manag Wilderness Ecosystems**

Credits: 4. Ecosystem science and policies and management practices related to managing specific resources, such as air, wildlife, and water, within wilderness. Management of non-conforming uses is also covered. Level: Graduate

- **NRSM 563 - Wilderness Planning**

Credits: 4. Planning theory and effective plan development, including principles and practices of

public involvement. Includes examination of primary planning frameworks. Level: Graduate

- **NRSM 570 - Political Ecology**

Credits: 3. Graduate seminar on key theories, issues and literature in the subfield of Political Ecology, an interdisciplinary environmental social science approach which integrates how political, economic, cultural and ecological processes interact and shape society nature relations. Case examples are drawn from both the North and South. Level: Graduate

- **NRSM 571 - Int'l Conserv & Develop**

Credits: 3. Offered spring. Prereq., graduate standing. Critical review of selected international natural resource development, conservation and management approaches and experiences. Level: Graduate

- **NRSM 575 - Environment & Development**

Credits: 3. Offered spring. Co-convened with NRSM 475. Examines key social forces that influence how individuals, groups and nation-states understand and live within their bio-physical environments, especially policies and processes relating to development, corporate capitalism, globalization, culture, class and other forms of power and social relations. Pays close attention to ways both indigenous and introduced resource use and management practices (including conservation) variably impact people of different races, classes, genders, cultures and livelihood practices. Level: Graduate

- **NRSM 579 - Collaborative Conservation**

Credits: 3. (R-4) Offered every semester. Same as ENST 579 and LAW 679. Prerequisite, ENST 513 or consent of instructor. Designed as the capstone experience of the Natural Resources Conflict Resolution Program. Provides practical experience in multi-party collaboration and conflict resolution. Students may design their own project in consultation with the director of the NRCR Program, or participate in a project organized and convened by faculty. Projects may be conducted year-round. Level: Graduate

- **NRSM 582 - Trop Ecos & Mgmt**

Credits: 3. Offered spring. Prereq., graduate standing or consent of instr. Introduction to tropical forests and agroecosystems, and a critical examination of their management and conservation within the context of ecological, socioeconomic and political change. Level: Graduate

- **NRSM 586 - Snow Hydrology**

Credits: 3. Offered intermittently. Prereq., graduate standing or consent of instr. The physics of snow formation, distribution and ablation. Snow and forest management in the subalpine zone. Level: Graduate

- **NRSM 594 - Seminar**

Credits: 1 TO 4. (R-12). Offered intermittently. Prereq. graduate standing. Presentations by student, faculty, and associates on issues and topics in their field. Level: Graduate

- **NRSM 595 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums

- **NRSM 596 - Independent Study**

Credits: 1 TO 12. (R-12) Offered every term. Prereq., consent of instr. Individual study or research problems. Level: Graduate
Course Attributes: Service Learning/Volunteer

- **NRSM 597 - Graduate Research**

Credits: 1 TO 15. (R-15) Offered every term. Independent graduate research in forest management, wood science, soils, wildlife management, silviculture, recreation and other topic areas. Level: Graduate

- **NRSM 598 - Internship**
Credits: 1 TO 2. (R-12) Offered every term. Practical application of academic learning in an off-campus placement. Prior approval must be obtained from faculty supervisor. Level: Graduate
- **NRSM 599 - Professional Paper**
Credits: 1 TO 15. (R-15) Offered every term. Professional paper preparation. Level: Graduate
- **NRSM 622 - Advanced Prolems in Env Policy**
Credits: 3. Offered spring even-numbered years. Examines environmental policy problems and contemporary issues in environmental policy, law, and administration. Policy tools, concepts and research resources introduced. Numerous problems, themes, and issues in environmental policy analyzed. Readings-based seminar; students lead most reviews and discussions. Level: Graduate
- **NRSM 695 - Special Topics**
Credits: 1 TO 12. (R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
- **NRSM 697 - Graduate Research**
Credits: 1 TO 15. (R-15) Offered every term. Independent graduate research in forest management, wood science, soils, wildlife management, silviculture, recreation and other topic areas. Level: Graduate
- **NRSM 699 - Thesis**
Credits: 1 TO 15. (R-15) Offered every term. Thesis/dissertation preparation. Level: Graduate

Parks, Tour & Recreation Mgmt

- **PTRM 355 - Wild. Med. And Risk Mgmt.**
Credits: 5. This course will train students in injury and illness prevention in a backcountry setting while emphasizing risk management principles. The course also trains students in the treatment and long-term management of medical emergencies in the backcountry, including improvised litters and splints. Instructors cover decision making involved in dislocation reduction, medication administration, and evacuation protocols. Risk management topics include participant screening, emergency response plans, risk matrices, and incident reporting. Co-requisites include HHP 332, Emergency Medical Technician and Incident Management; and PTRM 356, Wilderness Rescue and Survival Skills.
- **PTRM 356 - Wild. Rescue and Survival**
Credits: 5. This course is ideal for outdoor leaders involved in extended backcountry trips and those individuals seeking employment with search and rescue units, ski patrols and wilderness trip leading organizations. Students will be prepared to handle emergencies in high-elevation, winter conditions as well as in tropical and swiftwater environments. They will also be prepared for extended care of patients and rescuers in remote and challenging environments. Students will study navigation including landform interpretation of maps and use of map rulers to determine lat/long and UTM coordinates, as well as practical use of maps, compass and GPS. The course includes 3 days of Swiftwater Rescue training, as well as 3 days of Level I Avalanche training. An overnight, winter rescue scenario typically in conjunction with Missoula County Sheriff's Search and Rescue team, as well as training in rescue helicopter operations with St. Patrick Hospital's LifeFlight medics, complete the suite of practical experiences. Co-Requisites include HHP 332, Emergency Medical Technician and Incident Management; and PTRM 355, Wilderness Medicine and Risk Management.
- **PTRM 582 - Concept of Wilderness & PA**
Credits: 3. (R-3). Offered autumn. Theoretical and philosophical imperatives for the establishment of different forms of parks, wilderness and protected areas. In-depth discussion of the objectives and purposes for management of these areas, and of the current criticisms and attacks on their intellectual foundation. Level: Graduate

Writing

- **WRIT 222 - Technical Approach to Writing**

Credits: 2. Offered every term. Restricted to majors in Forestry, Resource Management, Park and Recreation, Wilderness Studies, and Wildlife Biology. Emphasis on strategy, style and tone in effective technical prose. Traditions of technical writing and how to adopt a wide range of tones and styles in writing various technical documents to diverse audiences. Focus on more effective technical sentences, paragraphs and larger writing components. Assignments include analyses, summaries, employment documents, research reports, case studies and editing/revision exercises.

Course Attributes: Writing Course-Lower-Division Writing Course-Approved
Writing Course-Intermediate

Course Descriptions

Fish, Wildlife Science & Mgmt

- **WILD 105N - Wildlife & People**

Credits: 3. Offered autumn. Intended for non-wildlife biology majors. Interactions of wildlife and people in today's society. **Course Attributes:** Natural Science Course

- **WILD 170 - Fish & Wildlife Interest Group**

Credits: 1. Offered autumn. Discussion section for incoming students.

- **WILD 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **WILD 240 - Intro to Biostatistics**

Credits: 3. Offered autumn. Prereq., calculus and consent of instr. Introduction to statistical ecology: distributions, hypothesis testing, and fitting models to data with emphasis on problems in ecological sampling. **Course Attributes:** Honors Course

- **WILD 275 - Wildlife Conservation**

Credits: 2. Offered spring. Prereq., sophomore standing or consent of instr. Principles of animal ecology and framework of wildlife administration as a basis for the conservation of wild birds and animals, and biodiversity. Intended for non-wildlife biology majors.

- **WILD 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **WILD 346 - Wildlife Physiological Ecology**

Credits: 3. Offered autumn. Prereq., BIOB 272. How physiological and biochemical processes in animals influence behavior and ecology. Application of physiological approaches to wildlife conservation such as assessment of animal health, nutritional condition, and physiological performance.

- **WILD 370 - Wildlife Habitat Cons & Mgmt**

Credits: 3. Offered autumn and spring. Prereq., junior/senior standing in wildlife biology, BIOE 370, or consent of instr. Application of principles of wildlife biology to conservation and management of wild bird and mammal habitats including field applications.

- **WILD 374 - Hunter Check Station**

Credits: 1. (R-2) Offered autumn. Students learn techniques for determining species, age and sex of game animals, then work 3-5 days as volunteers at hunter check stations operated by

management agencies.

- **WILD 391 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **WILD 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Course material appropriate to the needs and objectives of the individual student.

- **WILD 398 - Internship**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **WILD 408 - Advanced Fisheries**

Credits: 3. Offered spring. Prereq., BIOO 340. Quantitative analysis and interpretation of fish populations and community data for use in management. Selection, application and evaluation of management techniques. **Course Attributes:** Writing Course-Advanced

- **WILD 410 - Wildlife Policy & Biopolitics**

Credits: 3. Offered autumn. Prereq., junior standing. Overview of the laws affecting wildlife and how those laws are initiated, implemented, and enforced; impact of politics, interest groups, and agency jurisdictions.

- **WILD 460 - Internat Wildlife Cons Issues**

Credits: 2. Offered spring. Prereq., a course in wildlife biology and/or conservation biology. Review of major international wildlife conservation issues with emphasis on the social context of the issues and applied solutions.

- **WILD 470 - Conserv of Wildlife Populatns**

Credits: 3. Offered autumn and spring. Prereq., BIOE 370, M 162 or M 171, and senior standing in Biology, Forestry, Resource Conservation, Recreation Management or Wildlife Biology. Application of population ecology principles and theory to the conservation and management of wildlife populations. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **WILD 472 - Wildlife Hand & Chem Immobiliz**

Credits: 2. Offered spring. Principles of wildlife chemical immobilization for researchers and managers. Ethical and legal issues, field organization, animal care and handling, immobilizing drugs, drug delivery systems, animal monitoring and veterinary emergencies. No labs.

- **WILD 480 - The Upshot--Appld Wildlife Mgt**

Credits: 3. Offered spring. Prereq/Coreq., WILD 370 or WILD 470. Designed for students to apply their knowledge in the development of wildlife management planning.

- **WILD 485 - Aquatic Invertebrate Ecology**

Credits: 3. Offered autumn. Prereq., one 300-400 level ecology course: BIOE 370, BIOE 428, BIOE 447, BIOE 448, FORS 330, or NRSM 462. This course is designed to provide students an understanding of the life histories, ecology and importance of macroinvertebrates in freshwater aquatic systems. The primary focus will be on insects, although an introduction to other invertebrates will also be included. The lab portion will involve identification of major groups of aquatic macroinvertebrates and participation in an environmental assessment using invertebrates as indicators of stream condition and restoration efficacy.

- **WILD 491 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, new

courses, or one-time offerings of current topics.

- **WILD 492 - Independent Study**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., consent of instr. Original investigations or problems not related to student's thesis.

- **WILD 494 - Senior Wildlife Seminar**

Credits: 1. Offered autumn and spring. Prereq., senior standing in wildlife biology or consent of instr. Analysis and discussion led by students of current topics in wildlife biology.

- **WILD 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **WILD 499 - Thesis**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., consent of instr.; senior standing. Preparation of major paper based on study or research of a topic selected with an advisor according to needs and objectives of student.

- **WILD 540 - Research Design**

Credits: 3. Offered autumn. Prereq., introductory statistics course or consent of instr. Examination of study designs for experiments, quasiexperiments, observational studies, and sampling surveys with an emphasis on application. Level: Graduate

- **WILD 542 - Statistical Applications in Wildlife Biology**

Credits: 1 TO 2. (R-5) Offered autumn odd-numbered years. Explores statistical problems encountered by wildlife biology and ecology graduate students. Students will bring statistical problems of interest to class where, as a group, we will explore analysis options, assumptions, pitfalls, and alternative solutions. Level: Graduate

- **WILD 545 - Strong Inference Science**

Credits: 1. (R-7) Offered every fall. Graduate level, or consent of instructor for advanced undergraduates. Teach principles and philosophy of conducting strong inference science. Practical application to student's own thesis research. Level: Graduate

- **WILD 560 - Landscape Conservation**

Credits: 3. Offered spring. Examination of how various spatial and temporal scales influence wildlife and their habitats. Level: Graduate

- **WILD 562 - Wildlife Habitat Modeling**

Credits: 4. Offered spring, odd years. Prereq., consent of instr. A survey of theory and applications in the study of resource selection by animals. Level: Graduate

- **WILD 563 - Topics in Habitat Ecology**

Credits: 1. (R-15) Offered every term. Prereq., consent of instr. Discussion of recent scientific papers on advances in ecology, conservation, and population dynamics as related to habitat ecology and conservation. WBIO 562 or equivalent strongly recommended. Level: Graduate

- **WILD 564 - Scientific Writing**

Credits: 3. Offered spring, even years. Exploration of the major components and process of scientific writing within the field of Wildlife Biology, primarily focusing on research proposals and peer-review publications. Level: Graduate

- **WILD 568 - Topics in Aquatic Ecology**

Credits: 1. (R-15) Offered every term. Prereq., consent of instr. Review and synthesis of the

scientific literature current issues and analyses in aquatic ecology. We assume a general understanding of fish biology, aquatic ecology, as well as a background in population, community and ecosystem ecological concepts. Level: Graduate

- **WILD 570 - Applied Population Ecology**
Credits: 3. Offered spring even-numbered years. Prereq., courses in ecology, statistics, and calculus. Application of advanced population ecology tools and concepts to the evaluation of human perturbations on wildlife populations. Topics include methods to detect declining trends, the interacting components of population viability analysis, and identification of strategies to reverse declines. Level: Graduate
- **WILD 580 - Populations Dynamics**
Credits: 1. (R-15) Offered autumn and spring. Prereq., consent of instr. Discussion of recent papers on interface of population dynamics, ecological interactions, and wildlife management. Level: Graduate
- **WILD 594 - Grad Sem Wildf Biol**
Credits: 1. (R-15) Offered autumn and spring. Prereq., graduate standing in wildlife biology or Fish Wildlife Biology or consent of instr. Analysis of selected problems in wildlife biology and conservation. Level: Graduate
- **WILD 595 - Special Topics**
Credits: 1 TO 12. (R 20) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums
- **WILD 596 - Independent Study**
Credits: 1 TO 15. (R-15) Offered every term. Prereq., graduate standing and consent of instr. Original investigations or problems not related to student's thesis. Level: Graduate
Course Attributes: Service Learning/Volunteer
- **WILD 597 - Research**
Credits: 1 TO 15. (R 15) Offered every term. Prereq., graduate standing in wildlife biology or consent of instr. Graded pass/not pass only. Level: Graduate
- **WILD 599 - Professional Paper**
Credits: 1 TO 15. (R-15) Offered every term. Prereq., graduate standing in wildlife biology and consent of instr. Professional paper written in the area of the student's major interest based on either primary or secondary research. Subject matter must be approved by graduate committee. Graded pass/not pass only. Level: Graduate
- **WILD 697 - Research**
Credits: 1 TO 20. (R-20) Offered every term. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **WILD 699 - Thesis**
Credits: 1 TO 20. (R-20) Offered every term. Prereq., graduate standing in wildlife biology. Preparation of thesis. Level: Graduate

Writing

- **WRIT 325 - Science Writing**
Credits: 3. Offered spring. Prereq., WRIT 101 or equiv. and sophomore standing. Discussion of different types of science writing and focus on methods to achieve more fluent prose. Includes material on logic, inference, and developing arguments that rely on data. **Course Attributes:**
Writing Course-Approved Writing Course-Intermediate

Nat Resourc Science & Mgmt

- **NRSM 373 - Wilderness and Civilization**
Credits: 3. (R-6) Offered autumn and spring. Social and cultural perspectives on the wilderness idea and wildland practices. Course topics include history of wilderness and the wilderness movement, various philosophical viewpoints on wilderness, protected area management issues, and how wilderness fits into larger landscapes and societies. Part of the Wilderness and Civilization program.
- **NRSM 405 - Mgt of Wilderness Resource**
Credits: 4. An ecology-based treatment of wilderness management. Brief overview of fundamental ecological principles followed by an examination of their specific and often unique applications to wilderness ecosystems. Presentation of basic wilderness management principles and guidelines. Discussion of nonconforming wilderness uses.
- **NRSM 406 - Wilderness Mgt Planning**
Credits: 3. Exploration of basic planning theory, concepts, effective plan writing, and the characteristics of successful planning and implementation. In-depth treatment of the Limits of Acceptable Change planning framework. Comparison and evaluation of the different planning approaches used by the four wilderness managing agencies.
- **NRSM 491 - Special Topics**
Credits: 1 TO 9. (R 9) Offered intermittently. Experimental offerings of visiting professors; new courses or one time offerings of current topics.

Parks, Tour & Recreation Mgmt

- **PTRM 150 - Current Issues in PTRM**
Credits: 1. Offered autumn. This course will explore issues related to recreation and tourism in western Montana. This is a field based course designed to get students outside the classroom. Students will have a chance to visit outdoor recreation areas and meet recreation and tourism managers.
- **PTRM 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **PTRM 210 - Nature Tourism & Comm Rec**
Credits: 3. Offered autumn. Introduction to the tourism and commercial recreation industries. Provides initial link between the natural environment and business operations. Combination of introductory business philosophies, economics, and natural resource management into a framework for future reference and course work.
- **PTRM 210S - Nature Tourism & Comm Rec**
Credits: 3. Offered autumn. Introduction to the tourism and commercial recreation industries. Provides initial link between the natural environment and business operations. Combination of introductory business philosophies, economics, and natural resource management into a framework for future reference and course work. **Course Attributes:** Social Sciences Course
- **PTRM 217S - Parks & Outdoor Rec. Mgmt.**
Credits: 3. Offered autumn and spring. The management of land as an environment for outdoor recreation. Understanding the relationship between the visitor, resource base and management policies. Recreation planning on multiple use forest lands, parks, wilderness areas and private

lands.

- **PTRM 230 - Programming in Recreation**
Credits: 3. Offered intermittently. Principles of program planning for organized offerings in recreation. Selection, adaptation and evaluation of activities.
- **PTRM 291 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **PTRM 300 - Recreation Behavior**
Credits: 3. Offered spring. Prereq., PTRM 217S. This course provides an understanding of recreation behavior in wildland and nature-based tourism oriented settings. Students will learn about theories/conceptual frameworks from social and environmental psychology and their application to visitor management issues in the wildland recreation and nature-based tourism fields.
- **PTRM 310 - Nat Res Interp and Comm**
Credits: 3. Offered autumn. Prereq., COMX 111A or THTR 120A, junior or senior standing in PTRM or RECM. Principles, concepts, techniques essential to providing high quality interpretive programs in natural or cultural history. **Course Attributes:** Writing Course-Upper-Division
- **PTRM 345X - Sustaining Human Soc & Nat Env**
Credits: 3 TO 6. Offered Winter and Summer. These field-based, experiential classes focus on the environmental and conservation concerns, as well as the modern and traditional cultures, of Australia, New Zealand, or Fiji. **Course Attributes:** Indigenous and Global
- **PTRM 353 - Tourism & Sustainability Himalaya**
Credits: 3. Offered summer only. Coreq. NRSM 352. In this course we will explore the opportunities and challenges of development with particular reference to nature-based tourism and sustainability in an isolated but rapidly globalizing region of the Himalaya. Students will learn through extensive readings, class discussions, direct field experience (including living in a remote mountain village), meetings with development officials, sustainability activists and stakeholders in the region.
- **PTRM 380 - Rec Admin & Leadership**
Credits: 3. Offered spring. The theories, principles and practices that shape the administration of recreation opportunities offered through public, nonprofit and private agencies and organizations. Course content includes leadership roles of recreation managers, organizational structure, management, legality, risk management, staffing, communication and public relations.
- **PTRM 391 - Special Topics**
Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics.
- **PTRM 392 - Independent Study**
Credits: 1 TO 6. (R-6) Offered every term. Course material appropriate to the needs and objectives of the individual student.
- **PTRM 394 - Seminar**
Credits: 1 TO 4. (R-4) Offered intermittently. Variable topics by visiting scholars.
- **PTRM 398 - Internship**
Credits: 1 TO 6. Offered every term. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **PTRM 407 - Mnging Rec Res in Wilderness**
Credits: 3. Examination of strategies to management recreation in a wilderness setting. Addresses management of visitor use and experiences, measuring and monitoring biophysical and social impacts, effective education and interpretation, and law enforcement.
- **PTRM 418 - Winter Wilderness Field Studies**
Credits: 3. Examination of wilderness values, management issues and strategies, winter ecology and snow science, risk management and group leadership, and traditional skills. Winter field course in the Swan Valley and Mission Mountains Wilderness. Offered wintersession.
- **PTRM 450 - Pre-Practicum Prof Prep**
Credits: 1. Offered spring. A pre-practicum class to provide orientation for the practicum, PTRM 495 (RECM 460).
- **PTRM 451 - Tourism & Sustainability**
Credits: 3. Offered spring. Prereq., PTRM 210, or consent of instructor. Theories and conceptual models are applied to analyzing relationships between the integration of planning theories to sustainability concepts. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced
- **PTRM 482 - Wilderness & Protctd Area Mgt**
Credits: 3. Offered spring. Prereq., PTRM 217S, or consent of instructor. Examination of the origin, evolution, and application of the park concept on state, federal, and international levels. Evaluation of legislation, philosophy, and policy leading to consideration of goals, objectives, and strategies for wilderness and protected area management. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced
- **PTRM 484 - PTRM Field Measurement Tech**
Credits: 3. Offered autumn. Co-req. with either PTRM 485 or PTRM 451. Field measurement and management techniques critical in park, tourism & recreation management. Includes measurement of impacts on biophysical and social attributes of park, tourism & recreation settings.
- **PTRM 485 - Recreation Planning**
Credits: 4. Offered spring. Prereq., PTRM 217S and PTRM 300. Offered autumn. Needs of recreation opportunities and response to those needs through planning, demand assessment and resource analysis.
- **PTRM 491 - Special Topics**
Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, new courses or one-time offerings of current topics.
- **PTRM 492 - Independent Study**
Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Individual study of research problems.
- **PTRM 494 - Seminar**
Credits: 1 TO 4. Offered autumn and spring. Prereq., senior standing in wildlife biology or consent of instr. Analysis and discussion led by students of current topics in wildlife biology.
- **PTRM 495 - Practicum in PTRM**
Credits: 1 TO 6. (R-15) Offered every term. Prereq., PTRM 380, PTRM 450, senior standing, and consent of instr. Supervised pre-professional practice in approved parks, tourism & recreation management agencies. **Course Attributes:** Internships/Practicums
- **PTRM 498 - Internship**
Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of instr. Extended classroom learning during placements off campus. Prior approval must be obtained from faculty advisor and

Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **PTRM 499 - Senior Thesis**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., consent of instr.; senior standing. Preparation of major paper based on study or research of a topic selected with an advisor according to needs and objectives of student.

- **PTRM 500 - Conserv Social Sci Methods**

Credits: 3. Offered autumn. Prereq., a course in statistics or consent of instr. The nature of scientific research, planning research projects, organization and presentation of research results. Level: Graduate

- **PTRM 517 - Advanced Visitor Mgmt**

Credits: 3. Managing visitors in protected areas is an increasingly important. The U.S. National Park Service, for example, receives about 275 million visits per year. These visits impact both the parks and society on numerous levels. Many of the most perplexing issues associated with Protected Area Management are also visitor experience or access related. Visitors are managed to fulfill mandates, build constituencies for protected areas, generate income and improve the human condition. In the past four decades several visitor management strategies and tactics have been developed and evaluated. Examples of these strategies include changing physical places or facilities to accommodate use, changing the character of uses and visitors, emphasizing education or law enforcement, developing concessions etc. Within those broad strategies are also numerous tactics that have been tried in numerous contexts. Charging user fees, rationing use, using passive vs. active interventions into the visitor experience are tactical examples. In our globalizing profession these strategies and tactics are being challenged to perform within the context of a variety of governance and institutional arrangements. While most approaches were developed for public land settings, they are now being used on private lands, in communal settings, or in areas of international importance. The central challenge of this course is to analyze the effectiveness and appropriateness of visitor management strategies for a variety of issues and in a variety of institutional contexts. To be sure our efforts connect both theoretical and applied perspectives, we will use a single case for the organization of the course. That case is developing a visitor management plan for the Going to the Sun Road Corridor in Glacier National Park. This is a real process that the professor is cooperatively involved with. We will meet one or two times per week depending on the needs of the group. Level: Graduate

- **PTRM 554 - Geographies of Tourism**

Credits: 3. Consent of Instructor. This graduate level course will focus on geographic concepts such as place, space, and scale and their applications in tourism research. We will also cover spatial analysis techniques and their uses in tourism studies. The course will begin with an introduction to geography and its importance in tourism studies. Next, background on concepts and theories developed within the field of geography will be provided. From there we will begin to discuss ideas of space, place, landscapes and scale. In our discussion of scale we will focus on the politics of scale and ideas of globalization and the global-local nexus. This will lead into a discussion of networks and flows as they apply to tourism. We will also explore political geographies and gendered landscapes as they apply to tourism. Finally, we will explore some spatial analysis techniques used by geographers studying tourism. The course materials will be structured to give students information on how each topic is conceptualized by geographers, current theoretical debates relating to the topic and its applications in tourism research. The course will rely heavily on current literature, mainly from peer-reviewed journals and book chapters. Students will be expected to engage with these concepts through the literature in writing and discussion. Level: Graduate

- **PTRM 562 - Manage Rec Res Wilderness**

Credits: 3. Same as FORS 562. Current research, theory, and management approaches to recreation management in wilderness, including monitoring and management of visitor impacts and experiences. Level: Graduate

- **PTRM 574 - Perspectives in Human Dimen**
 Credits: 3. Consent of instructor. This course will provide graduate students with an understanding of multiple perspectives in human dimensions of natural resources. The course is intended to be broad in nature in order to provide students with a comprehensive understanding of the topics. Students will read and discuss foundational pieces by Orr and Leopold (among others) and explore newer readings on current research. The course will cover social psychological and sociological perspectives and discuss key issues such as scale, multidisciplinary research, sustainability and social diversity in natural resources. Students will be challenged to approach natural resources issues from multiple perspectives, not just the perspective they are most familiar with. Students will be able to communicate effectively among social scientists and be able to integrate diverse perspectives. Level: Graduate
- **PTRM 583 - Research & Dev. Tourism & Rec.**
 Credits: 3. This course will use Montana as a case study to understand tourism and recreation research and the tourism and recreation industry. From an applied research prospective, students will learn the intricacies of how to design a research program to support a tourism and recreation industry where the data and decision making tools for marketing professionals, land managers, planners, and political entities are generated. How do you build your relationships, work with advisory councils, pick your issues to study, design your methodologies, collect and analyze data, and tell the story so it is applicable to the industry yet objective and science driven? Level: Graduate
- **PTRM 594 - Conservation Soc Sci Seminar**
 Credits: 1 TO 2. (R-3) Offered Spring. Same as NRSM 594. Prereq. graduate standing. Presentations by students, faculty, and associates on issues and topics in their field. Level: Graduate
- **PTRM 595 - Special Topics**
 Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums
- **PTRM 596 - Independent Study**
 Credits: 1 TO 10. (R-10) Offered every term. Prereq., consent of instr. Individual study or research problems. Level: Graduate **Course Attributes:** Service Learning/Volunteer
- **PTRM 597 - Research**
 Credits: 1 TO 12. (R-12) Offered every term. Prereq., graduate standing. Independent graduate research in parks, tourism, and recreation management. Level: Graduate
- **PTRM 598 - Internship**
 Credits: 1 TO 12. (R-12) Offered every term. Prereq., consent of instr. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from faculty advisor and Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums
- **PTRM 599 - Professional Paper**
 Credits: 1 TO 15. (R-15) Offered every term. Preparation of professional paper. Level: Graduate
- **PTRM 695 - Special Topics**
 Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums
- **PTRM 697 - Research**
 Credits: 1 TO 15. (R-15) Offered every term. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

- **PTRM 699 - Thesis**

Credits: 1 TO 15. (R-15) Offered every term. Prereq., graduate standing. Preparation of thesis/dissertation. Level: Graduate

Recreation Management

- **RECM 405 - Manage Wilderness Res**

Credits: 4. An ecology-based treatment of wilderness management. Brief overview of fundamental ecological principles followed by an examination of their specific and often unique application to wilderness ecosystems. Presentation of basic wilderness management principles and guidelines. Discussion of nonconforming wilderness uses.

Climate Change Studies

Steven Running, Director

Climate Change Studies is an inter-disciplinary program open to all majors. The program educates students in three areas of the climate change issue: science, society, and solutions. Coursework in the minor provides a foundation that enables students to engage the scientific, societal, and political dimensions of global climate change. Further, the focus on solutions with its orientation toward applied learning will help students develop critical thinking and problem solving skills. Participating students will enhance their major field of study. They will be better prepared to enter a broad range of professions and graduate programs where they can meet the emerging challenges and opportunities arising from climate change. Climate Change Studies is a joint program between the College of Forestry and Conservation, College of Arts and Sciences, and Missoula College's Energy Technology program.

Department Faculty

Professor

Len Broberg, Professor
Johnnie N. Moore, Ph.D., University of California (Los Angeles), 1976
Steve Running, Regents Professor of Ecology; Director, Numerical Terradynamics Simulation Group

Associate Professor

Cory Cleveland, Associate Professor of Terrestrial Ecosystem Ecology
Joel T. Harper, Ph.D, University of Wyoming, 1998
Ulrich Kamp, Professor
Derek Kellenberg, Associate Professor
Anna Klene, Associate Professor
Peter Koehn, Comparative Government & Politics & Public Administration
Robin Saha, Associate Professor
Steve Schwarze, Professor & Department Chair
Dane Scott, Associate Professor of Ethics; Director of the Center for Ethics; Undergraduate Program Director, Resource Conservation
Dan Spencer, Associate Professor
Laurie Yung, Associate Professor of Natural Resource Social Science

Assistant Professor

Ashley Ballantyne, Assistant Professor of Bioclimatology
Bradley Layton, Energy Technology Program Director/Associate Professor

Climate Change Studies Minor

Steven Running, Director

Climate Change Studies is an interdisciplinary program open to all majors. The program educates students in three areas of the climate change issue: science, society, and solutions. Coursework in the minor provides a foundation that enables students to engage the scientific, societal, and political dimensions of global climate change. Further, the focus on solutions with its orientation toward applied learning will help students develop critical thinking and problem solving skills. Participating students will enhance their major field of study. They will be better prepared to enter a broad range of professions and graduate programs where they can meet the emerging challenges and opportunities arising from climate change. Climate Change Studies is a joint program between the College of Forestry and Conservation, College of Humanities and Sciences, and Missoula College's Energy Technology program.

Minor - Climate Change Studies (Minor)

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Required course

Rule: must take the following course

Course	Credits
CCS 103X - Intro Climate Change:Sci & Soc	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Climate Change Science

Rule: Must take at least 6 credits from the following list

Course	Credits
ERTH 303N - Weather and Climate	3 Credits

	GEO 482 - Global Change	3 Credits
	NRSM 291 - Special Topics	1 To 12 Credits
	NRSM 408 - Global Cycles and Climate	3 Credits
	NRSM 418 - Ecosystem Climatology	3 Credits
	NRSM 491 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-		6 Total Credits Required

Climate Change and Society

Rule: Must take at least 6 credits from the following list

Note: NRSM 395 Climate Change Effects and Adaptation in the Mekong; Wintersession also cross-listed with ENST 391, ANTY 391 and GPHY 391 - 6 total credits - 3 count toward Society Area

Also NRSM 321 AND ENST 311 Cycle the Rockies: Engery and Climate Change in Montana 6 cr. in Summer

—	Course	Credits
	COMX 349 - Comm Consump & Climate	3 Credits
	ECNS 445 - Int Env Econ & Clim Change	3 Credits
	ENST 367 - Envr Politics & Policies	3 Credits
	GPHY 421 - Sustainable Cities	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Climate Change Solutions

Rule: Must take at least 6 credits from the following courses with at least one course from category "A"

6 Total Credits Required

Category A: Practical Application

Rule: Must take at least 1 course but a total of 6 credits between both categories A and B

—	Course	Credits

CCS 391 - Climate Change Practicum	2 To 4 Credits
CCS 398 - Clmt Change Internship/SERV	2 To 4 Credits
ENST 476 - Environmental Citizenship	3 Credits
NRGY 298 - Internship	2 Credits
Minimum Required Grade: C-	3-6 Total Credits Required

Category B

Rule: May take 1 of the following courses

Note: Commentary: NRSM 395 Climate Change Effects and Adaptation in the Mekong; Wintersession also cross-listed with ENST 391, ANTY 391 and GPHY 391 - 6 total credits - 3 count toward Solutions Area

Also NRSM 321 AND ENST 311 Cycle the Rockies: Engery and Climate Change in Montana 6 cr. in Summer

Course	Credits
BGEN 160S - Issues in Sustainability	3 Credits
CCS 352 - Climate Field Studies	3 Credits
GPHY 421 - Sustainable Cities	3 Credits
NRGY 102 - Intro to Sustainable Energy II	3 Credits
NRGY 195 - Practicum	2 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Ecological Restoration

Bachelor of Science in Ecological Restoration

Ecological restoration — the process of assisting in the repair of damaged ecosystems— is one of the fastest growing areas of natural resource management. With increasing interest, there is a corresponding need for trained professionals who understand not only the science of restoration ecology but also the management practices and social factors that lead to successful project implementation. The College of Forestry and Conservation offers a Bachelor of Science and a minor in Wildland Restoration (for more information see: <http://www.cfc.umt.edu/wildland/>).

Degree Options

Bachelor of Science in Ecological Restoration (Aquatic and Terrestrial Options)

The major in Ecological Restoration prepares students to tackle the complex challenges associated with repairing degraded ecosystems. Students select one of two options: the *Terrestrial Option*, which focuses on restoration of forests, grasslands, and other terrestrial ecosystems; or the *Aquatic Option* which focuses on stream, wetland, and groundwater restoration. Both options provide in-depth training in the science of restoration ecology and the management activities and human dimensions of restoration practice. Students engage in field-based learning, contribute to cutting-edge restoration projects, and are challenged to apply ecological theory to restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in Ecological Restoration prepares students for careers as restoration practitioners with non-profit, private, or governmental agencies and for graduate school in ecology or natural resource management. Students who graduate with this major may qualify for the following federal civil service jobs: biological technician (Series 0404), ecologist (Series GS-408), forester (Series G-0460), hydrologist (Series GS-1315), range technician (Series GS-0455), and soil conservationist (Series GS-0457). More information on federal civil service requirements can be found at: <http://www.opm.gov/qualifications/standards/indexes/alph-ndx.asp>.

Minor in Ecological Restoration

In addition to the major, the Ecological Restoration program also offers a minor for students who wish to gain basic competency in restoration while pursuing another UM major.

Department Faculty

Professor

Diana Six, Professor of Forest Entomology/Pathology; Chair, Department of Ecosystems & Conservation Sciences

Associate Professor

Lisa Eby, Associate Professor of Aquatic Vertebrate Ecology
Christopher R. Keyes, Research Professor of Silviculture
Cara Nelson, Associate Professor of Restoration Ecology; Undergraduate Program Director, Ecological Restoration

Assistant Professor

Kelsey Jencso, Assistant Professor, Watershed Hydrologist
Elizabeth Covelli Metcalf, Assistant Professor of Recreation Management and Human Dimensions of Natural Resources

Affiliates

Ylva Lekberg, Adjunct Assistant Professor of Soil Community Ecology

Emeritus

Ronald Wakimoto, Professor of Forest Fire Science

Aquatic Ecological Restoration

The major in Wildland Restoration prepares students to tackle the complex challenges associated with repairing degraded ecosystems. Students can select one of two options: the Terrestrial Option, which focuses on the repair of terrestrial ecosystems; and the Aquatic Option, which focuses on stream, wetland, and groundwater restoration. Both options provide in-depth training in the science of restoration ecology and the management activities and human dimensions of restoration practice. Students engage in field-based learning, contribute to cutting-edge restoration projects, and are challenged to apply ecological theory to restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in Wildland Restoration prepares students for careers as restoration practitioners with non-profit, private, or governmental agencies and for graduate school in ecology or natural resource management. Students who graduate with this major may qualify for the following federal civil service jobs: biological technician (Series 0404), ecologist (Series GS-408), forester (Series G-460), hydrologist (Series GS-1315) and soil conservationist (Series GS-457). More information on federal civil service requirements can be found at: <http://www.opm.gov/qualifications/standards/indexes/alph-ndx.asp>.

Bachelor of Science - Ecological Restoration; Aquatic Option

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 89

Required Cumulative GPA: 2.0

Major Required Courses

Rule: Must take all courses

Note: Can take WRIT 325 Science Writing (honors) in place of NRSM 200; Can take NRSM 170 Intern'l Environ Change OR NRSM 180 Careers in Natural Resources in place of NRSM 121S

Course	Credits
NRSM 121S - Nature of Montana	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 265 - Elements of Ecological Restora	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take FORS 201 Biometrics OR WILD 240 Into to Biostats in place of STAT 216; can take THTR 120 Acting I in place of COMX 111A

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits

	BIOB 260 - Cellular and Molecular Biology	4 Credits
	BIOB 272 - Genetics and Evolution	4 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		39 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take NRSM 449 in place of NRSM 489E

—	Course	Credits
	NRSM 365 - Foundations of Restoration Ec	3 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	NRSM 444 - Ecological RestorationCapstone	5 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	NRSM 494 - Seminar in Ecol Restoration	1 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
Minimum Required Grade: C-		21 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 428 - Freshwater Ecology	5 Credits
Minimum Required Grade: C-	8 Total Credits Required

Restoration Aquatic Electives

Rule: Must take as least 9 credits

Note: WILD 491 Aquatic Macroinvertebrate Ecol. fall only

Course	Credits
BIOL 342 - Field Ecology	5 Credits
BIOL 435 - Comparative Animal Physiology	3 Credits
BIOL 451 - Landscape Ecology	3 Credits
BIOL 454 - Stream Ecology	3 Credits
BIOO 340 - Biology and Mgmt of Fishes	4 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
GEO 228 - Earth Surface Processes	2 Credits
GEO 420 - Hydrogeology	4 Credits
GEO 421 - Hydrology	3 Credits
GEO 460 - Process Geomorphology	4 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
NRSM 408 - Global Cycles and Climate	3 Credits
NRSM 418 - Ecosystem Climatology	3 Credits
NRSM 455 - Riparian Ecology & Management	3 Credits
NRSM 485 - Watershed Management	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Social Science Elective Courses

Rule: must take at least 3 credits

Course	Credits
ECNS 433 - Economics of the Environment	3 Credits
FORS 320 - Forest Environmental Economics	3 Credits
GPHY 335 - Water Policy	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 426 - Climate and Society	3 Credits
NRSM 475 - Environment & Development	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Writing Requirements

Rule: Must complete the following subcategories

15 Total Credits Required

Lower Division Writing

Rule: Complete all courses

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Upper Division Writing

Rule: Must take at least three courses

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits

	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 444 - Ecological Restoration Capstone	5 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
	NRSM 499 - Senior Thesis	1 To 3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Math requirements for major

Rule: Must take all courses

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Symbolic System

Rule: Must take one of the following courses

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WILD 240 - Intro to Biostatistics	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts Requirement for Major

Rule: must take one of the following course

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: May take the following course

—	Course	Credits
	NRSM 121S - Nature of Montana	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: must take one of the following course

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences within Major

Rule: Must take all courses

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Terrestrial Ecological Restoration

The major in Wildland Restoration prepares students to tackle the complex challenges associated with repairing degraded ecosystems. Students can select one of two options: the Terrestrial Option, which focuses on the repair of terrestrial ecosystems; and the Aquatic Option, which focuses on stream, wetland, and groundwater restoration. Both options provide in-depth training in the science of restoration ecology and the management activities and human dimensions of restoration practice. Students engage in field-based learning, contribute to cutting-edge restoration projects, and are challenged to apply ecological theory to restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in Wildland Restoration prepares students for careers as restoration practitioners with non-profit, private, or governmental agencies and for graduate school in ecology or natural resource management. Students who graduate with this major may qualify for the following federal civil service jobs: biological technician (Series 0404), ecologist (Series GS-408), forester (Series G-460), hydrologist (Series GS-1315) and soil conservationist (Series GS-457). More information on federal civil service requirements can be found at:<http://www.opm.gov/qualifications/standards/indexes/alph-ndx.asp>.

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 88

Required Cumulative GPA: 2.0

Major Required Courses

Rule: Must take all courses

Note: Can take WRIT 325 Science Writing (honors) in place of NRSM 200; Can take NRSM 170 Intern'l Environ Change OR NRSM 180 Careers in Natural Resources in place of NRSM 121S

—	Course	Credits
	NRSM 121S - Nature of Montana	3 Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
	NRSM 265 - Elements of Ecological Restora	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take FORS 201 Biometrics OR WILD 240 Into to Biostats in place of STAT 216; Can take THTR 120A Acting I in place of COMX 111A

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 260 - Cellular and Molecular Biology	4 Credits
	BIOB 272 - Genetics and Evolution	4 Credits
	BIOO 105N - Introduction to Botany	3 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits

	COMX 111A - Intro to Public Speaking	3 Credits
	M 162 - Applied Calculus	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		31 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take NRSM 449E in place of NRSM 489E

—	Course	Credits
	NRSM 365 - Foundations of Restoration Ec	3 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	NRSM 444 - Ecological RestorationCapstone	5 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	NRSM 494 - Seminar in Ecol Restoration	1 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
Minimum Required Grade: C-		21 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take BIOE 448 terer. Plant Ecology OR FORS 330 Forest Ecology OR NRSM 462 Range Ecology

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	BIOE 447 - Terrestrial Ecosystem Ecology	3 Credits
	BIOO 335 - Rocky Mountain Flora	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Restoration Terrestrial Electives

Rule: Must take as least 9 credits

Note: No Double Dipping with CORE courses

—	Course	Credits
	BIOE 447 - Terrestrial Ecosystem Ecology	3 Credits
	BIOE 448 - Terrestrial Plant Ecology	4 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOL 451 - Landscape Ecology	3 Credits
	BIOL 458 - Forest and Grassland Ecol	3 Credits
	BIOL 459 - Alpine Ecology	3 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 433 - Plant Physiology	3 Credits
	FORS 202 - Forest Mensuration	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	FORS 333 - Basic&Applied Fire Ecology	3 Credits
	FORS 347 - Multiple Resource Silviculture	3 Credits
	GEO 228 - Earth Surface Processes	2 Credits
	NRSM 408 - Global Cycles and Climate	3 Credits
	NRSM 418 - Ecosystem Climatology	3 Credits
	Minimum Required Grade: C-	9 Total Credits Required

Restoration Social Science Elective Courses

Rule: Must take at least 3 credits

—	Course	Credits
	ECNS 433 - Economics of the Environment	3 Credits
	FORS 320 - Forest Environmental Economics	3 Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits

	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Writing Required for the Major

Rule: Must complete the following subcategories

15 Total Credits Required

Lower Division Writing

Rule: must take the following courses

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Writing

Rule: Must take at least three courses

—	Course	Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 444 - Ecological RestorationCapstone	5 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
	NRSM 499 - Senior Thesis	1 To 3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Math requirement for major

Rule: Must take all courses

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Symbolic Systems

Rule: Must take one of the following courses

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WILD 240 - Intro to Biostatistics	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts Requirement for Major

Rule: must take one of the following course

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Sciences

Rule: May take the below course

—	Course	Credits
	NRSM 121S - Nature of Montana	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: must take one of the following course

—	Course	Credits

	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences within Major

Rule: Must take all courses

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Ecological Restoration Minor

Minor - Ecological Restoration (Minor)

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Major Required Course

Rule: must take the following course

Note: FORS 201 can be substituted for either STATS 216 Into to Statistics OR WILD 240 Into to Biostatistics

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
	NRSM 265 - Elements of Ecological Restora	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Required Courses

Rule: Must complete all of the following courses

Note: FORS 330 can be substituted for either BIOE 370 General Ecology OR BIOE 428 Freshwater Ecology OR NRSM 462 Range Ecology;
NRSM 385 can be substituted for BIOO 335 Rocky Mountain Flora

Course	Credits
FORS 330 - Forest Ecology	3 Credits
NRSM 365 - Foundations of Restoration Ec	3 Credits
NRSM 385 - Watershed Hydrology	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Natural Science Electives

Rule: Must take one of the following courses, but not a course already used for a core or above requirement

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOE 448 - Terrestrial Plant Ecology	4 Credits
BIOL 342 - Field Ecology	5 Credits
BIOL 451 - Landscape Ecology	3 Credits
BIOL 453 - Ecology of Small & Large Lakes	3 Credits
BIOL 454 - Stream Ecology	3 Credits
BIOL 458 - Forest and Grassland Ecol	3 Credits
BIOL 459 - Alpine Ecology	3 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
BIOO 340 - Biology and Mgmt of Fishes	4 Credits
BIOO 433 - Plant Physiology	3 Credits
FORS 202 - Forest Mensuration	3 Credits

	FORS 330 - Forest Ecology	3 Credits
	FORS 331 - Wildland Fuel Management	3 Credits
	FORS 333 - Basic&Applied Fire Ecology	3 Credits
	FORS 347 - Multiple Resource Silviculture	3 Credits
	GEO 228 - Earth Surface Processes	2 Credits
	GEO 420 - Hydrogeology	4 Credits
	GEO 460 - Process Geomorphology	4 Credits
	NRSM 335 - Environmental Entomology	3 Credits
	NRSM 360 - Rangeland Mgt (equiv 260)	3 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	NRSM 408 - Global Cycles and Climate	3 Credits
	NRSM 415 - Environmental Soil Science	3 Credits
	NRSM 418 - Ecosystem Climatology	3 Credits
	NRSM 455 - Riparian Ecology & Management	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
	NRSM 485 - Watershed Management	3 Credits
	WILD 470 - Conserv of Wildlife Populatns	3 Credits
	WILD 491 - Special Topics	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science Electives

Rule: take at least one course from the following, but if one of these courses are required for the major a second elective must be taken

Course	Credits
ECNS 433 - Economics of the Environment	3 Credits
FORS 320 - Forest Environmental Economics	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits

	NRSM 422 - Nat Res Policy/Administration	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Ethical & Human Values Elective within Minor

Rule: Can take the elective courses

Note: can take these courses for Social Science Electives in the minor and will work for this General Education Requirement

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences within Minor

Rule: must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Fire Sciences and Management

Department Faculty

Professor

Associate Professor

David Affleck, Associate Professor of Biometrics; Director of the Inland Northwest Growth & Yield Cooperative
Solomon Dobrowski, Associate Professor of Forest Landscape Ecology
Beth Dodson, Associate Professor of Integrated Natural Resource; Undergraduate Program Director, Forestry
Christopher R. Keyes, Research Professor of Silviculture
Carl Seielstad, Associate Research Professor; Fire/Fuels Program Manager, National Center for Landscape Fire Analysis
Laurie Yung, Associate Professor of Natural Resource Social Science

Assistant Professor

Andrew Larson, Associate Professor of Forest Ecology
James Riddering, Adjunct Research Assistant Professor; Remote Sensing Program Manager, National Center for Landscape Fire Analysis

Fire Sciences and Management Minor

Minor - Fire Sciences & Management (Minor)

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 23

Required Cumulative GPA: 2.0

Major Required Course

Rule: must take the following course

—	Course	Credits
	FORS 230 - Forest Fire Management	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

Required Course

Rule: must take the following course

Course	Credits
FORS 333 - Basic&Applied Fire Ecology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ecology Courses

Rule: Must take one of the following courses

Course	Credits
BIOE 370 - General Ecology	3 Credits
FORS 330 - Forest Ecology	3 Credits
NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Practicum or Planning Course

Rule: Must take one of the following courses

Course	Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 495 - Wildland RxFire Practicum	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
PTRM 485 - Recreation Planning	4 Credits
WILD 480 - The Upshot--Appld Wildlife Mgt	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Meteorology or Climate Course

Rule: Must take one of the following courses

Course	Credits
ERTH 303N - Weather and Climate	3 Credits
FORS 430 - Forest Meteorology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Measurements & Analysis Electives

Rule: Must take one of the following courses

—	Course	Credits
	FORS 202 - Forest Mensuration	3 Credits
	FORS 350 - Forestry Apps of GIS	3 Credits
	FORS 351 - Env Remote Sensing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural/Management Science Electives

Rule: Take at least one course from the following, but if one of these courses is required for the major a second elective must be taken

—	Course	Credits
	BIOE 449 - Plant Biogeography	3 Credits
	FORS 331 - Wildland Fuel Management	3 Credits
	FORS 347 - Multiple Resource Silviculture	3 Credits
	GPHY 317 - Geomorphology	3 Credits
	NRSM 335 - Environmental Entomology	3 Credits
	NRSM 365 - Foundations of Restoration Ec	3 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	WILD 370 - Wildlife Habitat Cons & Mgmt	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Social Science Electives

Rule: Take at least one course from the following, but if one of these courses is required for the major a second elective must be taken

—	Course	Credits
	FORS 320 - Forest Environmental Economics	3 Credits
	NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits

	NRSM 422 - Nat Res Policy/Administration	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Ethical & Human Values Elective within Minor

Rule: Can take the elective courses

Note: can take either course for minor and will work for General Education Requirement

Course	Credits
NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	

Geographic Information Systems

Department Faculty

Professor

Anna Klene, Associate Professor

Associate Professor

Carl Seielstad, Associate Research Professor; Fire/Fuels Program Manager, National Center for Landscape Fire Analysis

Adjunct

Kevin McManigal, Lecturer & GIST Certificate Coordinator

Geographic Information Systems Certificate

Certificate in GIS Sciences and Technologies

The Certificate in GIS Sciences and Technologies, jointly offered by the departments of Geography, and Forest Management, is aimed at present or future professionals or scientists who require skills in GIS technologies. The purpose of this program is to provide undergraduate students or individuals possessing an undergraduate degree with the training, knowledge, and understanding necessary to acquire, process, analyze, and properly display digital geographic data.

Special Requirements for the Certificate

To earn a certificate in GIS Sciences and Technologies, students must either complete or have completed an undergraduate degree and complete a minimum of 20 semester credit hours of course work, including 9 to 11 required credits and 9 to 11 elective credits as described below. Students must achieve at least an overall grade point average of 3.0 for courses within the program in order to earn a certificate. The certificate will be awarded upon the successful completion of all of the requirements of the certificate and the undergraduate degree.

Certificate of Art - Geographic Information Systems

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 20

Required Cumulative GPA: 3.0

Required GIS Core Courses

Rule: Must complete 1 from each of the following subcategories

Minimum Required Grade: C-

9-11 Total Credits Required

Introduction to GIS

Rule: Must complete 1 and only 1 of the following courses

Note: Prior to Fall 2013, this was fulfilled by FOR 250 & 350 or GPHY 381 & 382. In 2013 this requirement could be fulfilled with FORS 284.

Course	Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
GPHY 284 - Intro to GIS and Cartography	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Photogrammetry/Remote Sensing

Rule: Must complete 3-4 credits of the following courses

Note: GPHY 487 and 489 should be completed together.

—	Course	Credits
	FORS 351 - Env Remote Sensing	3 Credits
	GPHY 487 - Remote Sensing/Raster GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Additional Required Courses

Rule: Must complete 3-4 credits of the following courses

Note: GPHY 488 and 489 should be completed together. Spring 2014 and 2015, GPHY 488 and 489 are fulfilled by GPHY 491 GIS Applications.

—	Course	Credits
	FORS 350 - Forestry Apps of GIS	3 Credits
	GPHY 488 - Thematic Cartography & GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Advanced Elective Courses

Rule: Must complete 9-11 credits of the following subcategories

Note: Students can choose electives from any subcategory/ies.

Minimum Required Grade: C-

9-11 Total Credits Required

Raster GIS, Remote Sensing, and Image Analysis

Rule: May complete 4-8 credits from the following courses

Note: GPHY 587 and 489 should be completed together.

—	Course	Credits
	FORS 551 - Digital Image Processing	4 Credits
	GPHY 587 - Image Analysis & Modeling	3 Credits
	GPHY 589 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		4-8 Total Credits Required

Vector GIS and Networks

Rule: May complete 3-11 credits of the following courses

Note: GPHY 486 and 489 should be completed together. GPHY 588 and 589 should be completed together.

—	Course	Credits
	GPHY 486 - Transport, Planning & GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
	GPHY 580 - Seminar GIS & Cartography	3 Credits
	GPHY 588 - Vector GIS	3 Credits
	GPHY 589 - Cartography/GIS Laboratory	1 Credits
	Minimum Required Grade: C-	3-11 Total Credits Required

Data Management and Programming

Rule: May complete 3-10 credits of the following courses

Note: GPHY 468 and 469 should be completed together.

—	Course	Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits
	FORS 505 - Sampling Methods	3 Credits
	GPHY 468 - Community & Regional Analysis	3 Credits
	GPHY 469 - Planning & Analysis Laboratory	1 Credits
	Minimum Required Grade: C-	3-10 Total Credits Required

GIS Applications

Rule: May complete 3-11 credits of the following courses

Note: GPHY 482 and 489 should be completed together.

—	Course	Credits
	ANTY 452 - GIS in Archaeology	3 Credits
	FORS 503 - GIS:Meth & Applic I	3 Credits

GPHY 385 - Field Techniques	3 Credits
GPHY 481 - Advanced Cartographic Design	3 Credits
GPHY 482 - Spatial Analysis & GIS	3 Credits
GPHY 489 - Cartography/GIS Laboratory	1 Credits
GPHY 564 - Planning Design	3 Credits
WILD 562 - Wildlife Habitat Modeling	3 Credits
Minimum Required Grade: C-	3-11 Total Credits Required

Parks, Tourism, and Recreation Management

The B.S. in Parks, Tourism & Recreation Management degree is designed to prepare students for professional positions developing and managing nature-based recreation experiences and park resources for public land management agencies, nonprofit organizations, and the nature-based tourism industry. Students pursuing this degree must choose between an option in Recreation Resources Management or Nature-Based Tourism. The Recreation Resources Management option provides the educational background necessary for evaluating and managing wild lands to protect their recreational, heritage, and ecological values. The Nature-Based Tourism option is designed to combine an understanding of social, cultural, political, environmental, and economic contexts surrounding tourism in a natural resource setting. All students learn the processes and conceptual skills needed to determine alternative management strategies, make management decisions, and carry out management programs. Included are courses leading to an understanding of the basic ecological characteristics of recreational lands. Students also take courses dealing with human behavior and management. Emphasis is placed on presenting problems that would be encountered while managing national parks and forests, state and regional parks, wilderness areas, and other recreation resources of international and national significance.

Department Faculty

Professor

Bill Borrie, Professor of Park and Recreation Management
Wayne Freimund, Interim Dean; Professor, Protected Area Management
Norma Nickerson, Research Professor; Director of ITRR; Undergraduate Program Director, PTRM

Associate Professor

Keith Bosak, Associate Professor of Nature Based Tourism and Recreation

Assistant Professor

Elizabeth Covelli Metcalf, Assistant Professor of Recreation Management and Human Dimensions of Natural Resources
Jennifer Thomsen, Assistant Professor of Park, Recreation, and Tourism Management

Parks, Tourism, and Recreation Management B.S.

The B.S. in Parks, Tourism & Recreation Management degree is designed to prepare students for professional positions developing and managing nature-based recreation experiences and park resources for public land management agencies, nonprofit organizations, and the nature-based tourism industry. Students pursuing this degree must choose between an option in Recreation Resources Management or Nature-Based Tourism. The Recreation Resources Management option provides the educational background necessary for evaluating and managing wild lands to protect their recreational, heritage, and ecological values. The Nature-Based Tourism option is designed to combine an understanding of social, cultural, political, environmental, and economic contexts surrounding tourism in a natural resource setting. All students learn the processes and conceptual skills needed to determine alternative management strategies, make management decisions, and carry out management programs. Included are courses leading to an understanding of the basic ecological characteristics of recreational lands. Students also take courses dealing with human behavior and management. Emphasis is placed on presenting problems that would be encountered while managing national parks and forests, state and regional parks, wilderness areas, and other recreation resources of international and national significance.

Bachelor of Science - Parks, Tourism & Rec Management

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Note: There are no longer "degree options". Students can design their own elective choices with an advisor.

Major Required Courses

Rule: Must take all courses

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
PTRM 210 - Nature-Based Tourism	3 Credits
PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take SOCI 202 Social Statistics OR FORS 201 Biometrics in place of STATS 216; Can take THTR 120A Intro to Acting in place of COMX 111A; can take BIOE 172 Intro to Ecology OR BIOO 105 Botany in place of BIOB 170

—	Course	Credits
	ACTG 201 - Principles of Fin Acct	3 Credits
	ACTG 202 - Principles of Mang Acct	3 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		29 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take WILD 410 Wildlife Policy & Biopolitics in place of NRSM 422; Can take NRSM 462 Range Ecology in place of FORS 330; Can take PTRM 451 Tourism & Sustainability in place of PTRM 482

—	Course	Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
	PTRM 310 - Nat Res Interp and Comm	3 Credits
	PTRM 380 - Rec Admin & Leadership	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits

	PTRM 484 - PTRM Field Measurement Tech	3 Credits
	PTRM 485 - Recreation Planning	4 Credits
	PTRM 495 - Practicum in PTRM	1 To 15 Credits
Minimum Required Grade: C-		28 Total Credits Required

Writing Within Major

Rule: Must complete the following subcategories

9 Total Credits Required

Lower Division Writing

Rule: Must take all courses

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Writing

Rule: Must take one of the following courses

—	Course	Credits
	PTRM 451 - Tourism & Sustainability	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Math within Major

Rule: Must take all courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Symbolic Systems

Rule: Must take at least one of the following courses

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts Requirement

Rule: must take one of the following courses

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science within Major

Rule: must take the following course

—	Course	Credits
	PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: CAN take the elective course

—	Course	Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences within Major

Rule: Must take NRSM 210 and one of the biology courses

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Course	Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOE 172N - Introductory Ecology	3 Credits
BIOO 105N - Introduction to Botany	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Recreation Resource Management

Bachelor of Science - Parks, Tourism & Rec Management; Track: Recreation Resource Mgmt

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Note: There are no longer "degree options". This track allows students to work with a faculty advisor to select elective courses that will be more specific to their career choices.

Major Required Courses

Rule: Must take all courses

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
PTRM 210 - Nature-Based Tourism	3 Credits
PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take SOCI 202 Social Statistics OR FORS 201 Biometrics in place of STATS 216; Can take THTR 120A Intro to Acting in place of COMX 111A; can take BIOE 172 Intro to Ecology OR BIOO 105 Botany in place of BIOB 170

Course	Credits
ACTG 201 - Principles of Fin Acct	3 Credits
ACTG 202 - Principles of Mang Acct	3 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
M 115 - Probability and Linear Math	3 Credits
PSYX 100S - Intro to Psychology	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	29 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take WILD 410 Wildlife Policy & Biopolitics in place of NRSM 422; Can take NRSM 462 Range Ecology in place of FORS 330; Can take PTRM 451 Tourism & Sustainability in place of PTRM 482

Course	Credits
FORS 330 - Forest Ecology	3 Credits
NRSM 422 - Nat Res Policy/Administration	3 Credits
PTRM 300 - Recreation Behavior	3 Credits
PTRM 310 - Nat Res Interp and Comm	3 Credits
PTRM 380 - Rec Admin & Leadership	3 Credits
PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
PTRM 484 - PTRM Field Measurement Tech	3 Credits

PTRM 485 - Recreation Planning	4 Credits
PTRM 495 - Practicum in PTRM	1 To 15 Credits
Minimum Required Grade: C-	28 Total Credits Required

Recreation Resource Management Track

Rule: Can take these track courses

Note: Courses are not required in this track - please talk to a faculty advisor on what classes will be best for your area of interest.

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
COMX 421 - Comm in Non-Profit Organizatns	3 Credits
FORS 230 - Forest Fire Management	2 Credits
FORS 240 - Tree Biology	2 Credits
FORS 241N - Dendrology	3 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
FORS 331 - Wildland Fuel Management	3 Credits
FORS 333 - Basic&Applied Fire Ecology	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
GPHY 121S - Human Geography	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
NRSM 121S - Nature of Montana	3 Credits
NRSM 265 - Elements of Ecological Restora	3 Credits
NRSM 335 - Environmental Entomology	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
PTRM 150 - Current Issues in PTRM	1 Credits

Minimum Required Grade: C-

Writing Within Major

Rule: Must complete the following subcategories

9 Total Credits Required

Lower Division Writing

Rule: Must take all courses

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Writing

Rule: Must take one of the following courses

—	Course	Credits
	PTRM 451 - Tourism & Sustainability	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Math within Major

Rule: Must take all courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Symbolic Systems

Rule: Must take at least one of the following courses

—	Course	Credits
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	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts Requirement

Rule: must take one of the following courses

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science within Major

Rule: must take the following course

—	Course	Credits
	PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: CAN take the elective course

—	Course	Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences within Major

Rule: Must take NRSM 210 and one of the biology courses

—	Course	Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits

	BIOO 105N - Introduction to Botany	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Nature Based Tourism

Bachelor of Science - Parks, Tourism & Rec Management; Track: Nature-Based Tourism

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Note: There are no longer "degree options". This track allows students to work with a faculty advisor to select elective courses that will be more specific to their career choices.

Major Required Courses

Rule: Must take all courses

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
	PTRM 210 - Nature-Based Tourism	3 Credits
	PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take SOCI 202 Social Statistics OR FORS 201 Biometrics in place of STATS 216; Can take THTR 120A Intro to Acting in place of COMX 111A

—	Course	Credits
	ACTG 201 - Principles of Fin Acct	3 Credits

	ACTG 202 - Principles of Mang Acct	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		29 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take WILD 410 Wildlife Policy & Biopolitics in place of NRSM 422; Can take NRSM 462 Range Ecology in place of FORS 330; Can take PTRM 451 Tourism & Sustainability in place of PTRM 482

—	Course	Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
	PTRM 310 - Nat Res Interp and Comm	3 Credits
	PTRM 380 - Rec Admin & Leadership	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
	PTRM 484 - PTRM Field Measurement Tech	3 Credits
	PTRM 485 - Recreation Planning	4 Credits
	PTRM 495 - Practicum in PTRM	1 To 15 Credits
Minimum Required Grade: C-		28 Total Credits Required

Nature Based Tourism Recommended Electives

Rule: Can take these track courses

Note: Courses are not required in this track - please talk to a faculty advisor on what classes will be best for your area of interest.

Course	Credits
ANTY 101H - Anthro & the Human Experience	3 Credits
BMKT 325 - Principles of Marketing	3 Credits
BMKT 337 - Consumer Behavior	3 Credits
COMX 220S - Intro to Organizational Comm	3 Credits
COMX 351 - Principles of Public Relations	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
FORS 202 - Forest Mensuration	3 Credits
FORS 320 - Forest Environmental Economics	3 Credits
FORS 351 - Env Remote Sensing	3 Credits
GEO 101N - Intro to Physical Geology	3 Credits
GPHY 111N - Intro to Physical Geography	3 Credits
GPHY 311N - Biogeography	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
NRSM 121S - Nature of Montana	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
PHL 112E - Intro Ethics and Environment	3 Credits
PTRM 150 - Current Issues in PTRM	1 Credits
Minimum Required Grade: C-	

Writing Within Major

Rule: Must complete the following subcategories

9 Total Credits Required

Lower Division Writing

Rule: Must take all courses

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Writing

Rule: Must take one of the following courses

—	Course	Credits
	PTRM 451 - Tourism & Sustainability	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Math within Major

Rule: Must take all courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Symbolic Systems

Rule: Must take at least one of the following courses

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits

STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Expressive Arts Requirement

Rule: must take one of the following courses

Course	Credits
COMX 111A - Intro to Public Speaking	3 Credits
THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Social Science within Major

Rule: must take the following course

Course	Credits
PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: CAN take the elective course

Course	Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Natural Sciences within Major

Rule: Must take NRSM 210 and one of the biology courses

Course	Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOE 172N - Introductory Ecology	3 Credits
BIOO 105N - Introduction to Botany	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits

Minimum Required Grade: C-

6 Total Credits Required

Outdoor Recreation Services

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Parks, Tourism & Rec Management; Track: Outdoor Recreation Services

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Note: There are no longer "degree options". Students can design their own elective choices with an advisor.

Major Required Courses

Rule: Must take all courses

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
PTRM 210 - Nature-Based Tourism	3 Credits
PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take SOCI 202 Social Statistics OR FORS 201 Biometrics in place of STATS 216; Can take THTR 120A Intro to Acting in place of COMX 111A; can take BIOE 172 Intro to Ecology OR BIOO 105 Botany in place of BIOB 170

Course	Credits
ACTG 201 - Principles of Fin Acct	3 Credits

	ACTG 202 - Principles of Mang Acct	3 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		29 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take WILD 410 Wildlife Policy & Biopolitics in place of NRSM 422; Can take NRSM 462 Range Ecology in place of FORS 330; Can take PTRM 451 Tourism & Sustainability in place of PTRM 482

—	Course	Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
	PTRM 310 - Nat Res Interp and Comm	3 Credits
	PTRM 380 - Rec Admin & Leadership	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
	PTRM 484 - PTRM Field Measurement Tech	3 Credits
	PTRM 485 - Recreation Planning	4 Credits
	PTRM 495 - Practicum in PTRM	1 To 15 Credits
Minimum Required Grade: C-		28 Total Credits Required

Outdoor Recreation Services

Rule: Can take these track courses

Note: Courses are not required in this track - please talk to a faculty advisor on what classes will be best for your area of interest.

Course	Credits
BMGT 401 - Event Management	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
COMX 220S - Intro to Organizational Comm	3 Credits
COMX 421 - Comm in Non-Profit Organizatns	3 Credits
ENST 225 - Community & Enviornment	3 Credits
ENST 230H - Nature and Society	3 Credits
GPHY 121S - Human Geography	3 Credits
HEE 233 - Health Issues Child/Adol	3 Credits
NASX 180 - Event Planning	3 Credits
NRSM 121S - Nature of Montana	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
PSCI 460 - Exp Offering: Public Admin	1 To 9 Credits
PSCI 467 - Adv Nonprofit Adm	3 Credits
PTRM 150 - Current Issues in PTRM	1 Credits
S W 300 - Hum Behav & Soc Environ	3 Credits
SOCI 308 - Soc of Education	3 Credits
SOCI 342 - Urban/Metropolital Soc	3 Credits
SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
Minimum Required Grade: C-	

Writing Within Major

Rule: Must complete the following subcategories

9 Total Credits Required

Lower Division Writing

Rule: Must take all courses

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Writing

Rule: Must take one of the following courses

—	Course	Credits
	PTRM 451 - Tourism & Sustainability	3 Credits
	PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Math within Major

Rule: Must take all courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Symbolic Systems

Rule: Must take at least one of the following courses

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits

STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Expressive Arts Requirement

Rule: must take one of the following courses

Course	Credits
COMX 111A - Intro to Public Speaking	3 Credits
THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Social Science within Major

Rule: must take the following course

Course	Credits
PTRM 217S - Wildland Recreation Management	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethical & Human Values Elective within Major

Rule: CAN take the elective course

Course	Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Natural Sciences within Major

Rule: Must take NRSM 210 and one of the biology courses

Course	Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOE 172N - Introductory Ecology	3 Credits
BIOO 105N - Introduction to Botany	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits

Resource Conservation

Laurie Yung, Associate Professor, Resource Conservation Program Director

The challenging and rapidly evolving field of environmental conservation requires broad training and the ability to integrate and communicate across disciplines. Resource Conservation is an interdepartmental undergraduate major that prepares students for the diverse opportunities that now exist in environmental conservation, natural resource management, and sustainable livelihoods and communities. Students can choose a more structured area of study in the natural sciences, such as ecology or hydrology, or emphasize emerging sub-disciplines such as wildland fire management, natural resource economics, or climate and environmental change. Students can also integrate across disciplines and focus on environmental policy and natural resources planning, wilderness studies, sustainable livelihoods and community conservation, or international conservation. For more information on different curricular tracks within the Resource Conservation major, please see: www.cfc.umt.edu/rc. In addition to degree requirements listed below, students selecting the Bachelor of Science in Resource Conservation should contact their faculty advisor to approve their curriculum.

Department Faculty

Resource Conservation B.S.

Laurie Yung, Associate Professor, Resource Conservation Program Director

The challenging and rapidly evolving field of environmental conservation requires broad training and the ability to integrate and communicate across disciplines. Resource Conservation is an interdepartmental undergraduate major that prepares students for the diverse opportunities that now exist in environmental conservation, natural resource management, and sustainable livelihoods and communities. Students can choose a more structured area of study in the natural sciences, such as ecology or hydrology, or emphasize emerging sub-disciplines such as wildland fire management, natural resource economics, or climate and environmental change. Students can also integrate across disciplines and focus on environmental policy and natural resources planning, wilderness studies, sustainable livelihoods and community conservation, or international conservation. For more information on different curricular tracks within the Resource Conservation major, please see: www.cfc.umt.edu/rc. In addition to degree requirements listed below, students selecting the Bachelor of Science in Resource Conservation should contact their faculty advisor to approve their curriculum.

Bachelor of Science - Resource Conservation

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216 or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
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	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communication

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

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Course	Credits
NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
NRSM 422 - Nat Res Policy/Administration	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Social Science

Rule: Must take one course from below

Course	Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 426 - Climate and Society	3 Credits
NRSM 475 - Environment & Development	3 Credits
PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethics

Rule: Must take one course from below

Course	Credits
NRSM 449E - Climate Change Ethics/Policy	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional Required Courses

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits
PTRM 300 - Recreation Behavior	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Math

Rule: Must take one course from below

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take the one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits

	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Climate & Environment

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Climate & Environmental Change

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about the Climate & Environmental Change track can be found on our website: www.cfc.umt.edu/rc. Students in this track typically complete the Climate Change Minor (www.cfc.umt.edu/ccs). Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216 or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits

Minimum Required Grade: C-

3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Climate & Environmental Change

Rule: Can take these track courses

Note: More detailed information about the Climate & Environmental Change track can be found on our website: www.cfc.umt.edu/rc. Students in this track typically complete the Climate Change Minor (www.cfc.umt.edu/ccs). Please talk with your faculty advisor about which courses to take in this track.

—	Course	Credits
	CCS 103X - Intro Climate Change:Sci & Soc	3 Credits
	CCS 352 - Climate Field Studies	3 Credits

	CCS 398 - Clmt Change Internship/SERV	2 To 4 Credits
	COMX 349 - Comm Consump & Climate	3 Credits
	ECNS 445 - Int Env Econ & Clim Change	3 Credits
	FORS 232 - Forest Insects & Diseases	2 Credits
	FORS 333 - Basic&Applied Fire Ecology	3 Credits
	GPHY 335 - Water Policy	3 Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	NRSM 408 - Global Cycles and Climate	3 Credits
	NRSM 415 - Environmental Soil Science	3 Credits
	NRSM 418 - Ecosystem Climatology	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	Minimum Required Grade: C-	49 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

—	Course	Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	FORS 330 - Forest Ecology	3 Credits
	FORS 341 - Timber Harvesting & Roads	3 Credits
	FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
	FORS 347 - Multiple Resource Silviculture	3 Credits

FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits
PTRM 300 - Recreation Behavior	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Math

Rule: Must take one course from below

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits

Minimum Required Grade: C-

3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

Note: null

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits

Minimum Required Grade: C-

6 Total Credits Required

Ecology of Terrestrial Ecosystems

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Ecology of Terrestrial Ecosystems

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about Ecology of Terrestrial Ecosystems track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professionla Writing

Rule: Must take the following course

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216 or SOCI 202)

Note: Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

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—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Ethics

Rule: Must take one course from below

Course	Credits
NRSM 449E - Climate Change Ethics/Policy	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Ecology of Terrestrial Ecosystems

Rule: Can take these track courses

Note: Suggested courses for Ecology of Terrestrial Ecosystems. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

Course	Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 272 - Genetics and Evolution	4 Credits
BIOB 480 - Conservation Genetics	3 Credits
BIOE 370 - General Ecology	3 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOE 449 - Plant Biogeography	3 Credits
BIOO 320 - General Botany	5 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
BIOO 433 - Plant Physiology	3 Credits
CHMY 123 - Intro to Organic & Biochem	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits

	FORS 240 - Tree Biology	2 Credits
	FORS 241N - Dendrology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	FORS 347 - Multiple Resource Silviculture	3 Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	M 162 - Applied Calculus	4 Credits
	NRSM 265 - Elements of Ecological Restora	3 Credits
	NRSM 335 - Environmental Entomology	3 Credits
	NRSM 365 - Foundations of Restoration Ec	3 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	NRSM 408 - Global Cycles and Climate	3 Credits
	NRSM 415 - Environmental Soil Science	3 Credits
	NRSM 418 - Ecosystem Climatology	3 Credits
	NRSM 455 - Riparian Ecology & Management	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	WILD 275 - Wildlife Conservation	2 Credits
Minimum Required Grade: C-		94 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits

BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits
PTRM 300 - Recreation Behavior	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Math

Rule: Must take one course from below

Course	Credits
M 115 - Probability and Linear Math	3 Credits

	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Environmental Policy & Resources Planning

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Environmental Policy & Resources Planning

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about the Environmental Policy & Resource Planning track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
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CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216, SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

Course	Credits
FORS 201 - Forest Biometrics	3 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-	9 Total Credits Required

Biology

Rule: Must take one course from below

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOE 172N - Introductory Ecology	3 Credits
BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Communications

Rule: Must take one course from below

Course	Credits
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	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits

	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Environmental Policy & Resources Planning

Rule: Can take these track courses

Note: Suggested courses in Environmental Policy and Resources Planning. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
	ECNS 433 - Economics of the Environment	3 Credits
	ENST 367 - Envr Politics & Policies	3 Credits
	ENST 382 - Environmental Law	3 Credits
	FORS 320 - Forest Environmental Economics	3 Credits

	GPHY 335 - Water Policy	3 Credits
	GPHY 465 - Planning Princ & Processes	3 Credits
	GPHY 466 - Environmental Planning	3 Credits
	NRSM 121S - Nature of Montana	3 Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 425 - Nat Res & Envir Economics	3 Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 361 - Public Administration	3 Credits
	PSCI 461 - Administrative Law	3 Credits
	WILD 275 - Wildlife Conservation	2 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		64 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits

FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits
PTRM 300 - Recreation Behavior	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Math

Rule: Must take one course from below

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 151 - Precalculus	4 Credits

M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	Minimum Required Grade: C-	3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

Note:

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits

	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

International Conservation

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: International Conservation

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: Students in this track typically complete the International Development Studies Minor (www.cas.umt.edu/IDS). More detailed information about the International Conservation track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216, SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits

	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

International Conservation

Rule: Can take these track courses

Note: Students in this track typically complete the International Development Studies Minor (www.cas.umt.edu/IDS). More detailed information about the International Conservation track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

—	Course	Credits
	ENST 225 - Community & Environment	3 Credits
	ENST 396 - Supervised Internship (PEAS)	0 To 10 Credits
	ENST 480 - Food, Agriculture, Environment	3 Credits
	ENST 487 - Globalization, Justice & Envir	3 Credits
	ENST 493 - Study Abroad: Envir Justice LA	3 Credits
	GPHY 432 - Human Role Environ Change	3 Credits
	GPHY 434 - Food and Famine	3 Credits
	NRSM 170 - International Envir. Change	3 Credits

NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 475 - Environment & Development	3 Credits
PTRM 345X - Sustaining Human Soc & Nat Env	3 To 6 Credits
PTRM 353 - Tourism & Sustnbility Himalaya	3 Credits
PTRM 451 - Tourism & Sustainability	3 Credits
WILD 460 - Internat Wildlife Cons Issues	2 Credits
Minimum Required Grade: C-	44 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits

	NRSM 475 - Environment & Development	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
	NRSM 499 - Senior Thesis	1 To 3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Math

Rule: Must take one course from below

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Natural Resource Economics

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Natural Resource Economics

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about the Natural Resource Economics track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216 or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

Course	Credits
FORS 201 - Forest Biometrics	3 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits

Minimum Required Grade: C-

9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits

	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Natural Resource Economics

Rule: Can take these track courses

Note: Suggested courses in Natural Resource Economics. Please see ore detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

Course	Credits
ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
ECNS 217X - Issues in Economic Development	3 Credits
ECNS 301 - Intermediate Micro with Calc	3 Credits
ECNS 302 - Intermediate Macroeconomics	3 Credits
ECNS 403 - Introduction to Econometrics	4 Credits
ECNS 433 - Economics of the Environment	3 Credits
ECNS 445 - Int Env Econ & Clim Change	3 Credits
ENST 230H - Nature and Society	3 Credits
ENST 480 - Food, Agriculture, Environment	3 Credits
FORS 320 - Forest Environmental Economics	3 Credits
FORS 436 - Project Appraisal	3 Credits
GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
M 162 - Applied Calculus	4 Credits
NRSM 121S - Nature of Montana	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 425 - Nat Res & Envir Economics	3 Credits

	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	SOCI 101S - Introduction to Sociology	3 Credits
	SOCI 371 - Gender and Global Development	3 Credits
	SOCI 470 - Environmental Sociology	3 Credits
	WILD 275 - Wildlife Conservation	2 Credits
Minimum Required Grade: C-		64 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits

	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
	NRSM 499 - Senior Thesis	1 To 3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Math

Rule: Must take one course from below

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

Note: null

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Sustainable Livelihoods & Community Conservation

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Sustainable Livelihoods & Community Conservation

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about the Sustainable Livelihoods & Community Conservation track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Chemistry

Rule: Must take the following course

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216 or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201

Course	Credits
FORS 201 - Forest Biometrics	3 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits

Minimum Required Grade: C-

9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits

	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Sustainable livelihoods and Community Conservation

Rule: Can take these track courses

Note: Suggested courses in Sustainable Livelihoods and Community Conservation. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

Course	Credits
COMX 347 - Rhetoric Nature & Environment	3 Credits
ECNS 433 - Economics of the Environment	3 Credits
ENST 225 - Community & Environment	3 Credits
ENST 480 - Food, Agriculture, Environment	3 Credits
ENST 489S - Env. Justice Iss & Solut	3 Credits
GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
GPHY 432 - Human Role Environ Change	3 Credits
GPHY 468 - Community & Regional Analysis	3 Credits
NRSM 170 - International Envir. Change	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 475 - Environment & Development	3 Credits
PHL 422 - Environmental Philosophy	3 Credits
PTRM 451 - Tourism & Sustainability	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 270 - Intro Development Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 443 - Sociology of Poverty	3 Credits

	SOCI 470 - Environmental Sociology	3 Credits
Minimum Required Grade: C-		54 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits
PTRM 300 - Recreation Behavior	3 Credits

	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Math

Rule: Must take one course from below

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

Note:

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Watershed Hydrology

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Watershed Hydrology

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about the Watershed Hydrology track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216 or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits

	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits

	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

Course	Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 426 - Climate and Society	3 Credits
NRSM 475 - Environment & Development	3 Credits
PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethics

Rule: Must take one course from below

Course	Credits
NRSM 449E - Climate Change Ethics/Policy	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Watershed Hydrology

Rule: Can take these track courses

Note: Suggested courses in Watershed Hydrology. Please see more detailed description of this track online and talk with you faculty advisor about which courses to take in this track.

—	Course	Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
	GEO 420 - Hydrogeology	4 Credits
	GEO 421 - Hydrology	3 Credits
	GEO 460 - Process Geomorphology	4 Credits
	GPHY 335 - Water Policy	3 Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
	NRSM 385 - Watershed Hydrology	3 Credits
	NRSM 415 - Environmental Soil Science	3 Credits
	NRSM 455 - Riparian Ecology & Management	3 Credits
	NRSM 485 - Watershed Management	3 Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
	Minimum Required Grade: C-	53 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

—	Course	Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	FORS 330 - Forest Ecology	3 Credits

	FORS 341 - Timber Harvesting & Roads	3 Credits
	FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
	FORS 347 - Multiple Resource Silviculture	3 Credits
	FORS 349 - Practice of Silviculture	3 Credits
	FORS 440 - Forest Stand Management	3 Credits
	FORS 499 - Senior Thesis	1 To 3 Credits
	NASX 403 - Contmp Tribal Resource Issues	3 Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 444 - Ecological RestorationCapstone	5 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
	NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
	NRSM 499 - Senior Thesis	1 To 3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Math

Rule: Must take one course from below

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits

	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 172 - Calculus II	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

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—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Wilderness Studies

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Wilderness Studies

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: To complete this track students must enroll in the Wilderness and Civilization Program. For information and an application see www.cfc.umt.edu/wc.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216, SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take once course from below

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits

	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Wilderness Studies

Rule: Can take these track courses

Note: To complete this track students must enroll in the Wilderness and Civilization Program. For information and an application see www.cfc.umd.edu/wc. Please talk to a faculty advisor about additional coursework in this track.

—	Course	Credits
	ARTZ 394A - Seminar- Environmental Drawing	3 Credits
	LIT 280L - Ecology of Literature	3 Credits
	MUSI 304A - Sound in the Natural World	3 Credits
	NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
	NRSM 271N - Conservation Ecology	3 Credits
	NRSM 273 - Wilderness/Civ Field Stds	1 To 3 Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits

	NRSM 371 - Wilderness Issues Lect Series	1 Credits
	NRSM 373 - Wilderness and Civilization	3 Credits
	NRSM 398 - Internship	1 To 6 Credits
Minimum Required Grade: C-		

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits

	PTRM 300 - Recreation Behavior	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Math

Rule: Must take one course from below

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Wildland Fire Management

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Wildland Fire Management

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: Student in this track typically complete the Wildland Fire Sciences & Management Minor (www.cfc.umt.edu/FireSciences). Please see more detailed description of this track online and talk with your faculty advisor about which courses to take.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

Note: null

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216, or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits

	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communications

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

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Course	Credits
NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
NRSM 422 - Nat Res Policy/Administration	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Social Science

Rule: Must take one course from below

Course	Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 426 - Climate and Society	3 Credits
NRSM 475 - Environment & Development	3 Credits
PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethics

Rule: Must take one course from below

Course	Credits
NRSM 449E - Climate Change Ethics/Policy	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Wildland Fire Managment

Rule: Can take these track courses

Note: Student in this track typically complete the Wildland Fire Sciences & Management Minor (www.cfc.umt.edu/FireSciences). Please see more detailed description of this track online and talk with your faculty advisor about which courses to take.

Course	Credits
BIOO 105N - Introduction to Botany	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ERTH 303N - Weather and Climate	3 Credits
FORS 202 - Forest Mensuration	3 Credits
FORS 230 - Forest Fire Management	2 Credits
FORS 232 - Forest Insects & Diseases	2 Credits
FORS 241N - Dendrology	3 Credits
FORS 320 - Forest Environmental Economics	3 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 331 - Wildland Fuel Management	3 Credits
FORS 333 - Basic&Applied Fire Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 351 - Env Remote Sensing	3 Credits
FORS 481 - Forest Planning	3 Credits
FORS 495 - Wildland RxFire Practicum	3 Credits
FORS 533 - Use Fire Wldland Mgmt	3 Credits
GEO 101N - Intro to Physical Geology	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits
NRSM 265 - Elements of Ecological Restora	3 Credits
NRSM 385 - Watershed Hydrology	3 Credits

	NRSM 422 - Nat Res Policy/Administration	3 Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
Minimum Required Grade: C-		74 Total Credits Required

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is require): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits

	PTRM 300 - Recreation Behavior	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Math

Rule: Must take one course from below

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

Note: null

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits

THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

Course	Credits
NRSM 449E - Climate Change Ethics/Policy	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Rangeland Management & Grassland Ecology

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Science - Resource Conservation; Track: Range Management & Grassland Ecology

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: More detailed information about the Range Management & Grassland Ecology track can be found on our website: www.cfc.umt.edu/rc. Please talk with your faculty advisor about which courses to take in this track.

Professional Writing

Rule: Must take the following course

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must take the following course

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative and Spatial Analysis

Rule: Must take three of the following courses and one must be a statistics course (FORS 201, STAT 216, or SOCI 202)

Note: FORS 250 is highly recommended

Can take STAT 216 Statistics or SOCI 202 Social Statistics in place of FORS 201.

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: Must take one course from below

—	Course	Credits
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	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Communicatins

Rule: Must take one course from below

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Science

Rule: Must take the following course

—	Course	Credits
	NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ecology

Rule: Must take one course from below

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	NRSM 462 - Rangeland Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Policy

Rule: Must take one course from below

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—	Course	Credits
	NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
	NRSM 422 - Nat Res Policy/Administration	3 Credits
	WILD 410 - Wildlife Policy & Biopolitics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Social Science

Rule: Must take one course from below

—	Course	Credits
	NRSM 379 - Collab in Nat Res Decisions	3 Credits
	NRSM 424 - Community Forestry & Conservtn	3 Credits
	NRSM 426 - Climate and Society	3 Credits
	NRSM 475 - Environment & Development	3 Credits
	PTRM 300 - Recreation Behavior	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Additional Coursework

Rule: Must take at least 36 traditional letter-graded credits from the College of Forestry and Conservation (NRSM, WILD, FORS, PTRM, CCS 103, CCS 352, CCS 391)

Minimum Required Grade: C-

Range Management & Grassland Ecology

Rule: Can take these track courses

Note: Suggested courses in Range Management & Grassland Ecology. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 447 - Terrestrial Ecosystem Ecology	3 Credits
BIOE 458 - Forest and Grassland Ecol	3 Credits
BIOO 105N - Introduction to Botany	3 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
BIOO 433 - Plant Physiology	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
FORS 230 - Forest Fire Management	2 Credits
FORS 250 - Intro to GIS for Forest Mgt	3 Credits
FORS 333 - Basic&Applied Fire Ecology	3 Credits
NRSM 121S - Nature of Montana	3 Credits
NRSM 265 - Elements of Ecological Restora	3 Credits
NRSM 360 - Rangeland Mgt (equiv 260)	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 385 - Watershed Hydrology	3 Credits
NRSM 455 - Riparian Ecology & Management	3 Credits
NRSM 462 - Rangeland Ecology	3 Credits
WILD 275 - Wildlife Conservation	2 Credits
Minimum Required Grade: C-	

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451W Tourism and Sustainability, PTRM 482W Wilderness and Protected Area Mgmt.

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Course	Credits
BIOE 428 - Freshwater Ecology	5 Credits
FORS 330 - Forest Ecology	3 Credits
FORS 341 - Timber Harvesting & Roads	3 Credits
FORS 342 - Wood Anatomy, Properties, & ID	3 Credits
FORS 347 - Multiple Resource Silviculture	3 Credits
FORS 349 - Practice of Silviculture	3 Credits
FORS 440 - Forest Stand Management	3 Credits
FORS 499 - Senior Thesis	1 To 3 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
NRSM 379 - Collab in Nat Res Decisions	3 Credits
NRSM 444 - Ecological RestorationCapstone	5 Credits
NRSM 462 - Rangeland Ecology	3 Credits
NRSM 475 - Environment & Development	3 Credits
NRSM 489E - Ethics Forestry & Conservation	3 Credits
NRSM 495 - Ecological Restor Practicum	3 To 6 Credits
NRSM 499 - Senior Thesis	1 To 3 Credits
PTRM 300 - Recreation Behavior	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Math

Rule: Must take one course from below

Course	Credits

	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Symbolic System

Rule: Must take one course from below

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Expressive Arts

Rule: Must take one course from below

Note:

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethical & Human Values

Rule: Must take one course from below

—	Course	Credits
	NRSM 449E - Climate Change Ethics/Policy	3 Credits
	NRSM 489E - Ethics Forestry & Conservation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences in Major

Rule: Must take all courses

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
NRSM 210N - Soils, Water and Climate	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Wilderness Studies

Wayne Freimund (Professor) Director of Wilderness Institute

Students who successfully complete the requirements of the Wilderness and Civilization Program are eligible for the Wilderness Studies minor. Wilderness and Civilization is an interdisciplinary campus and field-based program. Each year, 25 students investigate wildland conservation and the human-nature relationship through the lenses of policy, ecology, art, Native American Studies, and literature. Wilderness and Civilization combines the strengths of classroom and field learning, interactive classes, innovative faculty, and applied learning through internships. Field trips include extended backcountry trips as well as shorter field trips examining ecology, environmental issues, land use, and natural history. Wilderness and Civilization offers students the opportunity to explore contemporary conservation debates, make connections between disciplines, and learn how to work for positive change.

Wilderness and Civilization is an undergraduate, immersion program geared toward sophomore-, junior-, and senior-level students in any major. Students take 17.0 credits of campus and field-based courses during the fall, and then continue in the spring with an art course, an internship, a 1.0 credit field course, and a 1.0 credit lecture series. The Wilderness and Civilization program is administered by the Wilderness Institute of the College of Forestry and Conservation. The program is offered in collaboration with the College of Arts and Sciences, the College of Visual and Performing Arts, and the Davidson Honors College.

Students must apply for admission to the Wilderness and Civilization program, which is limited to 25 students each year. Applicants must have a cumulative GPA of 3.0 or higher for all college and university work. Applications are due by April 1 and are available at the Wilderness Institute, University Hall 303.

Department Faculty

Professor

Maryann Bonjorni, Professor
Richmond Clow, Professor
David L. Moore, Professor

Associate Professor

Nancy Cook, Professor
Louise Economides, Associate Professor

Assistant Professor

Wilderness Studies Minor

Wayne Freimund (Professor) Director of Wilderness Institute

Students who successfully complete the requirements of the Wilderness and Civilization Program are eligible for the Wilderness Studies minor. Wilderness and Civilization is an interdisciplinary campus and field-based program. Each year, 25 students investigate wildland conservation and the human-nature relationship through the lenses of policy, ecology, art, Native American Studies, and literature. Wilderness and Civilization combines the strengths of classroom and field learning, interactive classes, innovative faculty, and applied learning through internships. Field trips include extended backcountry trips as well as shorter field trips examining ecology, environmental issues, land use, and natural history. Wilderness and Civilization offers students the opportunity to explore contemporary conservation debates, make connections between disciplines, and learn how to work for positive change.

Wilderness and Civilization is an undergraduate, immersion program geared toward sophomore-, junior-, and senior-level students in any major. Students take 17.0 credits of campus and field-based courses during the fall, and then continue in the spring with an art course, an internship, a 1.0 credit field course, and a 1.0 credit lecture series. The Wilderness and Civilization program is administered by the Wilderness Institute of the College of Forestry and Conservation. The program is offered in collaboration with the College of Arts and Sciences, the College of Visual and Performing Arts, and the Davidson Honors College.

Students must apply for admission to the Wilderness and Civilization program, which is limited to 25 students each year. Applicants must have a cumulative GPA of 3.0 or higher for all college and university work. Applications are due by April 1 and are available at the Wilderness Institute, University Hall 303.

Minor - Wilderness Studies (Minor)

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Note: This minor can be completed during a fall semester plus one wintersession course and four credits in the spring; Experiential learning credit for Honors will be completed with this minor

Required courses

Rule: must take the following courses

Note: NRSM 271 is an Honors course; NRSM 273 will be taken two times fall for 2 credits and spring for 1 credit

Course	Credits
NRSM 271N - Conservation Ecology	3 Credits
NRSM 273 - Wilderness/Civ Field Stds	1 To 3 Credits

Minimum Required Grade: C-

5 Total Credits Required

Required Courses

Rule: must take the following courses

Note: MUSI 304A is offered during Wintersession - if not offered then take ART 394A Env. Drawing

Course	Credits
LIT 373L - Lit & Environment	3 Credits
MUSI 304A - Sound in the Natural World	3 Credits
NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
NRSM 370S - Wildland Conserv Pol/Govrnance	3 Credits
NRSM 371 - Wilderness Issues Lect Series	1 Credits
NRSM 373 - Wilderness and Civilization	3 Credits
NRSM 398 - Internship	1 To 6 Credits
Minimum Required Grade: C-	19 Total Credits Required

Wildlife Biology

Winsor Lowe, Wildlife Biology Interim Director

The Wildlife Biology Program combines the best features of a liberal arts curriculum with scientific preparation in wildlife conservation. The Program provides students with an extensive knowledge in ecology, population biology, conservation biology, and critical thinking and quantitative skills. Our students receive a strong academic and scientific background with an emphasis on hands-on, experiential learning. The educational requirements for certification by The Wildlife Society can be met within the framework of the undergraduate program.

While some employment opportunities exist in wildlife conservation for students with the baccalaureate degree, we encourage students to continue their education through the master's degree to qualify for most state, federal, and private positions.

Three optional curricula are offered in the Wildlife Biology Program: terrestrial, aquatic, and honors. All three options follow the same schedule of courses for the freshman and most of the sophomore year and then pursue different curricula for the last two years. Each leads to a B.S. in Wildlife Biology. The University is well-suited for instruction in wildlife biology because of the excellent opportunities for field instruction and research at Lubrecht Experimental Forest, Flathead Lake Biological Station, and the Theodore Roosevelt Memorial and Bandy ranches. The Montana Forest and Conservation Experiment Station, the Division of Biological Sciences, and the Montana Cooperative Wildlife Research Unit facilitate research.

Department Faculty

Professor

Joel Berger, John J. Craighead Chair
Chad Bishop, Director, Wildlife Biology Program
Ragan Callaway, Professor
Zachary Cheviron, Assistant Professor
Erick Greene, Professor
Paul Krausman, Boone and Crockett Professor of Wildlife Conservation
Dave Naugle, Professor Large Scale Wildlife Ecology

Associate Professor

Creagh Breuner, Professor
Lisa Eby, Associate Professor of Aquatic Vertebrate Ecology
Mark Hebblewhite, Associate Professor of Ungulate Habitat Ecology
Winsor Lowe, Associate Professor

Assistant Professor

Victoria Dreitz, Assistant Professor, Wildlife Biology Program; Director, Avian Science Center
Jeffrey Good, Assistant Professor
Angela Luis, Assistant Professor of Population & Disease Ecology
Paul M. Lukacs, Associate Professor of Quantitative Wildlife Ecology

Adjunct

Thomas E Martin, DBS Associated Faculty
Mike Mitchell, Unit Leader, Montana Cooperative Wildlife Research Unit; Research Professor

Affiliates

Michael Schwartz, Adjunct Reseach Assistant Professor of Wildlife Biology

Emeritus

Kerry Foresman, Professor Emeritus
Richard Hutto, Professor Emeritus
Daniel Pletscher, Professor of Wildlife Biology, Emeritus

Aquatic Wildlife Biology

Winsor Lowe, Wildlife Biology Interim Director

The Wildlife Biology Program combines the best features of a liberal arts curriculum with scientific preparation in wildlife conservation. The Program provides students with an extensive knowledge in ecology, population biology, conservation biology, and critical thinking and quantitative skills. Our students receive a strong academic and scientific background with an emphasis on hands-on, experiential learning. The educational requirements for certification by The Wildlife Society can be met within the framework of the undergraduate program.

While some employment opportunities exist in wildlife conservation for students with the baccalaureate degree, we encourage students to continue their education through the master's degree to qualify for most state, federal, and private positions.

Three optional curricula are offered in the Wildlife Biology Program: terrestrial, aquatic, and honors. All three options follow the same schedule of courses for the freshman and most of the sophomore year and then pursue different curricula for the last two years. Each leads to a B.S. in Wildlife Biology. The University is well-suited for instruction in wildlife biology because of the excellent opportunities for field instruction and research at Lubrecht Experimental Forest, Flathead Lake Biological Station, and the Theodore Roosevelt Memorial and Bandy ranches. The Montana Forest and Conservation Experiment Station, the Division of Biological Sciences, and the Montana Cooperative Wildlife Research Unit facilitate research.

High School Preparation: In addition to general University admission requirements, the student should elect four years of mathematics and three years of science, including biology, chemistry and physics.

Bachelor of Science - Wildlife Biology; Aquatic Option

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 84

Required Cumulative GPA: 2.5

Note: Experiential Learning is required - Students have several options to fulfill this requirement - list is available from the Wildlife Advisor in Forestry 103C

Major Required Courses

Rule: Must take all courses

Note: Can take WRIT 325 Science Writing / Honors in place of NRSM 200

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
NRSM 180 - Careers in Natural Resources	2 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-	5 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take WILD 240 Into to Biostatistics/Honors in place of STAT 216; Can take WRIT 245 Science Writing/Honors in place of NRSM 200

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits

CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
COMX 111A - Intro to Public Speaking	3 Credits
M 162 - Applied Calculus	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	37 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take NRSM 422 Policy in place of WILD 410

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 428 - General Parasitology Lab	2 Credits
BIOO 320 - General Botany	5 Credits
BIOO 340 - Biology and Mgmt of Fishes	4 Credits
NRSM 385 - Watershed Hydrology	3 Credits
WILD 346 - Wildlife Physiological Ecology	3 Credits
WILD 408 - Advanced Fisheries	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WILD 480 - The Upshot--Appld Wildlife Mgt	3 Credits
WILD 494 - Senior Wildlife Seminar	1 Credits
Minimum Required Grade: C-	19 Total Credits Required

Writing Requirement

Rule: Must complete the following subcategories

12-18 Total Credits Required

Lower Division Writing

Rule: Complete all of the following courses

Note: Can take WRIT 325 Science Writing/Honors OR WRIT 201 College Writing II in place of NRSM 200

—	Course	Credits
	NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
	WRIT 101 - College Writing I	3 Credits
	Minimum Required Grade: C-	6 Total Credits Required

Upper Division Writing

Rule: Complete BIOE 371 and TWO of the other courses

—	Course	Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
	WILD 408 - Advanced Fisheries	3 Credits
	WILD 470 - Conserv of Wildlife Populatns	3 Credits
	WILD 499 - Thesis	1 To 3 Credits
	Minimum Required Grade: C-	6-12 Total Credits Required

Mathematics Requirement

Rule: must take the following course

—	Course	Credits
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	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Symbolic Systems

Rule: must take the following courses

Note: Can take WILD 240 Biostatistics/Honors in place of STAT 216

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Natural Sciences Requirement

Rule: Must take all courses

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
Minimum Required Grade: C-		8 Total Credits Required

Terrestrial Wildlife Biology

Bachelor of Science - Wildlife Biology; Terrestrial Option

College of Forestry & Conserv

Catalog Year: 2014-2015

Degree Specific Credits: 74

Required Cumulative GPA: 2.5

Note: Experiential Learning is required - Students have several options to fulfill this requirement - list is available from the Wildlife Advisor in Forestry 103C

Major Required Courses

Rule: Must take all courses

Note: Can take WRIT 325 Science Writing / Honors OR WRIT 201 College Writing II in place of NRSM 200

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
NRSM 180 - Careers in Natural Resources	2 Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
Minimum Required Grade: C-	17 Total Credits Required

Outside Major Required Courses

Rule: Must take all courses

Note: Can take WILD 240 Into to Biostatistics/Honors in place of STAT 216

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
COMX 111A - Intro to Public Speaking	3 Credits
M 162 - Applied Calculus	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	23 Total Credits Required

Major Required Courses

Rule: Must take all courses

Note: Can take FORS 347 Silviculture in place of NRSM 360; Can take NRSM 422 Policy in place of WILD 410
NOTE - two out of the three are required: BIOO 470, BIOO475, BIOO 340

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOO 340 - Biology and Mgmt of Fishes	4 Credits
BIOO 470 - Ornithology	4 Credits
BIOO 475 - Mammalogy	4 Credits
NRSM 360 - Rangeland Mgt (equiv 260)	3 Credits
WILD 346 - Wildlife Physiological Ecology	3 Credits
WILD 370 - Wildlife Habitat Cons & Mgmt	3 Credits
WILD 410 - Wildlife Policy & Biopolitics	3 Credits
WILD 470 - Conserv of Wildlife Populatns	3 Credits
WILD 480 - The Upshot--Appld Wildlife Mgt	3 Credits
WILD 494 - Senior Wildlife Seminar	1 Credits
Minimum Required Grade: C-	32 Total Credits Required

Writing Requirement

Rule: Must complete the following subcategories

12-18 Total Credits Required

Lower Division Writing

Rule: Complete all of the following courses

Note: Can take WRIT 325 Science Writing OR WRIT 201 College Writing II in place of NRSM 200

Course	Credits
NRSM 200 - Nat.Resource Professional Wrtg	3 Credits
WRIT 101 - College Writing I	3 Credits

Minimum Required Grade: C-

6 Total Credits Required

Upper Division Writing

Rule: Complete BIOE 371 and TWO of the other courses

—	Course	Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
	WILD 408 - Advanced Fisheries	3 Credits
	WILD 470 - Conserv of Wildlife Populatns	3 Credits
	WILD 499 - Thesis	1 To 3 Credits
	Minimum Required Grade: C-	6-12 Total Credits Required

Mathematics Requirement

Rule: must take the following course

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Symbolic Systems Requirement

Rule: must take the following courses**Note:** Can take WILD 240 Biostistics/Honors in place of STATS 216

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	Minimum Required Grade: C-	8 Total Credits Required

Expressive Arts

Rule: must take the following course

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Natural Sciences Requirement

Rule: Must take all courses

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
Minimum Required Grade: C-		8 Total Credits Required

Wildlife Biology Minor

Winsor Lowe, Interim Director

The Wildlife Biology Program combines the best features of a liberal arts curriculum with scientific preparation in wildlife conservation. The Program provides students with an extensive knowledge in ecology, population biology, conservation biology, and critical thinking and quantitative skills. Our students receive a strong academic and scientific background with an emphasis on hands-on, experiential learning. The educational requirements for certification by The Wildlife Society can be met within the framework of the undergraduate program.

While some employment opportunities exist in wildlife conservation for students with the baccalaureate degree, we encourage students to continue their education through the master's degree to qualify for most state, federal, and private positions.

Three optional curricula are offered in the Wildlife Biology Program: terrestrial, aquatic, and honors. All three options follow the same schedule of courses for the freshman and most of the sophomore year and then pursue different curricula for the last two years. Each leads to a B.S. in Wildlife Biology. The University is well-suited for instruction in wildlife biology because of the excellent opportunities for field instruction and research at Lubrecht Experimental Forest, Flathead Lake Biological Station, and the Theodore Roosevelt Memorial and Bandy ranches. The Montana Forest and Conservation Experiment Station, the Division of Biological Sciences, and the Montana Cooperative Wildlife Research Unit facilitate research.

Minor - Wildlife Biology

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Required courses

Rule: must take the following courses

Course	Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOO 101N - Survey MT Wldlife & Habitats	3 Credits
NRSM 180 - Careers in Natural Resources	2 Credits
WILD 105N - Wildlife & People	3 Credits
WILD 275 - Wildlife Conservation	2 Credits
Minimum Required Grade: C-	15 Total Credits Required

Required courses

Rule: must take the following courses

Note: Can take NRSM 360 Rangeland Mgmt in place of FORS 330

Course	Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
FORS 330 - Forest Ecology	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Graduate School

J.B. Alexander Ross, Ph.D. - Dean of the Graduate School

The College of Humanities and Sciences and the professional schools offer graduate study at both the masters and doctoral level. Admission and graduation for these graduate programs are administered by the Graduate School. Information on specific programs should be directed to the appropriate college or school.

Please refer to the [graduate school website](#) for degree programs offered.

College of Health Professions and Biomedical Sciences

Reed Humphrey, Dean

Lori J. Morin, Assistant Dean for Student Affairs

The College of Health Professions and Biomedical Sciences offers the Bachelor of Arts in Social Work, the Doctor of Pharmacy (Pharm.D.) degree; Master of Science degrees in Neuroscience, Pharmaceutical Sciences, Toxicology, and Medicinal Chemistry; the Master of Public Health degree; the Master of Social Work degree; the Doctor of Physical Therapy degree; and the Doctor of Philosophy (Ph.D.) degrees in Biomedical Sciences, Neuroscience, Toxicology, and Medicinal Chemistry.

The focus of these programs is to provide a composite of educational experiences that will produce a well-educated person and a highly trained, professional social worker, health care practitioner or scientist.

Name	Minor	Certificate	Associate	Bachelor
Gerontology	Requirements			
Social Work				Requirements

Health Sciences

Health science courses are concerned with fundamental issues in human health and disease and are, therefore, interdisciplinary in both scope and content. They have been designed not only for students anticipating careers in medicine, dentistry, nursing, public health, pharmacy, social work, medical technology, physical therapy, cytotechnology, and numerous other health care professions and services, but for all students interested in individual and community health, the clinical and paramedical arts, and the biomedical sciences. Health sciences courses are listed under two designations: 1) Allied Health: Health Sciences; 2) other disciplines.

Health Sciences Courses

Allied Health: Health Sciences

- AHHS 191 Special Topics
- AHHS 201 Living Well: Health and Disability
- AHHS 291 Special Topics
- AHHS 320 American Indian Health Issues
- AHHS 325 Introduction to Gerontology
- AHHS 327 Montana Gerontology Society Meeting
- AHHS 389 Recent Advances in Clinical Medicine
- AHHS 390 Research
- AHHS 391 Special Topics
- AHHS 394 Medical Preparation and Overview

- AHHS 395 Geriatric Practicum
- AHHS 420 Geriatric Health Issues
- AHHS 430 Health Aspects of Aging
- AHHS 440 Psychosocial Aspects of Illness and Disability in Older Persons
- AHHS 490 Research
- AHHS 491 Special Topics

Anthropology

- ANTY 211 Anthropological Genetics
- ANTY 227 Human Sexuality
- ANTY 333 Culture and Population
- ANTY 426 Culture, Health and Healing

Economics

- ECNS 310 Health Economics

Health and Human Performance

- HEE 110 Personal Health and Wellness
- NUTR 221N Nutrition

Microbiology

- BIOM 250N Elementary Microbiology
- BIOM 251 Elementary Microbiology Laboratory
- BIOM 400 Medical Microbiology

Native American Studies

- NASX 388 Native American Health and Healing

Social Work

- SW 423 Addiction Studies
- SW 455 Social Gerontology

Pharmacy

- PHAR 110N Use and Abuse of Drugs
- PHAR 145N Intro to Cancer Biology
- PHAR 320 American Indian Health Issues

Philosophy

- PHL 321E Philosophy and Biomedical Ethics

School of Physical Therapy and Rehabilitation Science

Reed Humphrey, Chair

The professional program in physical therapy grants the Doctor of Physical Therapy (D.P.T.) degree. The program has an entry-level D.P.T. program, an entry-level D.P.T./M.B.A. program, and a post-entry level transitional D.P.T. curriculum leading to the D.P.T. degree. The following section describes the profession and the pre-professional

requirements and application procedures. This information also is available on the program website at www.health.umt.edu/schools/pt.

The Profession

Physical Therapy is a health care profession concerned with the habilitation and rehabilitation of individuals having limitations resulting from pathological, surgical, or traumatic conditions. The profession is also concerned with health, wellness and prevention of disability in an effort to promote maximal use of an individual's capacities and reduce their risk of illness. Physical therapists are trained to evaluate neurological, musculoskeletal, cardiovascular, respiratory, and integumentary disorders. Exercise and physical agents, such as heat, cold, light, electricity, and massage are used to promote healing, relieve pain, maintain or restore strength, and improve joint range of motion and functional capabilities. Physical therapists play key roles in: 1) the physical therapy diagnosis and treatment of musculoskeletal injuries, 2) wellness and injury prevention, 3) rehabilitating injured workers to return to their jobs, 4) rehabilitating senior citizens after debilitating disease to enable them to remain independent, 5) helping handicapped children to live within the least restrictive environment, 6) preventing and treating sports-related injuries, and 7) conducting research in the basic and clinical sciences. Knowledge of the psychological and social ramifications of disability affecting the individual and his or her family is an integral part of physical therapy intervention.

Physical therapy is practiced in diverse settings, including hospitals, clinics, skilled nursing facilities, sports medicine programs, public schools, and private practices. Legislation in Montana permits direct public access to physical therapists for evaluation and treatment without a physician referral. Even so, physical therapists remain committed to functioning as an integral member of the health care team.

The physical therapy educational program at the University of Montana seeks to prepare physical therapists who have a broad base of skills upon graduation, and who will be able to implement physical therapy services in many settings, especially rural environments. Rural settings require a physical therapist to serve not only as a provider of direct patient care, but also to fulfill the roles of administrator, supervisor, teacher, consultant, and researcher. Students successfully completing the professional program meet the competencies for physical therapy as determined by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, receive a Doctor of Physical Therapy degree, and are prepared for state licensure.

The Physical Therapy Program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association through 2018.

High School Preparation:

Specific high school courses are not required but a background is recommended in mathematics, chemistry, biology, physics, English, and communication skills.

»Pre-Professional Physical Therapy Curriculum and Application Process

Students wishing to apply to the professional physical therapy program at the University of Montana-Missoula may select any major for their undergraduate degree. While pre-physical therapy is not a degree granting major at the University, prospective applicants should list pre-professional physical therapy (PPPT) as their second major. This will allow them also to receive advising from the School of Physical Therapy and Rehabilitation Science in order to assure adequate preparation for the professional program. In addition to completing a baccalaureate degree, applicants must take the following prerequisite courses and meet the additional application requirements listed. All prerequisite courses must be taken for a traditional letter grade and must be completed with a grade of "C" (2.00) or better.

Prerequisite Courses and Credits

Human Anatomy and Physiology: minimum of two semesters or two to three quarters of human anatomy and physiology. This course work must be completed in a Biology, Anatomy and/or Physiology department. A full sequence must be completed of two semesters or two to three quarters, depending upon what is offered by the institution. A comparative vertebrate anatomy and an animal physiology course may be substituted for human anatomy and physiology.

Chemistry: minimum of two semesters or two quarters of chemistry with laboratory. A full sequence must be completed of two semesters or two to three quarters, depending upon what is offered by the institution.

Physics: minimum of two semesters or two quarters of physics with laboratory. A full sequence must be completed of two semesters or two to three quarters, depending upon what is offered by the institution.

Statistics: minimum of one semester or quarter of statistics course work.

Social Sciences: minimum of two semesters or three quarters of social/behavioral science classes. These classes may include courses offered by Psychology, Educational Psychology, Sociology, Social Work, Cultural Geography and Anthropology departments.

Certification in adult, child, and infant CPR is assumed.

Computer literacy is assumed. You should be able to utilize email communication, word processing, statistical and spreadsheet programs and be able to complete searches on the Web.

Department Faculty

Professor

Charles Leonard, Professor, Physical Therapy

Associate Professor

James J. Laskin, Associate Professor, Physical Therapy
Ryan L. Mizner, Associate Professor
Anita Santasier, Chair

Assistant Professor

Jennifer Bell, Clinical Assistant Professor/Associate Director of Clinical Education
David Levison, Clinical Assistant Professor, Director of Clinical Education
Sambit Mohapatra, Assistant Professor, Physical Therapy
Alex Santos, Assistant Professor, Physical Therapy, Director of Motor Control Laboratory

Research Faculty

Ryan Mays, Research Assistant Professor of Exercise Physiology

Affiliates

Kimberly Mize, Affiliated Clinical Faculty

Course Descriptions

Allied Health: Health Sciences

- **AHHS 582 - Implementing Value Based System Change in Rehabilitation**
Credits: 1. Offered autumn, spring, summer. Prereq. Enrolled in the Rehabilitation Business Administration Certificate. Enhance the learner's appreciation of the management, data, and system skills needed to successfully innovate and implement necessary value based practice changes to compete in the changing rehabilitation healthcare landscape. Level: Graduate
- **AHHS 584 - Leadership to Develop Innovative Clinical Practice for Value Based Care**
Credits: 2. This course will explore the drivers of health care reform, the key strategies to implement value based care. The required leadership and organizational characteristics to support innovations and transformative health care. Level: Graduate
- **AHHS 599 - System Skills to Thrive in a Changing Health Care Environment - Capstone Project**

Credits: 4. This course will culminate in a capstone project describing the concept of system skills (ie., intrinsic interest in data, the ability to devise solutions to problems identified by the data; and understanding of how to implement practice innovations on a large scale) with relevance to physical therapy practice. The course has three components 1) the importance of measurement and the resultant systems data, 2) the concept of 'positive deviants' and provides case examples of innovators who are using systems data to solve clinical challenges, and 3) performance of a capstone project by the student related to their clinical issue. Level: Graduate

Physical Therapy

- **P T 503 - PT and Health Care System**

Credits: 4. Offered autumn. An introduction to physical therapy and its relationship to the health care system. Topics include introduction to PT as a profession, medical terminology, medical records, teaching and learning, ethics, laws and professional issues in physical therapy. Level: Graduate

- **P T 510 - Applied Clinical Anatomy**

Credits: 5. Offered autumn. Prereq., course in human anatomy or comparative vertebrate anatomy. Anatomy of the neuromusculoskeletal system and body cavities in relation to movement and function with clinical correlates. Course lab fee. Level: Graduate

- **P T 516 - Movement System Exam & Eval**

Credits: 5. Offered autumn. Prereq., PT 510, 529. Principles of musculoskeletal examination and evaluation including posture, neurologic screen, palpation, measurement of ROM and muscle performance, assessment of muscle length, and joint play. Level: Graduate

- **P T 519 - Musculoskeletal Management I**

Credits: 4. Offered spring. Prereq., PT 510, 516, 529. Coreq., PT 530, 524. Principles of musculoskeletal examination, evaluation, and intervention. The focus is application of anatomic and biomechanical principles when examining posture and movement, identification of abnormal movement patterns, and analysis of underlying neuromuscular impairments. Level: Graduate

- **P T 520 - Development Through Life Span**

Credits: 2. Offered spring. Presentation of changes in adults they progress through the lifespan. Includes the functional changes associated with aging, assessing and managing fall risk, performance and interpretation of functional outcome measures. Level: Graduate

- **P T 523 - Clinical Medicine I: Intro to Med**

Credits: 1. Introduction to medical screening within the patient/client management model. Level: Graduate

- **P T 524 - Clin Med II Intro to Med**

Credits: 1. Offered spring. Prereq., PT 523. Introduction to pharmacology, medical management of selected orthopedic and hematological conditions. Level: Graduate

- **P T 525 - Clin Med III**

Credits: 2. Offered autumn. Prereq., PT 523 or PT 516, and PT 524 or 519. Pathophysiology, medical and pharmacological management of hepatic, oncological, immunological diseases and organ transplantation. Level: Graduate

- **P T 526 - Foundational Skills & Intervention**

Credits: 3. Offered autumn. Coreq., PT 510, 516. Basic skills of transfers, bed mobility, gait assistive device use, and soft tissue mobilization. Level: Graduate

- **P T 527 - Physical & Electrophysical Agents**

Credits: 3. Offered spring. Physiology, indications, contraindications, and application of electrotherapy and physical agents. Theory and application of electrodiagnostic and electrotherapeutic procedures. Level: Graduate

- **P T 529 - Biomechanics**

Credits: 4. Offered autumn. Coreq., PT 510. Principles of biomechanics and application to physical therapy. Level: Graduate

- **P T 530 - PhysClinical Applied Exercise Physiology**

Credits: 4. Offered spring. Prereq., PT 510. Principles and applications of the physiological adaptations to acute and chronic exercise stresses, exercise assessment/testing, prescription and progression of the exercise program, and the adaptations of exercise interventions in the clinical environment. Basic principles and application of Proprioceptive Neuromuscular Facilitation (PNF). Level: Graduate

- **P T 536 - Neurosciences**

Credits: 5. Offered spring. Anatomy of the head and neck, and neuroanatomy of the human nervous system with emphasis on evaluation of central nervous system lesions and pathological conditions, clinical applications to physical therapy. Level: Graduate

- **P T 560 - Clinical Reasoning I**

Credits: 1. Offered spring. Introduction to the clinical reasoning process in physical therapy, faculty research and scholarship options, and laboratory orientation. Level: Graduate

- **P T 563 - Cardiopulmonary PT**

Credits: 3. Offered autumn. Prereq., PT 510, 516, 530. Cardiovascular and pulmonary pathology, pharmacology, and differential diagnosis. Physical therapy assessment and interventions for patients with cardiovascular and/or pulmonary disease. Level: Graduate

- **P T 565 - PT for Children**

Credits: 2. Offered autumn. Prereq., PT 520, PT 536. Normal development throughout childhood. Evaluation and intervention of neuromotor and musculoskeletal physical therapy rehabilitation of children. Physical therapy for children in school systems. Level: Graduate

- **P T 567 - Neurorehabilitation I**

Credits: 3. Offered autumn. Prereq., PT 536. Neurologic physical therapy assessment and intervention of adults with cerebrovascular accidents, Parkinson disease, or multiple sclerosis. Motor control and motor learning and application to physical therapy neurorehabilitation. Includes wheelchair and home assessment. Level: Graduate

- **P T 568 - Neurorehab II**

Credits: 3. Offered spring. Prereq., PT 536. Neurologic physical therapy assessment and intervention of adults with traumatic brain injury or spinal cord injury, degenerative neurological conditions, neurological diseases. Also includes assessment and treatment of vestibular system and conditions. Level: Graduate

- **P T 569 - Musculoskeletal Management II**

Credits: 5. Offered autumn. Prereq., PT 510, 516, 519, 529, 530. Principles of musculoskeletal examination, evaluation, and intervention for the hip, knee, ankle, foot, and lumbar spine. Level: Graduate

- **P T 570 - Psych of Illness & Disability**

Credits: 2. Offered autumn. Psychological response to illness and disability to include patient motivation, patient/professional interaction, and treatment of persons with chronic pain. Level: Graduate

- **P T 572 - Practice & Administration**

Credits: 2. Offered spring. Practice management and operations explored with emphasis on strategic planning, human resource management, regulatory compliance/risk management, quality improvement and coding payment. Level: Graduate

- **P T 573 - Musculoskeletal Management III**

Credits: 4. Offered spring. Prereq., PT 510, 516, 519, 529, 530. Principles of musculoskeletal examination, evaluation, and intervention for the shoulder, elbow, wrist, hand, temporomandibular joint (TMJ), thoracic and cervical spine. Level: Graduate

- **P T 576 - Clinical Reasoning II**

Credits: 2. Offered autumn. This course will build on the foundations established in Clinical Reasoning I. Issues related to clinical and research ethics will be discussed. The principles of evidence based practice (EBP), including the application of evidence and the creation of evidence, will be part of the discussion. Limitations of EBP and its role in the changing health care environment, critical appraisal of the literature, statistical knowledge, and weighing evidence for clinical decision making will be presented. A writing assignment, application of debate/persuasive argument techniques, and collaborative group exercise will be a part of this course. Level: Graduate

- **P T 577 - App Clin Teaching in PT**

Credits: 1 TO 2. Offered autumn. Teaching experience in practical application of clinical therapy. Level: Graduate

- **P T 578 - PT for Select Populations**

Credits: 6. Offered spring. Prereq., PT 510, 516, 529, 530. Physical therapy assessment and interventions are addressed in the areas of occupational health, pregnancy and pelvic floor dysfunction, wound management and prosthetic management. This course also addresses the needs and concerns of special populations in the clinical environment. Level: Graduate

- **P T 582 - Clinical Experience**

Credits: 1. Offered spring. A mix of classroom and clinical experiences to introduce students to the expectations of professional practice. CR/NCR grading. Level: Graduate

- **P T 583 - Integrated Clinical Experience-Orthopedic Physical Therapy**

Credits: 2. Offered autumn and spring. Prereq., P T 587 and successful completion of all prior coursework and clinical experiences. An integrated, part-time clinical experience with emphasis on evaluation and management of patients with orthopedic conditions. Only CR/NCR grading. Level: Graduate

- **P T 584 - Integrated Clinical Experience-Neurologic Physical Therapy**

Credits: 2. Offered autumn and spring. Prereq., PT 587 and successful completion of all prior coursework and clinical experiences. An integrated, part-time clinical experience with emphasis on evaluation and management of patients with neurological conditions. CR/NCR grading. Level: Graduate

- **P T 587 - Full-Time Clinical Experience I**

Credits: 4. Offered summer. Prereq., successful completion of all first-year DPT courses and PT 582. Eight weeks of full-time clinical experience with emphasis on developing patient evaluation and treatment skills. CR/NCR grading. Level: Graduate

- **P T 589 - Full-Time Clinical Experience II**

Credits: 5. Offered summer. Prereq., Successful completion of second year DPT courses and all previous clinical education courses. Eight weeks of full-time clinical experience with emphasis on learning about administrative issues, problem solving, time management, and communication skills. Continuation of development of patient treatment and evaluation skills. CR/NCR grading. Level: Graduate

- **P T 598 - Internship**

Credits: 1. Offered summer. Prereq., Successful completion of all prior clinical experiences, and previous DPT coursework. Eight weeks of full-time clinical experience with emphasis on learning about administrative issues, problem solving, time management, and communication skills. Continuation of development of patient treatment and evaluation skills. Only CR/NCR grading. Level: Graduate

- **P T 626 - Clinical Medicine IV**

Credits: 3. Offered autumn. Prereqs., PT 523 or PT 516, PT 524 or PT 519, and PT 525. Course will focus on the role of the physical therapist in a Direct Access environment. Pathology, differential screening, pharmacotherapeutics, evaluation and management of integumentary, gastrointestinal, endocrine/metabolic and urogenital disease. Course will address abdominal and dermatological screening. Level: Graduate

- **P T 627 - Prevention & Wellness Education**

Credits: 2. Offered autumn. Nutrition, health promotion, patient and support network education, exercise/fitness, disease and injury prevention, life span emphasis. Level: Graduate

- **P T 628 - PT Student Clinic**

Credits: 1. Offered autumn and spring. Open to 2nd and 3rd year DPT students. Supervised service learning experience for students providing physical therapy rehabilitation and wellness activities to individuals without health insurance. Level: Graduate **Course Attributes:**
Service Learning

- **P T 650 - Screening for Medical Disorder**

Credits: 2. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding appropriate referral of a patient to a physician for evaluation of medical conditions outside the scope of physical therapy. Level: Graduate

- **P T 651 - Med Imaging in Rehabilitation**

Credits: 2. Offered autumn, summer. Prereq. Enrolled in t-DPT curriculum. Provide the physical therapy clinical learner with the tools needed to interpret and apply specialized medical imaging information to the rehabilitation patient. Level: Graduate

- **P T 652 - Pharmacology in Rehab**

Credits: 2. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. Provide clinical learners with the primary drug classes and the physiologic basis of their action. Level: Graduate

- **P T 653 - Legal and Ethical Issues**

Credits: 1. Offered spring, summer. Prereq. Enrolled in t-DPT curriculum. Foundational information as to the legal, ethical and administrative decision making process often facing physical therapists in clinical practice. Level: Graduate

- **P T 654 - Clinical Decision Making**

Credits: 1. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. Provide ways to utilize the Guide to PT Practice for effective and efficient clinical decision making. Level: Graduate

- **P T 655 - Business and Marketing**

Credits: 2. Offered spring, summer. Prereq. Enrolled in t-DPT curriculum. Enhance the PT clinical learner's appreciation of business and management practices needed to succeed within the current healthcare landscape. Level: Graduate

- **P T 656 - Coding and Reimbursement**

Credits: 1. Offered autumn, summer. Prereq. Enrolled in t-DPT curriculum. Educate the clinical learner in analyzing reimbursement of current billing, accounts receivable, collection procedures and use of proper coding. Level: Graduate

- **P T 657 - Professionalism**

Credits: 2. Prereq. Enrolled in t-DPT curriculum. This seminar course provides the clinical learner with the opportunity to analyze and discuss the roles/responsibilities and challenges/opportunities inherent in doctoral level physical therapy practice. Only CR/NCR grading. Level: Graduate

- **P T 658 - Critical Assessment**

Credits: 3. Offered autumn, spring. Prereq. Enrolled in t-DPT curriculum. Develop skills in the application of evidence-based practice as a model for effective clinical decision-making. Level: Graduate

- **P T 659 - Capstone Project**

Credits: 4. Prereq. Enrolled in t-DPT curriculum. Development of the skills needed by physical therapists to fulfill their role as effective participants in the research process. Guide student through the capstone case report completion process. Only CR/NCR grading. Level: Graduate

- **P T 660 - Mgmt of MS Disorders**

Credits: 2. Offered autumn, spring, summer. Prereq., enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patients with musculoskeletal disorders. Level: Graduate

- **P T 661 - Mgmt of CVP Disorders**

Credits: 2. Offered autumn, spring and summer. prereq., Enrolled in t-DPT curriculum. PT's role, responsibilities and decision-making processes regarding appropriate patient management of persons with cardiovascular and/or pulmonary disorders. Level: Graduate

- **P T 662 - Mgmt of Neuro Disorders**

Credits: 2. Offered autumn, spring, summer. Prereq., enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patients with neurological disorders. Level: Graduate

- **P T 663 - Mgmt of Integ Disorders**

Credits: 2. Offered autumn, spring, summer. Prereq., Enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patients with integumentary disorders. Level: Graduate

- **P T 664 - Wellenss Hlth Promotion**

Credits: 2. Offered autumn, spring, summer. Prereq., Enrolled in t-DPT curriculum. PT's role, responsibilities, and decision-making processes regarding patient/client involvement with wellness and health promotion. Level: Graduate

- **P T 672 - Research in PT II**

Credits: 2. Offered autumn. Data analysis, writing of research manuscript, presentation of project. Level: Graduate

- **P T 676 - Clinical Reasoning III**

Credits: 3. Offered autumn. Course addresses elements of clinical mastery, professional development, career options, ethics and patient advocacy. Each student develops and presents a case report and provides peer review and feedback. Level: Graduate

- **P T 679 - Trends & Scholarly Act.**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Students are required to complete at least 6 credits during their 2nd and 3rd years. Seminar sections that focus on advanced clinical topics in physical therapy and/or engagement in research with an individual faculty advisor. Traditional or CR/NCR grading as determined by instructor. Level: Graduate

- **P T 680 - Clinical Internship**

Credits: 12. Prereq., Successful completion of all prior DPT coursework and clinical experiences. Final summative experience is a 15 week clinical internship. Includes writing and presentation of case study or special project. CR/NCR grading. Level: Graduate

- **P T 690 - Research**

Credits: 1 TO 10. (R-10) Prereq., consent of instr. Traditional or CR/NCR grading as determined by instructor. Level: Graduate

- **P T 691 - Special Topics**

Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Traditional or CR/NCR grading as determined by instructor. Level: Graduate

- **P T 692 - Independent Study**

Credits: 1 TO 4. (R-6) Prereq., consent of instructor. Traditional or CR/NCR grading as determined by instructor. Level: Graduate

- **P T 694 - Seminar/Workshop**

Credits: 1 TO 6. (R-6) Traditional or CR/NCR grading as determined by course instructor. Level: Graduate

- **P T 699 - Thesis/Dissertation**

Credits: 1 TO 10. (R-10) Offered every term. Only CR/NCR grading. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Pre-Medical Sciences

Mark A. Pershouse (Director and Associate Professor)

Health care continues to be one of the most rapidly expanding areas of our society. Careers in the health professions have expanded, both in numbers and in the variety of opportunities. The rewards of a career in health care include excellent salaries, stability of employment, geographic mobility, and the opportunity to help other people. The Pre-Medical Sciences Program is an advising program that helps students become well-informed, well-prepared applicants to programs in allopathic medicine, osteopathic medicine, chiropractic medicine, dentistry, naturopathic medicine, optometry, physician assistant studies, podiatry and veterinary medicine.

Pre-Medical Sciences is not a major at the University of Montana. The Pre-Medical coursework will help students to gain admission to a professional school or program while completing a degree in a field of study. Students may select any major as a field of study, but specific pre-professional courses must be completed. When selecting a major, remember that a science major is not required for admissions into professional schools. It is more important to perform well in your chosen major. Professional schools are most concerned with the overall quality, scope and difficulty of undergraduate work rather than the major.

Pre-professional courses are designed to provide a strong foundation in the sciences, highly developed communication skills, and a solid background in the social sciences and humanities. Curriculum guides outlining minimal course requirements established by professional schools are available from the Pre-medical Sciences office and from the Pre-Medical Sciences website (<http://umt.edu/premed>). Because many majors within the sciences, social sciences and humanities can provide strong preparation for medical school, the Pre-Medical Sciences Advising Program gives students the opportunity to interact with advisors from diverse disciplines in addition to their advisor for their major.

The minimal requirements for professional school should be completed by the end of the third year of study or prior to taking the admission test required by professional schools. Since specific subject requirements vary among institutions, students should discuss their academic plans with their Pre-Medical Sciences advisor.

Admission to a professional school is very competitive. Students must maintain a high grade-point average in college if they expect to be admitted. All required courses must be taken for letter grades. In addition, the applicant must score well on the appropriate professional admissions test. These tests are designed to measure basic academic ability in the natural sciences, reading ability and problem solving skills. These examinations are usually taken during the third year of study.

Besides academic accomplishments and admission exam scores, acceptance by a professional school is also dependent upon letters of recommendation, volunteer experience, job shadowing, and personal interviews conducted by the professional school. It is important that students consult with a Pre-Medical Sciences advisor and with an academic advisor in their major each year to make sure that they can satisfy the necessary requirements for graduation within the time available. The Pre-Medical Sciences Director will also discuss procedures, advise and assist the student during the process of applying to a professional school.

High School Preparation: High school students contemplating a career in the health professions should have three to four years of mathematics, courses in chemistry and physics and a solid background in literature and social science.

Public and Community Health Sciences

Craig Molgaard, Professor and Chair

Accredited by the Council on Education for Public Health (CEPH) in 2012, the School of Public and Community Health Sciences is a multi-disciplinary program that offers the Master of Public Health (M.P.H.) degree and a graduate Certificate of Public Health (C.P.H.). The program is designed to prepare public health practitioners who will use global insight to improve the health of the people of Montana and other rural areas. Predominantly on-line, web-based instruction allows both traditional students and working professionals to pursue a degree or certificate.

Department Faculty

Professor

Jean Carter, Pharm.D., Ph.D., Professor
Ann Cook, Research Professor Bioethics
Amanda Golbeck, Professor and Dr.
Willard Granath Jr., Professor
Kari Harris, Ph.D., M.P.H., Professor
Rosemary Hughes, Research Professor
Peter Koehn, Ph.D., Professor
Kimber Haddix McKay, Professor
Craig Molgaard, Ph.D., M.P.H., Chair and Professor
Liz Putnam, Chair, Associate Professor
Gilbert Quintero, Professor
Annie Sondag, Ph.D.

Associate Professor

Duncan G Campbell, Associate Professor Clinical Psychology
Bryan Cochran, Associate Professor of Psychology and Director of Clinical Training
Curtis Noonan, Associate Professor
Craig Ravesloot, Research Associate Professor Clinical Psychology
Robin Saha, Associate Professor
Gyda Swaney, Associate Professor Clinical Psychology
Tony Ward, Associate Professor and Vice-Chair

Assistant Professor

Annjeanette Belcourt, Assistant Professor

Adjunct

Julie Fife, MPH
Kathryn Fox, MPH
Erin Semmens, PhD, MPH, Postdoctoral Fellow

Meg Ann Traci, PhD, Research Assistant Professor/Project Director

Affiliates

Donna Bainbridge, Physical Therapist, EdD, ATC
Elizabeth Ciemins, Research Director
Leslie Diede, Health Promotion Coordinator
John Felton, President & CEO / Health Officer
Annie Glover, MPH Student
Niki Graham, MPH
Suzanne Reid Hawley, Chair and Professor
April Keippel, Grant Project Coordinator
Billie Kipp, President, Blackfoot Community College
Cindi Laukes, Director of Clinical Research, Montana Neuroscienc
Ellen Leahy, MPH Candidate
Lolem Ngong
Joanne Oreskovich, Ph.D., Epidemiologist, DPHHS
Angelia Paschal, Assistant Professor, Health Education, Department
Justin Price
Tom Seekins, Professor Developmental Psychology
Ned Vasquez, Program Director

Course Descriptions

Public Health

- **PUBH 510 - Intro to Epidemiology**

Credits: 3. Offered spring. Open to PUBH majors only. Principles and methods of epidemiologic investigation, descriptive and analytic epidemiology techniques, disease frequency, risk determination, study designs, causality, and validity. Level: Graduate

- **PUBH 511 - History & Theory Epidemiology**

Credits: 3. Offered autumn. Open to PUBH majors only. This graduate course covers the basic science of public health. Major schools of epidemiology from the Greek, Italian and English traditions will be compared and contrasted. Basic concepts and terminology will be introduced and major pandemics used to illustrate the evolution of the field. Level: Graduate

- **PUBH 512 - Neuroepidemiology**

Credits: 3. Offered autumn. Open to PUBH majors only. An overview of the fundamental considerations of the history, scope, and methods of neuroepidemiology as a subfield of epidemiology. Specific neurologic diseases and injuries will be studied as to distribution and risk factors, as well as the relationship to international public health. Level: Graduate

- **PUBH 515 - Public Health Genetics**

Credits: 3. Offered autumn. Open to PUBH majors only. Basic principles of genetics and genomics, application to public health practices and research. Includes issues in public health genetics such as informed consent, screening for genetic susceptibility, and ethical, legal and social implications. Level: Graduate

- **PUBH 520 - Fundamentals of Biostatistics**

Credits: 3. Offered autumn. Open to PUBH majors only. This course is designed for graduate students and practitioners in public health, biomedical sciences, and related fields. The course introduces basic vocabulary, concepts, and methods of biostatistics. The goal is to provide an introduction to how biostatistics works. Topics will include descriptive statistics, probability,

random variables, probability distributions, statistical inference, chi-square analysis, linear regression, and correlation. Level: Graduate

- **PUBH 525 - Multi/Native American Pub Hlth**

Credits: 3. Offered Autumn. Open to PUBH majors only. This course is designed to provide general overview of multicultural issues within the United States and specifically within Montana. The course will provide overview information about health disparities within the nation and how these disparities disproportionately impact ethnic minority populations. Montana's largest minority population is native American tribal communities. As a result, much of the course will incorporate advanced knowledge and topics relating to regional health disparities facing Native American communities. Level: Graduate

- **PUBH 530 - Pub Hlth Admin and Mangmnt**

Credits: 3. Offered autumn. Open to PUBH majors only. Overview of public health and health care systems; organizational structures, functions, authorities, policies and procedures; programmatic budgeting, operations, and prioritizations; program performance reporting and improvement; grants and contracts; informatics; human relations and negotiation; management and leadership; and business planning. Level: Graduate

- **PUBH 531 - Leadership in Public Health**

Credits: 3. Offered spring. Open to PUBH majors only. Prereq., PUBH 530 or consent of instr. This course deepens the student's knowledge and understanding of the role of public health leaders in the community whether in forming partnerships between public health agencies or with private entities. This course begins by building an understanding of the principles of leadership, explores the applications of leadership to public health, develops the relationship between leadership skills and competencies, studies the role of leadership in evaluation and research and concludes with a look at public health now versus how it could be in the future. Level: Graduate

- **PUBH 535 - Health Policy**

Credits: 3. Offered autumn and spring. Open to PUBH majors only. The evolution and intersection of international, federal, state, and local public health policy. Level: Graduate

- **PUBH 540 - Social & Behav Sci in Pub Hlth**

Credits: 3. Offered autumn. Open to PUBH majors only. Behavioral and social factors relevant to the identification and solution of public health problems, principles of health behavior change, applications, and assessment of interventions. Level: Graduate

- **PUBH 550 - Progrm Eval & Res Meth**

Credits: 3. Offered every odd summer. Open to PUBH majors only. Prereq., PUBH 510 or equiv. and consent of instr. Covers purpose statements, standards, study designs, sampling, measurement, methods for data collection and analysis, interpretation, and report preparation. Models of evaluation described, and similarities and differences between research and evaluation methods explored. Level: Graduate

- **PUBH 560 - Environmental & Rural Health**

Credits: 3. Offered spring. Open to PUBH majors only. Relationship of people to their physical environment, how this relationship impacts health, and efforts to minimize negative health effects. Level: Graduate

- **PUBH 570 - Ethical Issues in Public Hlth**

Credits: 3. Offered summer. Open to PUBH majors only. Focus on the values and moral issues that underlie U.S. public health policies. Course examines ethical decision making in areas such as policy development, research, environmental health, occupational health, resource allocation, and genetics. Level: Graduate

- **PUBH 580 - Rural Health Iss Global Contxt**

Credits: 3. Offered summer. Open to PUBH majors only. Focus on rural concerns and global influences on public health. Covers trends in global health, global health policies, players, priorities, human rights, health equity, and mobile and vulnerable populations. Students will be introduced to

health research methods and design, which will be used to analyze rural and global health issues. Emphasize the science and art of epidemiological strategies to answer specific health questions. Level: Graduate

- **PUBH 591 - Practicum**

Credits: 3. Offered autumn and spring. Open to PUBH majors only. Prereq., consent of instructor. Semester long, supervised graduate practicum in a health science setting, followed by an oral defense. Offered credit/no credit only. Level: Graduate

- **PUBH 593 - Professional Portfolio**

Credits: 3. Offered autumn and spring. Open to PUBH majors only. Prereq., PUBH 591 and PUBH 599, consent of instructor. Integrates the student's practice experience and knowledge gained through course work, practicum, and possibly professional papers and research with the goals and learning objectives of the M.P.H. program into a portfolio. Students will present and defend their portfolio to illustrate their growth as a professional public health practitioner at the end of their M.P.H. program. Offered credit/no credit only. Level: Graduate

- **PUBH 595 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Open to PUBH majors only. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Previous topics have included Global Health and Epidemiology of Infectious Disease. Level: Graduate

- **PUBH 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Open to PUBH majors only. Prereq., admission to the M.P.H., program and consent of instructor. Supervised readings, research, or public health practice. Level: Graduate

- **PUBH 597 - Research**

Credits: 3. (R-6) Offered autumn and spring. Open to PUBH majors only. Prereq., admission to the M.P.H. program and consent of instructor. With the guidance of their faculty advisor, students will develop a written proposal specific to the goals of their research project, and carry out the project. Level: Graduate

- **PUBH 599 - Professional Paper**

Credits: 3. Offered autumn and spring. Open to PUBH majors only. Prereq., consent of instructor. Students will write and submit an original research paper to a peer-reviewed public health or medical journal. Students may also fulfill the professional paper requirement by presenting a conference paper or conference poster to a local, regional, or national meeting. Offered credit/no credit only. Level: Graduate

School of Social Work

Ryan Tolleson Knee, Chair

Social work is a human service profession concerned with the prevention of social problems, the maintenance of satisfying social relationships and the enhancement of human development. It focuses on people and their social environment. Social workers employ a range of knowledge and skills as the basis for constructive intervention on behalf of various client populations. The Bachelor of Arts and Master of Social Work degrees are offered. The Bachelor of Arts degree prepares graduates for generalist social work practice. The Master of Social Work degree prepares graduates for advanced integrated practice.

The undergraduate major in social work is available for those who wish to prepare for: (1) professional employment in the social services; (2) entry into a graduate school of social work; (3) graduate education in other helping service professions. The graduate degree in social work prepares graduates for advanced social work practice. Students can enroll in a two year full-time program or in a part-time option. See the University of Montana Graduate Catalog for a description of the Master of Social Work program. Both the Bachelor of Arts degree and the Master of Social Work degree are fully accredited by the Council on Social Work Education.

Department Faculty

Professor

Janet Finn, Professor
Cindy Garthwait, Professor & Interdisciplinary Gerontology Program Coordinator
Ryan Tolleson Knee, Professor & Chair

Associate Professor

Keith Anderson, Associate Professor
Mary-Ann Bowman, Associate Professor & BSW Program Director
James Caringi, Associate Professor

Assistant Professor

Bart Klika, Assistant Professor
Laurie Walker, Assistant Professor

Adjunct

Kate Chapin, Director of Field Education
Kerrie Ghenie, Adjunct Assistant Professor, Montana Child Welfare Training Partnership
Charlie Wellenstein, Adjunct Assistant Professor, Montana Child Welfare Training Partnership

Course Descriptions

Social Work

- **S W 100 - Intro Soc Welfare**

Credits: 3. Offered autumn and spring. Overview of human services, programs and problems in meeting social welfare needs, with emphasis on the complexity of social services and their historical development. Analysis of the value, attitudinal, economic and political factors that condition the provision of these services.

- **S W 198 - Internship**

Credits: 1 TO 3. (R-3) Offered autumn and spring. Prereq., consent of instructor. Application of classroom learning in off campus internship placements. Prior approval must be obtained from the School of Social Work practicum coordinator and from the Center for Work-Based Learning. A maximum of 6 credits of Internship (198, 398,) may count toward graduation. **Course Attributes:**
Internships/Practicums Internship graduation limit 6

- **S W 200 - Intro Soc Wrk Pract**

Credits: 4. Offered autumn and spring. Prereq., SW 100, sophomore standing. Introduction to social work as a profession, including an examination of goals, guiding philosophy and basic assumptions. Emphasis on a generalist framework of social work practice and the development of beginning analytical and practice skills.

- **S W 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **S W 300 - Hum Behav & Soc Environ**

Credits: 3. Offered autumn and spring. Prereq., SW 100 and 200, and junior standing in Social Work. Using the ecological-social systems framework, the integration of knowledge and concepts from the social and behavioral sciences for analysis and assessment of problems and issues relevant to professional social work practice. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **S W 310 - S W Policy & Services**

Credits: 3. Offered autumn and spring. Prereq., SW 200; Social Work major. Social welfare history, program planning and analysis with review of selected policies on the national level. Includes international comparisons. Upper-division writing course. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **S W 323 - Women & Soc Action Amer**

Credits: 3. Offered intermittently. Prereq., one of SW 100, SOCI 101S, or ANTY 101H or consent of instr. Same as WS 323. Focus on women's experiences of and contributions to social change in North, South and Central America in the mid to late-20th century. Through case studies, testimonials, discussions with activists and Internet connections examine social constructions of gender, compare forms of social action in diverse cultural, political and historical contexts, link practice to theories of social participation, and reflect on lessons learned from women's experiences.

- **S W 325 - Introduction to Gerontology**

Credits: 3. Offered spring. Prereq., junior standing or consent of instr. An interdisciplinary discussion of the health and social issues of older persons, utilizing didactic presentations, clinical demonstrations, and curricular modules.

- **S W 350 - S W Interven Meth I**

Credits: 3. Offered autumn and spring. Prereq., SW 200; Social Work major. The study and application of the generalist model of social work practice and related techniques and procedures for the assessment, intervention and prevention of problems in social functioning. Emphasis on individuals and families.

- **S W 360 - S W Interven Meth II**

Credits: 4. Offered autumn and spring. Prereq., Social Work major. The study and application of the generalist model of social work practice and related techniques and procedures for the assessment, intervention and prevention of problems in social functioning. Emphasis on groups and team meetings.

- **S W 391 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **S W 398 - Internship**

Credits: 1 TO 3. (R-3) Offered autumn and spring. Application of classroom learning in off campus internship placements. Prior approval must be obtained from the School of Social Work practicum coordinator and the Center for Work-Based Learning. A maximum of 6 credits of Internship (198, 398) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **S W 400 - Social Work Research**

Credits: 3. Offered autumn and spring. Prereq., SW 360; Social Work major. Utilization of social research findings in social work practice. Techniques for the collection and analysis of clinical data. Special emphasis on research methodology for the assessment of practitioner and program

effectiveness.

- **S W 410E - Social Work Ethics**

Credits: 3. Offered autumn and spring. Prereq., SW 200, admission into the BSW program. Analysis of specific ethical dilemmas from personal, professional and policy perspectives. Focus on ethical issues common to the helping professions and utilizing codes of ethics as guides to decision-making. The relationship between professional ethical issues and the development of social policy. **Course Attributes:** Ethical & Human Values Course Group 2 Ethical & Human Values

- **S W 420 - Child Abuse/Child Welfare**

Credits: 3. Offered autumn. Prereq., junior standing or consent of instr. Signs and symptoms of physical and sexual abuse and neglect, family dynamics in abuse and neglect, the legal context, programs of prevention and intervention, foster care, special needs adoptions and related issues in child welfare.

- **S W 423 - Addiction Studies**

Credits: 3. Offered spring. Same as PSYX 441 and SOCI 433. Examination of chemical dependency and behavioral compulsions, including alcohol and other drugs, gambling, eating disorders, sexual addictions. Ecosystems perspective on etiology, treatment, prevention, family dynamics, community response, and societal contributors. Students engage in a service learning community project which is integrated into the classroom through initial training, regular reflection, and other activities.

- **S W 434 - Social Work and the Law**

Credits: 3. Offered spring even-numbered years. Prereq., junior standing. Contemporary implication of social work practice in a judicial arena.

- **S W 440 - Psychosoc Illness Disabil**

Credits: 3. Offered autumn. Same as HS 440. Prereq., PSYX 245. ?A review of the psychosocial aspects of illness and disability in older persons to include societal impact of these illnesses, responses of the individual, family, and support network to the stress of illness and disability, caregiver issues, cultural implications, and the impact of the health care system on these psychosocial aspects.

- **S W 450 - Children and Youth at Risk**

Credits: 3. Offered autumn or spring. Focus on the aspects of society that pose a threat to today's youth and the ramification of those threats on youth development and behavior. Resilience and protective factors for youth at risk and strategies to work with those youth. Attention to related systems in Missoula and Montana, including juvenile justice, mental health, child protection, substance abuse, and education.

- **S W 455 - Social Gerontology**

Credits: 3. Offered autumn. Examination of the field of social gerontology, including an examination of the major bio/psycho/social/cultural/spiritual theories of aging, the service system, social and health issues, family and care giving dynamics, social policy, and end of life concerns.

- **S W 465 - Social Work Global Context**

Credits: 3. Offered spring even-numbered years. Prereq., upper-division or graduate standing. Examination of globalization, human rights, poverty, international aid, and gender issues; their relationship to social work and social justice, and strategies for action.

- **S W 472 - Relational Development**

Credits: 3. Offered autumn and spring. This course covers strategies to help children whose early experiences deprived them of the nurturing needed to develop the essential capacity to connect with others. Emphasis is on significant discoveries in the fields of neuroscience, childhood trauma, grief and loss, child development, and family systems that have fueled the evolution of the Attachment Treatment philosophy to a broader method of caring for emotionally distress children, the Relational Development treatment approach.

- **S W 475 - Death, Dying and Grief**

Credits: 3. Offered intermittently. Examination of death, dying and grief from an ecological perspective, focusing on the processes of dying and theories of grief. Emphasis on physical, social, psychological, spiritual, and cultural influences that surround death and grief. Consideration of cultural norms, attitudes toward death, medical, legal and ethical issues of dying. Focus on normal and complicated grief.

- **S W 485 - Counseling Theories**

Credits: 3. Offered autumn. Prereq., PSYX 100S. Same as COUN 485 and PSYX 442. This course introduces students to the primary theories that constitute the intellectual foundation for common counseling and psychotherapy techniques, with a special focus on gender, interpersonal influence strategies, and diversity issues.

- **S W 487 - Advanced Practice I**

Credits: 2. Offered every term. Concurrent SW 495; admission to the practicum program. Consideration and discussion of practicum-related matters, professional development, and issues confronting the profession.

- **S W 488 - Advanced Practice II**

Credits: 2. Concurrent with SW 495; admission to the practicum program. Consideration and discussion of practicum-related matters, professional development, and issues confronting the profession.

- **S W 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **S W 492 - Independent Study**

Credits: 1 TO 10. (R 10) Offered intermittently. Prereq., 10 credits in social work. Independent work under the University omnibus option. See index. **Course Attributes:** Omnibus Course

- **S W 495 - Field Work Practicum**

Credits: 5. (R-10) Offered every term. Prereq., SW 350 and 360 and approved application to practicum coordinator. Practicum must be taken over two consecutive semesters for a total of 10 credits. Minimum of one credit per semester. Cumulative grade average of 2.75 or above in SW 100, 200, 300, 350 and 360 and a 3.0 grade average for SW 200, 350 and 360 are required. Supervised field work in public and private agencies and institutions. Successful completion of the field work practicum requires a passing performance on the school administered professional social work competency examination. **Course Attributes:** Internships/Practicums

- **S W 500 - Orientation**

Credits: 1. Prereq., admission to M.S.W. program. Seminar introducing M.S.W. students to program philosophy and social work's theory and value base. Level: Graduate

- **S W 505 - Found Social Work Pract**

Credits: 2. Prereq., admission to M.S.W. program. Introductory practice course that examines generalist social work practice, dominant theoretical influences, and forces shaping social work over time. Level: Graduate

- **S W 510 - Hum Behav Soc Envt I**

Credits: 3. Prereq., admission to M.S.W. program. Introduction to and critical consideration of social work perspectives on human behavior as influenced by the social environment. Particular attention is paid to biological, psychological, social, cultural and spiritual influences. Level: Graduate

- **S W 511 - Hum Behav Soc Invt II**

Credits: 3. Prereq., admission to M.S.W. program and SW 510 or consent of instr. Advanced course on human behavior and social environment that addresses difference and diversity, histories and mechanisms of discrimination and oppression, and frameworks for thought and practice that

recognize diversity and promote social justice. Level: Graduate

- **S W 515 - Pract W Indiv & Families**

Credits: 4. Prereq., admission to M.S.W. program or consent of instr. Practice-oriented course building on students' developing knowledge of engagement, assessment, intervention and evaluation and the application to practice with individuals and families in context of community. Level: Graduate

- **S W 520 - SW Research Methods**

Credits: 3. Prereq., admission to M.S.W. program or consent of instr. Introduction to principles, methodologies, technologies, and statistical approaches of human service research. Emphasis on beginning capabilities in evaluation of social work practice and skill development regarding use of published research. Level: Graduate

- **S W 521 - Advanced Research**

Credits: 3. Prereq., SW 515. The use of research within the integrated practice model of social work through evaluation of practice and program evaluation. Advanced statistical concepts are applied to direct practice and five types of program evaluation. Level: Graduate

- **S W 525 - Pract Groups & Communities**

Credits: 4. Prereq., admission to M.S.W. program or consent of instr. Practice oriented course addressing theories, frameworks, principles, and skills of group and community work. Dynamics of group work and examination of modalities such as mutual aid and social action groups. Level: Graduate

- **S W 530 - History of Social Policy**

Credits: 3. Prereq., admission to M.S.W. program or consent of instr. Foundation in social welfare policy and services; examination of relationship between history social welfare policy and emergence of social work profession. Introduction to frameworks for policy analysis. Level: Graduate

- **S W 531 - Social Policy Analysis**

Credits: 3. Prereq., SW 530. Focus on the analysis of existing or proposed policies specific to oppressed populations, rural areas and isolated communities. Level: Graduate

- **S W 535 - Advanced Practice**

Credits: 4. Prereq., consent of instr. Builds on the skills, knowledge, and values of the foundation generalist and practice courses. Level: Graduate

- **S W 545 - Organizational Leadership**

Credits: 3. Prereq., consent of instr. Advanced training in professional leadership and how to effectively conceive, plan, design, implement, manage, assess, and change contemporary organizations. Level: Graduate

- **S W 551 - Couples and Family Therapy**

Credits: 3. Offered spring. Prereq., admission to the MSW program, SW 505, or consent of instructor. Course explores family-centered methods of clinical social work interventions with couples and families that can be applied in a variety of settings. Level: Graduate

- **S W 552 - Psychopathology & S W**

Credits: 3. Prereq., admission to the MSW program, SW 505, or permission of instructor. Focus on current problems of children, adolescents, and adults of all ages that can be classified as a mental disorder under the DSM of the system. Includes information on theories within the bio-psycho-social paradigm of causality of disorders/conditions; on methods of assessment, including DSM; and an understanding of how social injustice, oppression and poverty impacts healthy growth and development across the life span. Level: Graduate

- **S W 553 - Social Work Addictions**

Credits: 3. Offered spring semester. Prereq., admission to MSW program or by permission of instructor. The course examines historical and contemporary models of direct practice, and current ideological, political, policy and systemic challenges to the practice of social work in the addictions. Level: Graduate

- **S W 554 - Suicide Prev/Intervention**

Credits: 1. Offered winter. Prereq., admission to MSW program or consent of instructor. This course investigates the biological, psychological and social forces that directly impact suicidal behaviors. Current program services and resources are critically analyzed. Level: Graduate

- **S W 555 - Leader in Uncertain Times**

Credits: 1. Offered winter. Prereq., admission to MSW program or consent of instructor. This course is designed to give participants a clearer picture of their leadership competencies and greater self knowledge so that they are more effective in providing the needed situational leadership in the organizations they run, work in, or participate in. Level: Graduate

- **S W 576 - Found Integrative Sem I**

Credits: 1. Prereq., admission to MSW program, SW 505, 587. Seminar accompanying first semester foundation practicum in which students discuss experience with goal of integrating theory and practice. Level: Graduate

- **S W 577 - Found Integrative Sem II**

Credits: 1. Prereq., admission to MSW program, SW 505, 587. Seminar accompanying second semester foundation practicum in which students discuss experience with goal of integrating theory and practice. Level: Graduate

- **S W 578 - Advanced Seminar I**

Credits: 1. Prereq., SW 587. Critical analysis of how predominant social work theories and professional values and skills are being incorporated into the practicum. Level: Graduate

- **S W 579 - Advanced Seminar II**

Credits: 1. Prereq., SW 578. Critical analysis of how predominant social work theories and professional values and skills are being incorporated into the practicum. Advanced portfolio development. Level: Graduate

- **S W 586 - Found Practicum I**

Credits: 2. Prereq., admission to MSW program. First semester foundation field practicum experience in a supervised setting designed to provide opportunities to integrate classroom learning and field experiences. Level: Graduate

- **S W 587 - Found Practicum II**

Credits: 2. Prereq., admission to MSW program, SW 505, 587. Second semester foundation field practicum experience in a supervised setting designed to provide opportunities to integrate classroom learning and field experiences. Level: Graduate

- **S W 588 - Concentration Practicum I**

Credits: 3. Prereq., SW 587, 589. Advanced supervised field work in public and private agencies and institutions. Level: Graduate

- **S W 589 - Concentration Practicum II**

Credits: 3. Prereq., SW 588. Advanced supervised field work in public and private agencies and institutions. Level: Graduate

- **S W 593 - Professional Portfolio**

Credits: 1. Prereq., foundation courses. Summative and in-depth written analysis of course work and practicum experience. Level: Graduate

- **S W 594 - Graduate Seminar**

Credits: 3. (R-9) Offered autumn or spring. Prereq., admission to MSW program or consent of instr. In-depth analysis of a current social work issue. Level: Graduate

- **S W 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., admission to MSW program or consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **S W 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered autumn or spring. Prereq., admission to MSW program or consent of instr. Work on selected problems by individual students under direct faculty supervision. Level: Graduate

- **S W 597 - Research**

Credits: 1 TO 9. (R-9) Offered autumn or spring. Prereq., admission to MSW program or consent of instr. Directed individual graduate research and study appropriate to background and objectives of the student. Level: Graduate

Social Work B.A.

Bachelor of Arts - Social Work

College of Health Prof Biomed

Catalog Year: 2014-2015

Degree Specific Credits: 65

Required Cumulative GPA: 2.75

Note: A minimum of 40 social work credits are required for this degree. No more than 60 social work credits will count toward graduation. Admission into the School of Social Work requires a 2.75 overall GPA, a 3.00 in S W courses and completion of 5 of 8 extra departmental courses.

Lower Division Core Courses

Rule: Take 32 Credits in the following subcategories

32 Total Credits Required

Social Science Requirements

Rule: All of the following courses are required.

Course	Credits
PSCI 210S - Intro to American Government	3 Credits

PSYX 100S - Intro to Psychology	4 Credits
PSYX 230 - Developmental Psychology	3 Credits
PSYX 233 - Fund of Psychology of Aging	3 Credits
S W 100 - Intro Soc Welfare	3 Credits
S W 200 - Intro Soc Wrk Pract	4 Credits
SOCI 101S - Introduction to Sociology	3 Credits
Minimum Required Grade: C-	23 Total Credits Required

Economics Requirement

Rule: Choose 1 of the following courses

—	Course	Credits
	ECNS 101S - Economic Way of Thinking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Human Population Requirement

Rule: Choose 1 of the following courses

—	Course	Credits
	ANTY 122S - Race and Minorities	3 Credits
	GPHY 121S - Human Geography	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Biological Requirement

Rule: Choose 1 of the following courses

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Course	Credits
BIOB 101N - Discover Biology	3 Credits
PSYX 250N - Fund of Biological Psychology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper Core Courses

Rule: All courses listed are required

Note: 10 credits of S W 495 required over 2 semesters

Course	Credits
S W 300 - Hum Behav & Soc Environ	3 Credits
S W 310 - S W Policy & Services	3 Credits
S W 350 - S W Interven Meth I	3 Credits
S W 360 - S W Interven Meth II	4 Credits
S W 400 - Social Work Research	3 Credits
S W 410E - Social Work Ethics	3 Credits
S W 487 - Advanced Practice I	2 Credits
S W 488 - Advanced Practice II	2 Credits
S W 495 - Field Work Practicum	5 Credits
Minimum Required Grade: C-	33 Total Credits Required

Gerontology Minor

Students in the Gerontology Minor program will study issues of aging from an interdisciplinary perspective and come to understand the interplay between them, including the health and medical as well as social and psychological needs of older persons. Although this interdisciplinary minor is housed in the School of Social Work, students in other majors may complete the minor in consultation with both the Chair of the Gerontology Minor and the students' academic advisors in their respective departments. Students must consult with their major advisor to select electives, practicum or volunteer experiences, and to integrate courses that will meet the requirements of the minor.

Minor - Gerontology (Minor)

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Lower Core Course

Rule: Must complete the following:

—	Course	Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Core Courses

Rule: Must complete all of the following:

—	Course	Credits
	AHHS 325 - Introduction to Gerontology	3 Credits
	AHHS 430 - Health Aspects of Aging	3 Credits
	S W 455 - Social Gerontology	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Gerontology Electives

Rule: Must complete 1 of the following courses

Note: A student must take a minimum of 3 elective credits with at least 25% of the content focused on gerontology. Students may petition for approval of another elective course.

—	Course	Credits
	AHHS 201 - Living Well, Health & Disabilil	2 Credits
	AHHS 327 - MGS Meeting	1 Credits
	AHHS 420 - Geriatric Health Issues	3 Credits
	ANTY 426 - Culture, Health and Healing	3 Credits
	COMX 485 - Communication and Health	3 Credits

	ECNS 310 - Intro Health Economics	3 Credits
	NASX 388 - Native Amer Health & Healing	3 Credits
	PHL 321E - Philosophy & Biomedical Ethics	3 Credits
	S W 475 - Death, Dying and Grief	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Integrating Courses

Rule: Must complete 1 of the following courses

Note: A course has been identified that will integrate the core course content with concepts within each student's major. A similar course can be identified in other majors if required. Students can also take NRS 377 Introduction to Community Based Nursing through MSU with approval by advisor.

—	Course	Credits
	CSD 360 - Language Disorders	3 Credits
	KIN 483 - Exercise Disease & Aging	3 Credits
	P T 520 - Development Through Life Span	2 Credits
	PHAR 451 - Therapeutics I	3 Credits
	S W 300 - Hum Behav & Soc Environ	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Practicum Courses

Rule: Must complete 1 of the following courses

Note: Students can also take NRS 454 Urgent and Palliative Care through MSU with approval by advisor. Students in majors that do not have access to a practicum course can enroll in HS 326 Geriatric Practicum for up to 3 credits of service learning experience compatible with the student's major and interests.

—	Course	Credits
	AHHS 395 - Geriatric Practicum	1 To 3 Credits
	KIN 498 - Internship	2 To 6 Credits
	P T 588 - Clinical Internship II	4 Credits

	PHAR 585 - Geriatric APPE	4 Credits
	PSYX 398 - Internship	1 To 3 Credits
	S W 398 - Internship	1 To 3 Credits
	S W 495 - Field Work Practicum	5 Credits
	SOCI 498 - Internship	1 To 6 Credits
	WGSS 398 - Coop Education/Internship	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Skaggs School of Pharmacy

Pharmacy is the study of the biological, chemical, and physical characteristics of medicinal substances and the utilization of these substances in the prevention, treatment, and control of illness and disease. It also encompasses a study of the systems of delivering health care and the function of the professional pharmacist within these systems.

The Skaggs School of Pharmacy was established in 1907 at Montana State College and was transferred to the University in 1913. The pharmacy program consists of two departments, Pharmacy Practice and Biomedical and Pharmaceutical Sciences.

The Skaggs School of Pharmacy is a member of the American Association of Colleges of Pharmacy. The entry-level doctor of pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education, 135 S. LaSalle Street, Suite 4100, Chicago IL 60603-4810, telephone (312) 664-3575, (800) 533-3606; FAX (312) 664-4652; <http://www.acpe-accredit.org/>

The curriculum offered by the Skaggs School of Pharmacy consists of a six year program leading to the entry-level Pharm.D. degree. The first two years, or pre-professional portion of the curriculum, are spent in studies of the basic biological and physical sciences, and in course work necessary to satisfy the University general education requirements. During the first three years of the professional program, students devote their time to the study of the biomedical and pharmaceutical sciences and pharmacy practice. Areas of study include biochemistry, microbiology, medicinal chemistry, pharmaceuticals, pharmacology, social and administrative pharmacy, and therapeutics. The final professional year is entirely experiential.

A program of selected electives allows the student to obtain further educational experience in specialized areas of pharmaceutical knowledge. Students in the professional program may choose elective courses in specific areas of interest which include community pharmacy practice, management, research and teaching, hospital and institutional pharmacy practice, and a variety of therapeutic-based topics. All students must confer with assigned advisors prior to each registration period and receive approval of proposed courses.

In addition to their formal educational program, to become registered pharmacists, students must complete practical experience under the direction of a registered pharmacist and pass the NAPLEX and MPJE exams administered by the National Association of Boards of Pharmacy.

Career opportunities exist in the fields of community pharmacy, institutional pharmacy, federal or state government service, public health agencies, and with the pharmaceutical industry in sales positions or in manufacturing. Those with advanced degrees or residencies are in demand for research positions and in pharmaceutical education.

High School Preparation: In addition to the general University admission requirements, algebra, trigonometry, biology, chemistry, physics and a course in computers are recommended.

Admission

The general requirements for admission to the University are listed separately in this catalog.

»Pre-Pharmacy Program

The pre-pharmacy curriculum, which requires a minimum of two years of full-time study, may be taken at any accredited college or university.

Students at the University of Montana-Missoula may enter the pre-pharmacy program during any semester. It is recommended that students considering pharmacy as a major declare a pre-pharmacy major as early as possible in order to receive appropriate advising. Upon designating pre-pharmacy as a major, students will be assigned an advisor within the pharmacy program.

Professional Pharmacy Program

Students must apply for admission to the professional program. Class size in the professional pharmacy program is restricted and admission to the program is competitive. The admission process is designed to admit the best overall class into professional study. Completed applications are evaluated by the Skaggs School of Pharmacy Admissions Committee. Acceptances are made by the pharmacy faculty and the dean based on the recommendations of the committee.

Since very few elective credits are available in the professional pharmacy curriculum, students will be expected to have completed all General Education requirements except for the upper-division writing and ethics requirements prior to entering the professional curriculum. Students must complete all General Education requirements before entering pharmacy practice experience rotations during the final year of the program. Applicants will be screened based on academic record (both overall and in the required pre-pharmacy course work) and Pharmacy College Admission Test scores (refer to www.pcatweb.info for test dates). To be eligible for admission, students must have a minimum grade point average of 2.5 on a 4 point scale, both overall and in required pre-professional courses. Students must earn grades of at least a C (not C-) in all required pre-pharmacy courses. For the past several years there have been more than two applicants for each opening, and the grade point average of the entering class has been about 3.5. In addition, applicants must present proof of having completed at least 20 hours of volunteer or paid service in a pharmacy, other health care, or social field, a writing assignment about the experience, and one evaluation form filled out by someone involved with the applicant in such an experience. A personal interview is also required.

As a state supported institution, the Skaggs School of Pharmacy gives all applicants from the Montana University System equal consideration for admission into the professional pharmacy program. There is no restriction on admission of out-of-state students; however, Montana residents are given priority among students with equal qualifications. Students will be notified of their admission status in writing. In the past, students with only international coursework have not been admitted to the professional pharmacy program.

The curriculum of the professional pharmacy program is sequential. Therefore, students may enter the program in the autumn semester only. Application forms for admission to the professional curriculum may be obtained from the website of the College of Health Professions and Biomedical Sciences (www.health.umt.edu). Applications must be post marked by February 15th preceding the autumn semester of the year for which admission is requested.

An application fee must be submitted with the application. Admission for one academic year cannot be deferred to another academic year. Official transcripts of all academic courses taken must be forwarded directly to the Skaggs School of Pharmacy.

The professional pharmacy curriculum must be taken in residence at the University. Students transferring from other accredited schools of pharmacy may be admitted with advanced standing, determined on the basis of credits accepted, provided they are in good academic standing. Transfer credit for required professional courses taken at other institutions is accepted only for those courses which are deemed equivalent and in which a letter grade of C (2.00) or better is obtained.

Academic Progression

The general University academic standing requirements are listed separately in this catalog.

Students in the professional pharmacy curriculum must maintain cumulative, professional, and pharmacy grade point averages of 2.0 or higher. The professional grade point average consists of all required course work in the professional curriculum. The pharmacy grade point average consists of all courses with a pharmacy (PHAR) prefix.

Students enrolled in the professional pharmacy program must maintain satisfactory academic progress. Students must earn grades of at least C- in all required courses in the professional pharmacy curriculum. Students in the professional program who have a pharmacy or professional grade point average of less than 2.0 or who receive a grade of D or F in any required course in the professional curriculum will be placed on academic probation. A student must petition to continue in the professional pharmacy program if he or she is on probation. A student will be dismissed from the professional pharmacy program if he or she is on probation for a total of three terms, not necessarily consecutive, subject to review by the dean. A student will be removed from probation when a grade point average of 2.0 has been achieved and all grades in required professional pharmacy courses are C- or better.

Students who have failed ten or more credits of required professional course work or who fail to progress in the expected manner for two consecutive years may be dismissed from the professional pharmacy program, subject to review by the Academic Standards Committee and the dean.

Students dismissed from the program for substandard performance will not be readmitted, except in cases where substantiation is made to the faculty, by written petition, that the substandard performance was the result of circumstances that no longer exist, or that the student has demonstrated the capability and desire to perform satisfactory work since his or her dismissal from the program.

Students leaving the program on their own volition are guaranteed readmission if they are in good academic standing and exit by interview with the assistant dean for student affairs. Those students leaving the program on their own volition and not in good standing must reapply for admission.

The professional pharmacy curriculum consists of an integrated sequence of required courses which is designed to be completed in four consecutive years. With appropriate justification, part-time study in the professional pharmacy program may be allowed. Students desiring to be enrolled in part-time study must make their request by petition to the Academic Standards Committee. Because the curriculum is revised periodically, students who take longer than the normal number of years to complete the professional program will be required to complete curricular changes applicable to the class in which they graduate. Because the pharmacy program is academically intense, employment beyond the minimal, part-time work is not recommended.

»Special Degree Requirements

Refer to graduation requirements listed previously in the catalog.

Degree candidates must:

1. Meet the general University requirements for graduation.
2. Earn a grade point average of 2.0 or higher in each of the following areas:
 1. all courses attempted at The University of Montana-Missoula (cumulative GPA).
 2. all courses which carry a pharmacy (PHAR) prefix (pharmacy GPA).
 3. all required courses in the professional pharmacy curriculum (professional GPA).
3. Required pharmacy course work must be completed with a grade of C- or better.
4. Complete at least six full academic years, including pre-pharmacy instruction, and a minimum of eight semesters of professional instruction as a full-time student registered for a minimum of twelve credits per semester.
5. Complete not less than 200 credits of course work.

Licensure in Montana

An applicant for licensure as a registered pharmacist in Montana must pass national examinations as required by the Montana State Board of Pharmacy. To qualify for the examinations, the applicant must be of good moral character and a graduate of an accredited school of pharmacy; however, an applicant will not receive a license until all requirements have been met.

Internship Regulations

1. The internship requirement for licensure as a registered pharmacist in Montana is regulated by the Montana State Board of Pharmacy. Students must be registered with the Board of Pharmacy as a pharmacy intern in order to accrue internship hours.
2. Only those students who have completed 30 days of the professional pharmacy curriculum may begin their internship.
3. The internship requirement consists of 1,500 hours of experience in an approved pharmacy setting. The student also may acquire hours concurrently with school attendance in courses,

clinical pharmacy programs, or demonstration projects which have been approved by the Board of Pharmacy.

4. Most courses and programs currently offered by the School of Pharmacy are approved and applicable toward fulfilling the internship requirement.
5. Students will receive credit for internship time and/or courses taken if such experience is certified by the preceptor and/or instructor and approved by the Board of Pharmacy.

Pre-Pharmacy Curriculum

The courses shown here must be completed before entering the professional pharmacy program. The sequence of courses is illustrative and, if proper prerequisites are satisfied, the student may alter the order in which the courses are taken.

In addition, applicants to the professional pharmacy program must present proof of having completed at least 20 hours of volunteer or paid service in a pharmacy, other health care, or social field, a writing assignment about the experience, and one evaluation form from someone involved with the applicant in such an experience. The Pharmacy College Admission Test (PCAT) must be taken within two years of application.

Pre-Pharmacy First Year	A/S	Total Cr
CHMY 141N, 143N College Chemistry I, II	5/5	10
M 162 Applied Calculus (prereq. M 151 or appropriate placement score)	4	4
BIOH 112 Intro to Human Form and Function I BIOH 113 Intro to Human Form and Function II	3/3	6
WRIT 101 English Composition	3	3

Pre-Pharmacy Second Year	A/S	Total Cr
BIOB 260 Cell/Molecular Bio	4	4
CHMY 221, 222 Organic Chemistry I, Organic Chemistry I Lab	3/2	5
CHMY 223 Organic Chemistry II	3	3
ECNS 201S Principles of Microeconomics	3	3
PHSX 205N/206N Fundamental of Physics I & Lab	4,1	5
STAT 216 Statistics (other acceptable courses for the Statistics requirement include PSYX 222 or SOCI 202)	4	4

Either Year, any semester- Required	A/S	Total Cr
PSYX 100S or SOCI 101S Intro to Psychology or Sociology	4 or 3	3 or 3
THTR 120A Introduction to Acting I or COMX 111A Public Speaking	3	3

Either year, any semester - Recommended courses to fulfill UM General Education requirements	A/S	Total Cr
ANTY 101H Anthropology & the Human Experience or NASX 105H Intro to Native American Studies	3	3
LIT 110L Intro to Lit or LIT 120L Poetry	3	3
ANTY 122S Race and Minorities; HSTR 101H Western Civilization; HSTA 101H American History I	3	3

* *Students must complete the University's General Education requirements. Due to the limitation of elective credits in the professional pharmacy curriculum, students are advised to complete the lower-division General Education requirement during the pre-pharmacy curriculum.

Professional Pharmacy Curriculum

Students must apply for admission to the professional program. For requirements see the section on Admission. Students enrolled in the professional pharmacy curriculum are assessed a supplemental fee. This fee does not apply to pre-pharmacy students. Refer to the fees section of this catalog for details. Students must demonstrate proficiency in pharmaceutical calculation by successfully completing a competency assessment prior to entering the second professional year.

The Upper-Division Writing Requirement must be met by successfully completing PHAR 550 or an upper-division writing course from the approved list in the Academic Policies and Procedures section of this catalog. See index.

First Professional Year	A	S
PHAR 381 Pharmaceutical Biochemistry	4	-
PHAR 328 Antimicrobial Agents	-	3
PHAR 331 Pharmaceutics	-	4
PHAR 341, 342 Physiological Systems I, II	4	4
PHAR 361-362 Pharmaceutical Sciences Lab I, II	1	1
BIOM 400 Medical Microbiology	3	-
PHAR 300 Pharmacy Practice I	3	-
PHAR 310 Pharmacy Practice II	-	2
PHAR 363 Pharmaceutical Care Lab I	-	1
PHAR 371-372 Integrated Studies I, II	1	1
Total	16	16

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Second Professional Year Autumn/Spring Intersession:	A	S
PHAR 480 Community Pharmacy Introductory Experience	-	3
PHAR 421, 422 Medicinal Chemistry I, II	3	3
PHAR 432 Clinical Pharmacokinetics	3	-
PHAR 443, 444 Pharmacology and Toxicology	4	4
PHAR 412 Pharmacy Practice III–Social and Behavioral Pharmacy	-	2
PHAR 451, 452 Therapeutics I, II	3	3
PHAR 460, 463 Pharmaceutical Care Lab II, III	1	1
PHAR 471, 472 Integrated Studies III, IV	1	1
Electives	1	2
Total	16	16

Third Professional Year Autumn/Spring Intersession:	A	S
PHAR 481 Hospital Pharmacy Introductory Experience	-	3
PHAR 505 Pharmacy Practice IV--Pharmaceutical Care	3	-
PHAR 506 Pharmacy Practice V–Advanced Pharmaceutical Care	-	3
PHAR 513 Pharmacoeconomics and Outcomes Research	-	3
PHAR 514E Pharmacy Ethics	-	3
PHAR 550 Drug Literature Evaluation	3	-
PHAR 553, 554 Therapeutics III and IV	4	4
PHAR 557 Public Health in Pharmacy	2	-
PHAR 560, 563 Pharmaceutical Care Lab IV, V	1	1

PHAR 571, 572 Integrated Studies V, VI	1	1
PHAR 578 Portfolio Assessment & APPE Orientation	-	1
Total	14	16

Fourth Professional Year	A	S
PHAR 579 Community Pharmacy Advanced Pharmacy Practice Experience	4	-
PHAR 580 Hospital Pharmacy advanced Pharmacy Practice Experience	-	4
PHAR 581 Inpatient Advanced Pharmacy Practice Experience	4	-
PHAR 582 Ambulatory Care Advanced Pharmacy Practice Experience	-	8
PHAR Elective Pharmacy Practice Experience	8	8
Total	16	20

Required credits: 200

Department of Pharmacy Practice

Michael P. Rivey, Chair

The Department of Pharmacy Practice provides academic course work for the Doctor of Pharmacy and Masters degrees, conducts research in the broad area of health care, and provides service to the profession of pharmacy and other health care disciplines.

Faculty

Professors

Douglas R. Allington, Pharm.D., University of South Carolina, 1988

Donna G. Beall, Pharm.D., University of Florida, 1984

Jean T. Carter, Ph.D., University of Arizona, 1997

Gayle A. Hudgins, Pharm.D., Duquesne University, 1976

David S. Forbes, Ph.D., University of Wisconsin, 1973 (Dean)

Sarah Johnston Miller, Pharm.D., Mercer University, 1985

Lori J. Morin, Pharm D., M.B.A., The University of Montana, 1981 (Assistant Dean for Student Affairs)

Michael P. Rivey, M.S., University of Iowa, 1982 (Chair)

Vincent J. Colucci, Pharm.D., Idaho State University, 1995

Associate Professors

Sherrill Brown, Pharm.D., University of Missouri, Kansas City, 2003

Kendra Procacci, Pharm.D., University of Wyoming, 2004

Assistant Professors

Annjeanette E. Belcourt-Dittloff, Ph.D., University of Montana, 2006

Katy Hale, Pharm.D., University of Washington, 2004

Kerry J. Haney, Pharm.D., The University of Montana, 2011

Instructor

Lisa Venuti, Pharm.D., The University of Montana, 2003

Department of Biomedical and Pharmaceutical Sciences

Richard J. Bridges, Chair

The Department of Biomedical and Pharmaceutical Sciences offers a curriculum in support of the Doctor of Pharmacy (Pharm.D.) degree and graduate programs in the biomedical and pharmaceutical sciences. Degree programs include the M.S. in Neuroscience, Pharmaceutical Sciences, Toxicology and Medical Chemistry; and the Ph.D. in Neuroscience, Biomedical Sciences, Toxicology, and Medical Chemistry. These programs provide education and training in pharmacology, toxicology, neurobiology, neurochemistry, medicinal chemistry, and molecular genetics. Program graduates are well prepared for careers in academia, government and industry.

»Faculty

Professors

Howard D. Beall, Ph.D., University of Florida, 1991

Richard J. Bridges, Ph.D., Cornell University Medical College, 1987 (Chair)

Fernando Cardozo-Pelaez, Ph.D., University of Southern Florida, 1996

J. Douglas Coffin, Ph.D., State University of New York Health Sciences Center at Syracuse, 1989

Andrij Holian, Ph.D., Montana State University, 1975 (Director, Center for Environmental Health Sciences)

Michael Kavanaugh, Ph.D., Oregon Health Sciences University-Portland, 1987 (Director, Center for Structural and Functional Neuroscience)

Diana I. Lurie, Ph.D., University of Pennsylvania, 1989

Nicholas Natale, Ph.D., Drexel University, 1978

Charles M. Thompson, Ph.D., University of California, Riverside, 1982

Associate Professors

Lilian Calderon-Garciduenas, M.D., Ph.D., University of North Carolina, 2001

Darrell Jackson, Ph.D., Washington State University, 1990

Curtis W. Noonan, Ph.D., Colorado State University, 2000

Keith K. Parker, Ph.D., University of California, San Francisco, 1977

Mark A. Pershouse, Ph.D., University of Texas-Houston, 1993

Elizabeth A. Putnam, Ph.D., University of Texas-Houston, 1989

Kevan Roberts, Ph.D., Christie Hospital in Manchester, U.K., 1984

David M. Shepherd, Ph.D., Oregon State University, 1999

Jerry R. Smith, Ph.D., University of Mississippi, 1977

Anthony Ward, Ph.D., The University of Montana, 2001

Erica L. Woodahl, Ph.D., University of Washington, 2004

Assistant Professors

J. Josh Lawrence, Ph.D., University of Wisconsin-Madison, 1999

Yoon Hee Cho, Ph.D., Seoul National University, 2006

Kasper Hansen, Ph.D., University of Copenhagen, 2006

Lecturer

David S. Freeman, Ph.D., University of Washington, 1974

Research Professor

Andrea Stierle, Ph.D., Montana State University, 1988

Donald Stierle, Ph.D., University of California-Riverside, 1978

David J. Poulsen, Ph.D., University of Delaware, 1995

Research Associate Professors

Dianne L. DeCamp, Ph.D., University of Delaware, 1988

Philippe Diaz, Ph.D., University Paul Cezanne, 1997

Research Assistant Professors

Celine Beamer, Ph.D., University of Montana, 2002

Michael Braden, Ph.D., Purdue University, 2007

Zeina Jaffar, Ph.D., University of College London, 1991

Christopher T. Migliaccio, Ph.D., University of California-Davis, 2000

Sarjubhai A. Patel, Ph.D., University of Montana, 2000

Thomas Rau, Ph.D., University of Montana, 2007

Emeritus Professors

Todd G. Cochran, Ph.D., University of Washington, 1970

Charles L. Eyer, Ph.D., Washington State University, 1976

Rustem S. Medora, Ph.D., University of Rhode Island, 1965

Vernon R. Grund, Ph.D., University of Minnesota, 1974

Course Descriptions

Allied Health: Health Sciences

- **AHHS 191 - Special Topics**

Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **AHHS 201 - Living Well, Health & Disabilil**

Credits: 2. Offered autumn and spring. The development and implementation of exercise programs for individuals with physical disabilities or chronic illness.

- **AHHS 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHHS 320 - Am Ind Health Issues**

Credits: 2. Offered spring. Same as PHAR 320. An overview of the health issues, health care delivery and payment that affect American Indians.

- **AHHS 325 - Introduction to Gerontology**

Credits: 3. Offered spring. Prereq., junior standing or consent of instr. An interdisciplinary discussion of the health and social issues of older persons, utilizing didactic presentations, clinical demonstrations, and curricular modules.

- **AHHS 327 - MGS Meeting**

Credits: 1. (R-3) Offered spring. Attendance and participation in the Montana Gerontology Society meeting held annually in April.

- **AHHS 389 - Rec Adv in Clin Med**

Credits: 1. Offered spring. Prereq., junior or senior standing. Weekly presentations throughout the semester by local clinical medical practitioners describing in non-technical terms recent advances in their specialties.

- **AHHS 390 - Research**

Credits: 1 TO 4. (R-8) Offered autumn and spring. Prereq., consent of instr. Traditional or CR/NCR grading determined by instructor. **Course Attributes:** Research & Creative Schlrshp

- **AHHS 391 - Special topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHHS 394 - Medical Preparation**

Credits: 2. Offered autumn. Admission by application, sophomores, juniors, and seniors only. This is a survey course designed for students considering a career in the health care field, geared towards students considering becoming a medical provider (MD, DO, NP, PA).

- **AHHS 395 - Geriatric Practicum**

Credits: 1 TO 3. (R-3) Offered spring. Prereq., HS 325. Service learning experience in geriatrics in a setting compatible with the student's major and interests. **Course Attributes:** Internships/Practicums

- **AHHS 420 - Geriatric Health Issues**

Credits: 3. Prereq., Anatomy & physiology. A review of normal aspects of aging, common health problems associated with aging, and common pharmacological and non-pharmacological treatments of these problems in older persons.

- **AHHS 430 - Health Aspects of Aging**

Credits: 3. Offered spring. Same as HHP and HS 430. Overview of the health aspects of aging in the United States including biological theories of aging, normal physiological changes associated with aging systems, common pathological problems associated with aging, cultural and ethnic differences in the health of elders, health promotion and healthy aging, and the health care continuum of care for older persons.

- **AHHS 440 - Psychoso Illness Disabil**

Credits: 3. Offered autumn. Same as SW 440. Prereq., PSYX 245. A review of the psychosocial aspects of illness and disability in older persons to include societal impact of these illnesses, responses of the individual, family, and support network to the stress of illness and disability, caregiver issues, cultural implications, and the impact of the health care system on these psychosocial aspects.

- **AHHS 490 - Research**

Credits: 1 TO 4. (R-8) Offered autumn and spring. Prereq., consent of instr. Traditional or CR/NCR grading determined by instructor. **Course Attributes:** Research & Creative Schlrshp

- **AHHS 491 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Pharmacy

- **PHAR 300 - Pharmacy Practice I**

Credits: 3. Offered autumn. Prereq., M 162 and admission to the professional pharmacy program. An introduction to the prescription and pharmaceutical calculations and to the role of the pharmacist in systems involved in health care delivery.

- **PHAR 310 - Pharmacy Practice II**

Credits: 2. Offered spring. Prereq., PHAR 300 (309). Federal and state laws and regulations pertaining to pharmacy practice. Introductory dispensing laboratory.

- **PHAR 363 - Pharmaceutical Care Lab I**

Credits: 1. Coreq. PHAR 310. Practice in technical and legal aspects of drug dispensing, prescription and OTC drug counseling, and sterile intravenous (IV) admixture.

- **PHAR 395 - Pharmacy Practicum**

Credits: 1 TO 2. (R-3) Offered autumn and spring. Prereq., PHAR 309. Supervised professional experience in the Student Health Service Pharmacy. **Course Attributes:**
Internships/Practicums

- **PHAR 412 - Pharmacy Practice III**

Credits: 2. Offered spring. Prereq., second professional year standing and a course in communication. The social, economic, legal, ethical, and psychological factors involved in professional and patient relationships of pharmacists. **Course Attributes:**
Writing Course-Upper-Division

- **PHAR 415 - Medication Therapy Mgmt**

Credits: 1. Offered Spring. Prereq., second or third professional year standing in pharmacy. A broad introduction to the basic principles, concepts, and application of medication therapy management (MTM) in various pharmacy practice settings.

- **PHAR 451 - Therapeutics I**

Credits: 3. Offered autumn. Prereq., second professional year standing; coreq., PHAR 471; prereq. or coreq., PHAR (BMED) 328, 421 and 443. Pharmacotherapeutics of common disease states emphasizing pathophysiology and the selection, monitoring, and individualization of drug therapy. Applies the basic pharmaceutical sciences to patient care.

- **PHAR 452 - Therapeutics II**

Credits: 3. Offered spring. Prereq., PHAR 451; coreq., PHAR 472; prereq. or coreq., PHAR (BMED) 422, 432 and 444. Pharmacotherapeutics of common disease states emphasizing pathophysiology and the selection, monitoring, and individualization of drug therapy. Applies the basic pharmaceutical sciences to patient care.

- **PHAR 460 - Pharmaceutical Care Lab II**

Credits: 1. Offered autumn. Prereq., second professional year standing, PHAR 310. Introduction to parenteral practice application, applied patient interview assessment, and communication skills for practice.

- **PHAR 463 - Pharmaceutical Care Lab III**

Credits: 1. Coreq. PHAR 412. Practice counseling and patient-care skills with emphasis on non-prescription drugs and devices. Includes individual in-service presentations.

- **PHAR 471 - Integrated Studies III**

Credits: 1. Offered autumn. Prereq., second professional year standing in pharmacy. Small group conferences designed to develop professional skills while integrating material from first and second year professional pharmacy courses.

- **PHAR 472 - Integrated Studies IV**

Credits: 1. Offered spring. Prereq., PHAR 471. Continuation of 471.

- **PHAR 480 - Community Pharmacy IPPE**

Credits: 3. (R-6) Offered every term. Prereq., completion of first professional year. Supervised professional experience in community pharmacy.

- **PHAR 481 - Hospital Pharmacy IPPE**

Credits: 3. (R-6) Offered every term. Prereq., completion of first professional year. Supervised professional experience in a hospital pharmacy.

- **PHAR 505 - Pharmacy Practice IV**

Credits: 3. Offered autumn. Prereq., third professional year standing in Pharm.D. program. Applications of advanced drug therapy monitoring and disease state management. Level: Graduate

- **PHAR 506 - Pharmacy Practice V**

Credits: 3. Offered spring. Prereq., PHAR 505. Aspects of dispensing, management, communications, disease state monitoring, and legal issues related to the provision of pharmaceutical care. Level: Graduate

- **PHAR 513 - Pharmacoeconomics**

Credits: 3. Offered spring. Prereq., third professional year standing or consent of instr. Introduction to assessing the economic, clinical and humanistic outcomes of pharmacotherapy. Level: Graduate

- **PHAR 514E - Case Studies Pharm Ethics**

Credits: 3. Offered spring. Prereq., third professional year standing or consent of instr. A practical discussion of pharmacy ethics, as it relates to pharmacy practice. Level: Graduate **Course Attributes:** Ethical & Human Values Course Group 2 Ethical & Human Values

- **PHAR 550 - Drug Literature Eval**

Credits: 3. Offered autumn. Prereq., third professional year standing in pharmacy. Scientific and statistical evaluation of the drug and medical research literature to formulate solutions for patient-specific pharmacotherapy problems. Level: Graduate **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **PHAR 553 - Therapeutics III**

Credits: 4. Offered autumn. Prereq., PHAR 452, 472: prereq. or coreq., PHAR 571. Pharmacotherapeutics of common disease states emphasizing pathophysiology and the selection, monitoring, and individualization of drug therapy. Applies the basic pharmaceutical sciences to patient care. Level: Graduate

- **PHAR 554 - Therapeutics IV**

Credits: 4. Offered spring. Prereq., PHAR 553, 571; prereq. or coreq., PHAR 572. Intended for Pharm.D. students. Pharmacotherapeutics of common disease states emphasizing pathophysiology and the selection, monitoring, and individualization of drug therapy. Applies the basic pharmaceutical sciences to patient care. Level: Graduate

- **PHAR 556 - Psychopharmacotherapeutics**

Credits: 2. Offered autumn. Prereq., PHAR 452 or consent of instr. A discussion of the more common childhood and adult psychiatric disorders with emphasis on a pharmacologic approach to their treatment. Level: Graduate

- **PHAR 557 - Public Health In Pharmacy**

Credits: 2. Offered autumn. Prereq., PHAR 452, 472. Discussion of the roles and responsibilities of

pharmacists in public health and the role of drugs in public health programs. Level: Graduate

- **PHAR 560 - Pharmaceutical Care Lab IV**
Credits: 1. Coreq PHAR 505. Practice in professional communication and pharmaceutical care interventions and recommendations. Level: Graduate
- **PHAR 563 - Pharmaceutical Care Lab V**
Credits: 1. Coreq., PHAR 506. Practice in professional communication and pharmaceutical care interventions and recommendations. Level: Graduate
- **PHAR 571 - Integrated Studies V**
Credits: 1. Offered autumn. Prereq., third professional year standing in Pharm.D. program. Small group conferences designed to develop the professional skills needed to practice pharmaceutical care while integrating material from the professional pharmacy curriculum. Level: Graduate
- **PHAR 572 - Integrated Studies VI**
Credits: 1. Offered spring. Prereq., third professional year standing in Pharm.D. program. Small group conferences designed to develop professional skills while integrating material from other pharmacy courses. Level: Graduate
- **PHAR 578 - Port Assess/APPE Orient**
Credits: 1. Offered spring. Prereq., final semester in didactic PHARM D curriculum. Preparation and assessment of the student portfolio and orientation for the final experiential year of the professional pharmacy program. Level: Graduate
- **PHAR 579 - Comm Pharm APPE**
Credits: 1 TO 12. (R-12) Offered every term. Prereq., completion of didactic courses in the Pharm. D. program. Supervised professional experience in the patient care functions of the pharmacist in the community pharmacy setting. Level: Graduate
- **PHAR 580 - Hosp Pharm APPE**
Credits: 4. (R-12) Offered every term. Prereq. Completion of didactic courses in the Pharm.D. program. Supervised professional experience in the patient care functions of the pharmacist in the hospital pharmacy setting. Level: Graduate
- **PHAR 581 - Inpatient APPE**
Credits: 4 TO 12. (R-12) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in the clinical functions of the pharmacist in the inpatient hospital setting. Level: Graduate
- **PHAR 582 - AMB Care APPE**
Credits: 4 TO 16. (R-16) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in the clinical functions of the pharmacist in the ambulatory care setting. Level: Graduate
- **PHAR 583 - Drug Information APPE**
Credits: 4. (R-8) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in the provision of drug information by the pharmacist. Level: Graduate
- **PHAR 584 - Specialized Services APPE**
Credits: 4. (R-8) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in specialized practice settings, such as home infusion, compounding, and nuclear pharmacies.. Level: Graduate
- **PHAR 585 - Geriatric APPE**
Credits: 4. (R-8) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience with geriatric patients in the long term care and/or

other pharmacy setting. Level: Graduate

- **PHAR 586 - Clinical Speciality APPE**

Credits: 4. (R-16) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in the clinical functions of the pharmacist in specialty settings or with specialized groups of patients. Level: Graduate

- **PHAR 587 - Administrative APPE**

Credits: 4. (R-8) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in the administrative aspects of providing pharmaceutical care. Level: Graduate

- **PHAR 588 - Research APPE**

Credits: 4. (R-8) Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in a research setting. Level: Graduate

- **PHAR 589 - Education APPE**

Credits: 4. Offered every term. Prereq., completion of didactic courses in the Pharm.D. program. Supervised professional experience in teaching in a pharmacy curriculum. Level: Graduate

- **PHAR 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., senior or graduate standing. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **PHAR 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

- **PHAR 603 - Professional Practice IV**

Credits: 4. Offered autumn. Prereq., third professional year standing in Pharm.D. program and acceptance into M.B.A. program. Aspects of dispensing, management, communications, disease state monitoring, and legal issues related to the provision of pharmaceutical care. Level: Graduate

- **PHAR 604 - Professional Practice V**

Credits: 4. Offered spring. Prereq., PHAR 603. Applications of advanced drug therapy monitoring and disease state. Level: Graduate

Course Descriptions

Biomedical /Pharmaceutical Sci

- **BMED 545 - Research Lab Rotations**

Credits: 2 TO 3. (R 6) Offered autumn and spring. Prereq., BMED 443 or graduate standing. Experience in research methods in departmental research laboratories. Level: Graduate

- **BMED 581 - Research Seminar Biomed**

Credits: 1. (R-9) Offered autumn and spring. Oral and written presentations of experimental research results and selected literature topics in biomedical science. Level: Graduate

- **BMED 582 - Research Seminar Neurosci.**

Credits: 1. (R-9) Offered autumn and spring. Oral and written presentations of experimental research results and selected literature topics in neuroscience. Level: Graduate

- **BMED 583 - Research Seminar Toxicol**

Credits: 1. (R-9) Offered autumn and spring. Oral and written presentations of experimental research results and selected literature topics in toxicology. Level: Graduate

- **BMED 593 - Current Research Literature**

Credits: 1. (R-6) Offered autumn and spring. Readings and discussion of current research literature. Level: Graduate

- **BMED 594 - Seminar**

Credits: 1. (R 6) Offered autumn and spring. Prereq., senior or graduate standing. Level: Graduate

- **BMED 595 - Special Topics**

Credits: 1 TO 9. (R 9) Offered intermittently. Prereq., senior or graduate standing. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate

- **BMED 596 - Independent Study**

Credits: 1 TO 9. (R 9) Offered every term. Level: Graduate

- **BMED 597 - Research (MS)**

Credits: 1 TO 9. (R 10) Offered every term. Level: Graduate

- **BMED 599 - Thesis (MS)**

Credits: 1 TO 9. (R 10) Offered every term. Level: Graduate

- **BMED 605 - Biomedical Research Ethics**

Credits: 1. Offered spring. Overview of biomedical research ethics and regulations. Topics include ethics and morality in science, scientific integrity, conflicts of interest, human and animal experimentation, intellectual property, plagiarism. Level: Graduate

- **BMED 609 - Biomedical Statistics**

Credits: 3. Offered autumn. Experimental design and statistical analysis relevant to the biomedical sciences. Level: Graduate

- **BMED 610 - Neuropharmacology**

Credits: 3. Offered alternate years. Prereq., BMED 613 or 661 or consent of instr. Focus on current areas of research and research technologies in neuropharmacology. Development of presentations and research grant proposals. Level: Graduate

- **BMED 613 - Pharmacology I**

Credits: 4. Offered autumn. Prereq., BIOC 380 or equiv. Fundamentals of pharmacology and drug action. Level: Graduate

- **BMED 614 - Pharmacology II**

Credits: 4. Offered spring. Prereq., BMED 613. Fundamentals of pharmacology and drug action. Continuation of BMED 613. Level: Graduate

- **BMED 615 - Molecular Pharmacology**

Credits: 3. Offered alternate years. Prereq., BMED 600, 613 or consent of instr. Focus on the molecular world of receptors and their interactions with related cellular components and ultimately with binding ligands, both physiological and pharmaceutical. Major emphasis in pharmacodynamics with some time devoted to related pharmacokinetic parameters. Level: Graduate

- **BMED 620 - Cardiovas Pharm & Tox**

Credits: 3. Offered alternate years. Prereq., BMED 613 or 641, or consent of instr. Recent advances in pharmacology and toxicology of the cardiovascular system. In-depth study of regulatory mechanisms and the effect of immune response and xenobiotics on cardiovascular function. Level: Graduate

- **BMED 621 - Drug Design**
 Credits: 4. Offered alternate years. Prereq., Organic Chemistry and Biochemistry or consent of instr. Introduction to the main concepts in medicinal chemistry. Laboratory experience in instrumental analysis, interpreting NMR, MS cleavage, and structure elucidation Level: Graduate
- **BMED 622 - Drug Pharmacodynamics**
 Credits: 4. Offered alternate years. Organic Chemistry and Biochemistry or consent of instr. Introduction and topical coverage of how drugs form complexes with biological targets to cause an array of responses. Level: Graduate
- **BMED 623 - Drug Diversity**
 Credits: 3. Offered alternate years. Organic Chemistry and Biochemistry or consent of instr. Topics in chemogenomics and diversity oriented synthesis will be covered. Level: Graduate
- **BMED 624 - Methods in Medicinal Chemistry**
 Credits: 3. Offered intermittently. Prereq., Organic chemistry and biochemistry or consent of instr. Novel approaches to small molecule therapeutics for disease targeting. Level: Graduate
- **BMED 625 - Drug Synthesis**
 Credits: 3. Offered intermittently. An introduction to the past and current synthetic approaches and total syntheses of biologically active drugs. Level: Graduate
- **BMED 626 - Res Meth Biochem Pharm**
 Credits: 1 TO 3. (R-6) Offered every term. Prereq., consent of instr. Laboratory course intended to familiarize students with the instruments, and expertise of current research techniques in the biomedical sciences. Level: Graduate
- **BMED 627 - Professional Development**
 Credits: 1. Offered autumn and spring. Prereq., Organic Chemistry and Biochemistry or consent of instr. Developmental training in presentations, writing, reviewing, literature research, teaching, research methods, grant writing, ethics, and business aspects in medicinal chemistry. Level: Graduate
- **BMED 628 - Grantsmanship**
 Credits: 1. This course is designed to provide graduate students and postdoctoral fellows with the necessary background, tools and hands on experience to be able to confidently write and submit a research grant. The focus is on preparing a fellowship application although training will be provided for more typical investigator initiated grants. The entire process from conception, preparation, review and revision will be covered. This course will be a requirement for students on training grants. No prerequisites are required. Level: Graduate
- **BMED 630 - Pharmacogenetics**
 Credits: 3. Offered alternate years. Prereq., BIOC 380 or 481. The genetic basis of differential drug activity. Level: Graduate
- **BMED 632 - Advanced Pharmacokinetics**
 Credits: 4. Offered Fall. Recent developments and emerging concepts in theoretical and experimental pharmacokinetics, pharmacogenomics, and drug disposition. Critical analysis of the current literature. Level: Graduate
- **BMED 637 - Topics in Biomedical Sci**
 Credits: 1 TO 3. (R-9) Offered autumn or spring. Prereq., BMED 613, or 641, or 661. Current topics in the biomedical sciences. Level: Graduate
- **BMED 641 - Toxicology I-Principles**
 Credits: 3. Offered autumn. Prereq., BIOC 481 or equiv. Introduction to toxicology. Topics include general principles, risk assessment, organ system toxicology, introduction to carcinogenesis, and genetic toxicology. Level: Graduate

- **BMED 642 - Toxicology II-Agents**
 Credits: 3. Offered spring. Prereq., BMED 641. Toxic agents and the diseases caused by those agents. Includes common toxicants in the environment and occupational settings as well as drug induced toxicity. Level: Graduate
- **BMED 643 - Cellular & Molecular Tox**
 Credits: 3. Offered autumn. Prereq., BMED 641. Cellular and molecular mechanisms of toxicity. Includes apoptosis, regulation of cell cycle, genetic toxicology, and signal transduction pathways in toxicity. Level: Graduate
- **BMED 644 - Immunopharm/Immunotox**
 Credits: 3. Offered alternate years. Prereq., MICB 410 or equiv. The impacts of xenobiotic agents on the immune system. Level: Graduate
- **BMED 645 - Respiratory Toxicology**
 Credits: 3. Offered alternate years. Prereq., BMED 641. The lung and associated immune systems and their response to inhaled immunogenic and toxicological agents. Level: Graduate
- **BMED 646 - Neurotoxicology**
 Credits: 3. Offered alternate years. Prereq., BMED 641 or 661. Mechanisms of major neurotoxins and neurological disease. Level: Graduate
- **BMED 647 - Topics in Toxicology**
 Credits: 1 TO 3. (R-9) Offered autumn or spring. Prereq., BMED 613, or 641, or 661. Current topics in toxicology. Level: Graduate
- **BMED 657 - Topics in Immunology**
 Credits: 1 TO 3. (R-9) Offered autumn or spring. Prereq., MICB 410 or equiv. Current topics in immunology. Level: Graduate
- **BMED 661 - Neuroscience I**
 Credits: 4. Offered autumn. Prereq., BIOC 380 or equiv. Overview of the structure and function of the nervous system. Level: Graduate
- **BMED 662 - Neuroscience II**
 Credits: 4. Offered spring. Prereq., BMED 661. Fundamentals of developmental neuroscience, behavioral and cognitive neuroscience and computational neuroscience. Level: Graduate
- **BMED 667 - Topics in Neurobiology**
 Credits: 1 TO 3. (R-9) Offered every year. Prereq., BMED 661. Current topics in neuroscience. Level: Graduate
- **BMED 668 - Neuropathology**
 Credits: 4. Prereq., BMED 347 or BMED 661. This course will provide a comprehensive overview of the pathological findings in neurological disease, and their biological basis. This course will provide neuroscience graduate students with a clear description of molecular and cellular processes and reactions that are relevant to the normal and abnormal functioning of the nervous system. Level: Graduate
- **BMED 694 - Seminar**
 Credits: 1 TO 3. (R 6) Offered autumn and spring. Prereq., senior or graduate standing. Level: Graduate
- **BMED 697 - Research (PhD)**
 Credits: 1 TO 9. (R-20) Offered every term. Level: Graduate
- **BMED 699 - Dissertation (PhD)**
 Credits: 1 TO 9. (R-20) Offered every term. Level: Graduate

Pharmacy

- **PHAR 110N - Use & Abuse of Drugs**

Credits: 3. Offered autumn and spring. Drug dependence and abuse. **Course Attributes:**
Natural Science Course

- **PHAR 145N - Intro to Cancer Biology**

Credits: 3. Introduction to basic concepts in cancer biology, treatment, and prevention. Includes discussions of the history of cancer, nomenclature, prevention, cellular and molecular mechanisms, pathology, treatment, and familial cancers. **Course Attributes:**
Natural Science Course

- **PHAR 191 - Special Topics**

Credits: 1 TO 6. (R 16) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **PHAR 324 - Medicinal Plants**

Credits: 2 TO 3. Offered autumn. Same as AAHS 324. Plants and other natural substances which nourish, heal, injure, or alter the conscious mind.

- **PHAR 328 - Antimicrobial Agents**

Credits: 3. Offered spring. Prereq., BIOM 400. Chemical characteristics, biochemical mechanisms, and pharmacological properties of drugs used in treating infections caused by microorganisms.

- **PHAR 331 - Pharmaceutics**

Credits: 4. Offered spring. Prereq., CHMY 222, first professional year standing. Physical pharmacy and dosage forms.

- **PHAR 341 - Physiological Systems I**

Credits: 4. Offered autumn. Prereq., CHMY 222, PHSX 205N, BIOB 260/261. Principles of anatomy, normal and abnormal physiology.

- **PHAR 342 - Physiological Systems II**

Credits: 4. Offered spring. Prereq., PHAR 341. Continuation of 341.

- **PHAR 361 - Pharm Sci Lab I**

Credits: 1. Offered autumn. Coreq., PHAR 300, PHAR 341. Laboratory experience in the pharmaceutical sciences.

- **PHAR 362 - Pharm Sci Lab II**

Credits: 1. Offered spring. Prereq., PHAR 361; coreq., PHAR 331 and 342. Continuation of 361.

- **PHAR 371 - Integrated Studies I**

Credits: 1. Prereq., first professional year standing in pharmacy. Small group conferences designed to develop professional skills while integrating material from other pharmacy courses.

- **PHAR 372 - Integrated Studies II**

Credits: 1. Prereq., PHAR 371. Continuation of 371.

- **PHAR 381 - Pharmaceutical Biochemistry**

Credits: 4. Offered every Autumn. Prereq., admission to Pharmacy School. Fundamental biochemistry from a pharmaceutical sciences perspective; management of genetic information, molecular structure and function, and metabolic reactions, especially as relating to drug actions and targets.

- **PHAR 390 - Undergraduate Research**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., consent of instr. Individual participation

in library or laboratory research. **Course Attributes:** Research & Creative Schlrshp

- **PHAR 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHAR 401 - Use of Animals in Research**

Credits: 2. Offered intermittently. Prereq., consent of faculty supervisor. An introductory course to the care and use of laboratory animals in research. Includes lecture and some hands-on instruction with inanimate models and live animals.

- **PHAR 421 - Medicinal Chem I**

Credits: 3. Offered autumn. The chemistry of organic compounds used medicinally and their biochemical mechanisms of action.

- **PHAR 422 - Medicinal Chem II**

Credits: 3. Offered spring. Prereq., BMED 421. Continuation of 421.

- **PHAR 430 - Pharmacogenetics**

Credits: 2. Offered each semester online. Prereq., BMED 421, 432. The genetic basis of differential drug activity.

- **PHAR 432 - Clinical Pharmacokinetics**

Credits: 3. Offered spring. Prereq., BMED 331 and pharmaceutical calculation proficiency requirement, or consent of instr. Drug absorption, distribution and elimination.

- **PHAR 443 - Pharmacol & Toxicol I**

Credits: 4. Offered autumn. Prereq., second professional year standing. Basic principles of pharmacology, toxicology and therapeutics.

- **PHAR 444 - Pharmacology & Toxicol II**

Credits: 4. Offered spring. Prereq., BMED 443. Continuation of 443.

- **PHAR 445 - Immunopharm/Immunotox**

Credits: 3. Offered in alternating years. Prereq., consent of instr. This course is designed to introduce advanced undergraduate students and professional Pharmacy students to various aspects involved in the development and mechanisms of action of immunomodulatory drugs and chemicals.

- **PHAR 484 - Introduction to Toxicology**

Credits: 3. Offered every autumn. Prereq., Biology, Chemistry, and Biochemistry; or consent of instructor. Online instruction provides students with a comprehensive introduction to environmental health and the principles of toxicology. Included: Human toxic substance exposure, processing of toxic substances and the impact on cells and tissues including genetic and epigenetic factors. Graduate increment includes design of a research study in toxicology and leading class

- **PHAR 485 - Environmental Health**

Credits: 3. Offered every spring. Prereq., Biology, Chemistry, Biochemistry, and Intro. Toxicology; or consent of instructor. Online instruction for the principles, concepts and applications of environmental health. Included: Methods and paradigm used in the field ranging from ecology to epidemiology, from toxicology to environmental psychology, from genetics to ethics. This course will provide students with a comprehensive introduction to environmental health. This includes an overview of the methods and paradigms used in the field, ranging from ecology to epidemiology, from toxicology to environmental psychology, and from genetics to ethics.

- **PHAR 486 - Epidem Translational**

Credits: 3. Offered every Autumn. Prereq., Biology, Chemistry, Biochemistry, Statistics, and Intro. Toxicology; or consent of instructor. Online instruction to introduce the principles and methods for

epidemiologic and clinical investigation, including biostatistical applications. Students will learn to conduct and interpret epidemiological and clinical studies on environmental toxicology. Graduate increment includes design and analysis of an epidemiological study and leading class discussions.

- **PHAR 490 - Undergraduate Research**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., consent of instr. Individual participation in library or laboratory research. **Course Attributes:** Research & Creative Schlrshp

- **PHAR 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHAR 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Varying topics.

College of Humanities and Sciences

Christopher M. Comer, Dean

Jenny McNulty, Associate Dean

S. Melanie Hoell, Director of Advising

Homepage: www.cas.umt.edu

The College of Humanities and Science is the intellectual core of the University of Montana. We fulfill the central purpose for which the University was chartered in 1893: to provide a liberal education and integrated knowledge of the humanities and the sciences.

A liberal arts education gives students the means to think broadly and test the value of diverse ideas, beliefs and facts. It empowers them to continue the learning process throughout life. By studying the ways of thinking and expression that are characteristic of the humanities and the social and natural sciences, students will be educated citizens. They will be enabled to think critically about scientific methods and findings, social analysis, creativity in the arts and humanities, aesthetics and values. Equally important is effective expression of one's understandings. Clear thinking, cogent expression, and solid values provide the foundation of successful careers.

A particular strength of the College is the breadth of its disciplines and programs. This breadth makes possible a varied and flexible curriculum that advances both general programs and specialized education on the undergraduate and graduate levels. Another strength is the quality of the faculty. Its members have a distinguished record of teaching, research and creation of new knowledge, and service to our communities. Their commitment to undergraduate liberal arts education is demonstrated by the quality of the graduates the College has produced. The pre-professional education received here has enabled University of Montana graduates to compete successfully for admission to graduate schools across the nation. A third strength of the College is its commitment to students as they pursue their academic studies at the University. This is reflected in close student/faculty relationships and in the continuous attention given by the College to the effect that policies, procedures, and administrative practices have on students' educational experience.

Name	Minor	Certificate	Associate	Bachelor
<u>African-American Studies</u>	<u>Requirements</u>			
<u>Anthropology</u>				<u>Requirements</u>

<u>Applied Science</u>				<u>Requirements</u>
<u>Arabic Studies</u>	<u>Requirements</u>			
<u>Astronomy</u>	<u>Requirements</u>			
<u>Biochemistry</u>				<u>Requirements</u>
<u>Biology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Central & Southwest Asian Stds</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Chemistry</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Chinese</u>	<u>Requirements</u>			
<u>Classical Civilization</u>	<u>Requirements</u>			
<u>Classics</u>				<u>Requirements</u>
<u>Communication Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Computer Applications</u>	<u>Requirements</u>			
<u>Computer Sci-Mathematical Sci</u>				<u>Requirements</u>
<u>Computer Science</u>	<u>Requirements</u>			<u>Requirements</u>
<u>East Asian Studies</u>				<u>Requirements</u>
<u>Economics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Engl as a Sec Lang</u>		<u>Requirements</u>		
<u>English</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Environmental Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Film Studies</u>	<u>Requirements</u>			
<u>Forensic Studies</u>		<u>Requirements</u>		
<u>French</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Geographic Information Systems</u>		<u>Requirements</u>		
<u>Geography</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Geosciences</u>	<u>Requirements</u>			<u>Requirements</u>

<u>German</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Global Public Health</u>	<u>Requirements</u>			
<u>Greek</u>	<u>Requirements</u>			
<u>Historic Preservation</u>		<u>Requirements</u>		
<u>History</u>	<u>Requirements</u>			<u>Requirements</u>
<u>History-Political Science</u>				<u>Requirements</u>
<u>Human and Family Development</u>	<u>Requirements</u>			
<u>International Development Stds</u>	<u>Requirements</u>			
<u>International Field Geos Dual</u>				<u>Requirements</u>
<u>International Field Geos Joint</u>				<u>Requirements</u>
<u>Irish Studies</u>	<u>Requirements</u>			
<u>Japanese</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Language Rejuvenation & Maint</u>		<u>Requirements</u>		
<u>Latin</u>	<u>Requirements</u>			
<u>Latin American Studies</u>	<u>Requirements</u>			
<u>Liberal Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Linguistics</u>	<u>Requirements</u>			
<u>Mathematical Sci-Computer Sci</u>				<u>Requirements</u>
<u>Mathematics</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Medical Technology</u>				<u>Requirements</u>
<u>Microbiology</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Military Studies</u>	<u>Requirements</u>			
<u>Mountain Studies</u>	<u>Requirements</u>			
<u>Native American Studies</u>	<u>Requirements</u>			<u>Requirements</u>
<u>Nonprofit Administration</u>	<u>Requirements</u>			

Philosophy	Requirements			Requirements
Physics	Requirements			Requirements
Political Science	Requirements			Requirements
Political Science-History				Requirements
Psychology	Requirements			Requirements
Russian	Requirements			Requirements
Russian Studies	Requirements			
Sociology	Requirements			Requirements
South & Southeast Asian Stds	Requirements			
Spanish	Requirements			Requirements
Women's and Gender Studies	Requirements			

African-American Studies

Tobin Miller Shearer, Program Director

African-American Studies at the University of Montana connects African and African-American (including Latin America and the Caribbean) history, experiences, and perspectives with the 21st century. The goal of the African-American Studies curriculum is to develop basic knowledge of, and appreciation for, the diverse experiences of the African Diaspora, and their contributions to the nations into which they were incorporated. Through this study students will recognize that the African-American narrative connects to the core issues of nation formation, identity politics, social movements, and the liberal state. Those who take this minor will likewise be equipped to talk alongside, through, and in the midst of the racial fracture lines that mark this nation as a country where the color of one's skin is socially significant. In all these efforts, we promote scholarship that is driven first and foremost by an interest in creating knowledge and furthering our understanding of the African-American experience. The interdisciplinary curriculum of African-American Studies includes course offerings from the following academic disciplines: anthropology, economics, English, geography, history, music, political science, and sociology. Some topics of study include: African heritage and cultural continuity among African-Americans; African-American identity issues and cultural variation; the history of African-American protest and resistance, including the abolitionist, anti-lynching, and civil rights movements; the Harlem Renaissance; the social dynamics of integration and segregation; and the various circumstances of, and prospects for, African Americans in the 21st century.

Department Faculty

Affiliates

Jill Bergman, Professor
Benedicte Boisseron, Associate Professor
Gregory Campbell, Professor
Johan Eriksson, Assistant Professor of Saxophone and Jazz Studies
Jeffrey Gritzner, Emeritus Professor
Quan Manh Ha, Associate Professor
Anya Jabour, Professor of History; Co-Director, Women & Gender Studies
Michael Mayer, Professor of History
George Price, Lecturer
Daisy Rooks, Associate Professor
Tobin Miller Shearer, Associate Professor of History; Director of African-American Studies
Kyle G. Volk, Associate Professor of History; Director of Graduate Studies
Celia Winkler, Professor

Course Descriptions

African-American Studies

- **AAST 208H - Discovering Africa**
Credits: 3. Offered intermittently. Same as HIST 208H. Interdisciplinary study of the history of pre-colonial Africa, focusing on social, economic, political and cultural institutions and traditions including the wealth, diversity and complexity of ancient and classical African civilizations and cultures. **Course Attributes:** Historical & Cultural Course
- **AAST 262 - Abolitionism: The First Civil Rights Movement**
Credits: 3. Offered spring. Same as HIST 262. Interdisciplinary, historical perspective on the early 19th century movement to abolish slavery and racial discrimination in the United States.

African-American Studies Minor

Minor - African-American Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

African-American Studies Core Courses

Rule: All courses are required

Note: Several of these courses are cross-listed with history (HSTA) and maybe taken under that subject:

AAS 141H = HSTA 141H

AAS 342H = HSTA 342H

—	Course	Credits
	AAS 141H - Black: Africa to Hip-Hop	3 Credits
	AAS 342H - Afr Amer Hist to 1865	3 Credits
	AAS 343H - Afr Amer Hist Since 1865	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

African-American Studies Electives

Rule: 6 credits required from the following electives, 3 of which must be in an upper division course

Note: Several of these courses are cross-listed with history (HSTA) and maybe taken under that subject:

AAS 347 = HSTA 347;

AAS 415 = HSTA 415;

AAS 417 = HSTA 417;

AAS 420 = HSTA 420

—	Course	Credits
	AAS 195 - Special Topics	1 To 6 Credits
	AAS 208H - Discovering Africa	3 Credits
	AAS 260 - African Amer & Native Amer	3 Credits
	AAS 262 - Abolitionism	3 Credits
	AAS 295 - Special Topics	1 To 6 Credits
	AAS 347 - Voodoo, Muslim, Church	3 Credits
	AAS 372 - African American Identity	3 Credits
	AAS 395 - Special Topics	1 To 9 Credits
	AAS 415 - The Black Radical Tradition	3 Credits
	AAS 417 - Prayer & Civil Rights	3 Credits
	AAS 420 - America Divided, 1848-1865	3 Credits
	AAS 495 - Special Topics	1 To 9 Credits
	HSTA 327 - Atlantic World Slavery	3 Credits

Minimum Required Grade: C-

6 Total Credits Required

Other Electives

Rule: 9 credits are required from the following courses. At least 2 of the courses must be from different disciplines.

Note: FRCH 391: Special Topics must be African-American Literature. Students can also take HSTR 388 and HSTR 409.

Course	Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
ECNS 217X - Issues in Economic Development	3 Credits
FRCH 391 - Special Topics	1 To 9 Credits
GPHY 243S - Africa	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 420 - America Divided, 1848-1865	3 Credits
HSTR 262H - Islamic Civil: Classical Age	3 Credits
LIT 343 - African American Lit	3 Credits
LIT 420 - Critical Theory	3 Credits
MUSI 130L - History of Jazz	3 Credits
PSCI 326 - Politics of Africa	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 325 - Social Stratification	3 Credits
SOCI 443 - Sociology of Poverty	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Anthropology Department

Douglas MacDonald, Chair

Anthropology is the study of people, both ancient and contemporary, in their biological, archaeological, cultural, and linguistic context. Anthropology uses a holistic approach to integrate findings from the social sciences, natural sciences, and the humanities. The primary educational mission of the Department of Anthropology is teaching, research, and professional service to impart the critical importance of understanding the human condition and its relevancy to an increasingly diverse world. To accomplish this task, the Department of Anthropology provides a curriculum that will help students understand and appreciate the range of human cultures as well as the significance of biological evolution of the human condition. Through our undergraduate and graduate programs students not only achieve a broad cross-cultural education, but prepare to apply their anthropological knowledge in their chosen career paths. A minor, Bachelor of Arts, Master of Arts, and Doctor of Philosophy degrees are offered in anthropology, with options or specializations available at every level. For undergraduates, the B.A. can include an option in Archaeology, Cultural and Ethnic Diversity, Forensic Anthropology, Linguistics, Medical Anthropology - or a general degree crafted to the interests of the student. Parallel missions to promote the study of human diversity and experience are advanced by the Linguistics Program, which is also housed in the Department. Additional offerings include certificates in Forensic Science and Historic Preservation; these certificates are interdisciplinary by nature, but are administered within the Anthropology Department.

Department Faculty

Professors

Gregory Campbell, Professor
Kelly Dixon, Professor
John Douglas, Professor
S. Neyooxet Greymorning, Professor
Ardeshir Kia, Associate Director, Central and Southwest Asia Program
Douglas MacDonald, Professor & Graduate Program Coordinator
Kimber Haddix McKay, Professor
Anna Prentiss, Professor
Gilbert Quintero, Professor
Randall Skelton, Professor
G.G. Weix, Professor

Associate Professors

Irene Appelbaum, Associate Professor, Linguistics Director
Leora Bar-el, Associate Professor
Mizuki Miyashita, Associate Professor
Tully Thibeau, Associate Professor, Dept.Chair

Assistant Professors

Meradeth Snow, Assistant Professor

Adjunct Faculty

Corey Ragsdale, Visiting Assistant Professor

Lecturers

D. Garry Kerr, Adjunct Instructor
Richard Sattler, Adjunct/Lecturer

Emeritus Professors

Thomas A. Foor, Professor Emeritus

Course Descriptions

Anthropology

- **ANTY 101H - Anthro & the Human Experience**

Credits: 3. Offered autumn and spring. Offered intermittently in summer. A survey of anthropology which introduces the fundamental concepts, methods and perspectives of the field. The description and analysis of human culture, its growth and change. The nature and functions of social institutions. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **ANTY 102H - Intro to South & S. East Asia**

Credits: 3. Offered intermittently. An introduction to South and Southeast Asian regions, cultures, societies, and histories, with particular emphasis on artistic, religious and literary traditions from prehistory to the present. An overview approach with different materials and emphases. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **ANTY 103H - Intro Latin American Studies**

Credits: 3. Offered autumn or spring. Multidisciplinary survey and introduction to Latin America from pre- Columbian times to the present. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **ANTY 122S - Race and Minorities**

Credits: 3. Offered autumn. Analysis of the development and concept of race as a social category and the processes of cultural change within and between ethnic groups. **Course Attributes:** Social Sciences Course American and European

- **ANTY 133X - Food and Culture**

Credits: 3. Offered spring. Examination of the ways culture shapes the satisfaction of a biological need; food production, preparation, choices, customs, taste, taboos, beverages, spices and food distribution around the globe. **Course Attributes:** Indigenous and Global

- **ANTY 141H - The Silk Road**

Credits: 3. Offered autumn and spring. Introduction to the study of the human communities, cultures, and economies in Central and Southwest Asia along the ancient four thousand mile-long Silk Road. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **ANTY 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ANTY 198 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, and 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **ANTY 210N - Intro to Physical Anthropology**
 Credits: 3. Offered autumn. An introduction to human evolutionary biology including processes of evolution, primate studies, hominid paleontology, and human variation. **Course Attributes:**
 Natural Science Course
- **ANTY 211N - Anthropological Genetics**
 Credits: 3. Offered intermittently. Genetics-related problems that confront individuals and society. Variation and natural selection in human populations. Designed for non-biology majors. **Course Attributes:**
 Natural Science Course
- **ANTY 213N - Physical Anthropology Lab**
 Credits: 1. Prereq., or coreq., ANTY 210N. Offered autumn. This lab course allows students to more deeply explore the concepts and materials covered in Introduction to Physical Anthropology. Students will engage in lab based activities involving human genetics and processes of evolution, biology and behavior of non-human primates, human evolution, and modern human adaptation and variation. **Course Attributes:**
 Natural Science Lab Course Natural Science Course
- **ANTY 216 - Primates in Peril**
 Credits: 3. Offered intermittently. An overview of the living primates and their behavior with a focus on conservation issues that have an impact on primates.
- **ANTY 220S - Culture & Society**
 Credits: 3. Offered autumn and spring. Study of social organization of non-western societies; emphasis on variations in ecology, social structure, economic, political and religious beliefs and practices. **Course Attributes:**
 Non-Western Course Social Sciences Course
 Indigenous and Global
- **ANTY 241H - Central Asian Culture and Civ**
 Credits: 3. Offered autumn even numbered years. Introduction to Central Asia's history, culture and ways of thinking. Focus on the political and social organization of Central Asia and cultural changes as expressed in art and interactions with China, India and the Middle East. **Course Attributes:**
 Historical & Cultural Course Indigenous and Global
- **ANTY 250S - Intro to Archaeology**
 Credits: 3. Offered spring. What archaeologists do and how they reconstruct past human cultures. Methodological and theoretical approaches to understanding and explaining past human societies. **Course Attributes:**
 Social Sciences Course
- **ANTY 251H - Foundations of Civilization**
 Credits: 3. Offered spring. Focus on the worldwide evolution of human society from Stone Age hunter-gatherers to the beginnings of modern civilization. Approached through the colorful and exciting world of archaeologists and the sites they excavate. **Course Attributes:**
 Historical & Cultural Course Indigenous and Global
- **ANTY 254H - Arch Wonders of the World**
 Credits: 3. Offered spring even numbered years. This course highlights the classical civilizations of the ancient world, fields such as Egyptology and Classical Archaeology, and the major archaeological discoveries which are associated with them. **Course Attributes:**
 Historical & Cultural Course Indigenous and Global
- **ANTY 291 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings relating to current problems or new developments in the discipline.
- **ANTY 310 - Human Variation**
 Credits: 3. Offered every spring. Prereq., ANTY 210N or consent of instr. Introduction to human biological variation, and to the methods and theories that are used to explain the distribution of

variable features. **Course Attributes:** Writing Course-Approved
Writing Course-Intermediate

- **ANTY 312 - Human Evolution**
Credits: 3. Offered autumn. Prereq., ANTY 210N. An exploration of the fossil and archaeological records of the evolution of human beings, and of current methods and theories used in interpreting these data.
- **ANTY 314 - Principles of Forensic Anthro**
Credits: 3. Offered autumn. Prereq., ANTY 210N. A study of techniques for recovering skeletal material, identifying and interpreting human skeletal remains, keeping records, interacting with the law enforcement system and documenting human rights abuses. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced
- **ANTY 318 - Casting & Facial Approximation**
Credits: 3. Offered spring. Prereq., ANTY 314 and consent of instr. An exploration of techniques for conservation and replication of skeletal elements, facial reconstruction, and other techniques for identification of individuals from their skeletal remains.
- **ANTY 323X - Native Peoples of Montana**
Credits: 3. Offered spring. The history and culture of the Indian tribes in Montana. **Course Attributes:** Indigenous and Global
- **ANTY 326E - Indigenous Peoples & Globl Dev**
Credits: 3. Offered spring odd-numbered years. This class will examine the impact of global development on tribal and Indigenous peoples. Topics will include land issues, health, employment, and cultural change caused by global development and explore how these societies are resisting and adapting to their changing world. **Course Attributes:** Ethical & Human Values Course
Indigenous and Global
- **ANTY 330X - Peoples and Cultures of World**
Credits: 3. (R-9) Offered autumn and spring. Study of the peoples of various geographic regions and their cultures.
- **ANTY 333 - Culture and Population**
Credits: 3. Offered autumn, even-numbered years. The relationship between population processes and culture to the human condition; survey data, methodologies, theories of demographic and culture change.
- **ANTY 336 - Myth, Ritual and Religion**
Credits: 3. Offered autumn odd-numbered years. Theories and practices concerning supernatural phenomena, and the comparative study of world religions and cosmological traditions of indigenous peoples throughout the world. **Course Attributes:** Writing Course-Approved
Writing Course-Intermediate
- **ANTY 347 - Central Asia and Its Neighbors**
Credits: 3. Offered autumn odd number years. Analysis of the human communities and cultures of Central and Southwest Asia, with particular emphasis on the importance of relationships with neighboring countries and civilizations since ancient times.
- **ANTY 349 - Social Change in NnWstrn Socts**
Credits: 3. Offered autumn, odd-numbered years. Prereq., ANTY 220S or consent of instr. Study of the processes of change, modernization and development. **Course Attributes:**
Non-Western Course Social Sciences Course
- **ANTY 351H - Archaeology of North America**
Credits: 3. Offered intermittently. The origins, backgrounds and development of Pre-Columbian American peoples and cultures. **Course Attributes:** Historical & Cultural Course

Indigenous and Global

- **ANTY 352X - Archaeology of Montana**

Credits: 3. Offered spring. The origins, distributions and development of aboriginal cultures in Montana and surrounding regions. **Course Attributes:** Indigenous and Global

- **ANTY 353 - Paleolndian Archaeology**

Credits: 3. Offered spring or winter, even-numbered years. Examines archaeological, linguistic, biological and skeletal data to determine from where and when Native Americans arrived in North America. Examines archaeological sites from such diverse places as Montana, Siberia, Virginia, and Chile to answer the most intriguing question in contemporary American archaeology today: how, when and from where did people first arrive in the Americas?

- **ANTY 354H - Mesoamerican Prehistory**

Credits: 3. Offered intermittently. The development of civilization and prehistoric states in the New World. Prehistoric lifeways and the effects of European contact on these cultures. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **ANTY 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ANTY 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., 9 credits in anthropology; consent of faculty supervisor and cooperative education officer. Practical application of classroom learning through internship in a number of areas such as museology, cultural resource management, and forensics. A maximum of 6 credits of Internship (198, 298, 398, and 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **ANTY 400 - History of Anthropology**

Credits: 3. Offered autumn. Prereq., ANTY 101H and 220S. The development of theory and method in cultural anthropology to the present. Various archaeological, ethnological and socio-psychological theories in the light of historical anthropology. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **ANTY 401 - Anthropological Data Analysis**

Credits: 3. Offered autumn. Prereq., M 104, M 105, M 115, M 121, M 122, M 135, M 151 or consent of instr. An analysis of the foundations of anthropological scaling and measurement.

- **ANTY 402 - Quan Ethnographic Field Methds**

Credits: 3. Offered autumn. This course is designed to enhance student understanding of field methods that generate quantitative data describing human behavior. The toolkit of a student completing this course will include knowledge of basic methods that will get you from observing behavior to discussing your research and findings in a professional manner in oral or written formats. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **ANTY 403E - Ethics and Anthropology**

Credits: 3. Offered spring even-numbered years. Prereq., ANTY 101H or 220S, or consent of instr. Ethical and anthropological modes of inquiry in relation to each other. Focus on the sociocultural subfield as well as ethical issues in physical anthropology and archaeology. **Course Attributes:** Ethical & Human Values Course Writing Course-Upper-Division Writing Course-Advanced

- **ANTY 404 - Anthropological Museology**

Credits: 3. Offered spring even-numbered years. Prereq., ANTY 101H. Introduction to anthropological museums, museum work and museum theory.

- **ANTY 408 - Advanced Anthro Statistics**

Credits: 3. Offered spring. Prereq., consent of inst. Focus on techniques used for microcomputer-

based data management and multivariate analysis. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **ANTY 409 - Preceptorship in Anthropology**
Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., ANTY 210N, 220S, 250S and consent of instr. Assisting a faculty member by tutoring, grading objective exams, conducting review sessions, and carrying out other class-related responsibilities. Open to juniors, senior, and graduate students with consent of the faculty member with whom they serve. Proposals must be approved by department chair.
- **ANTY 412 - Osteology**
Credits: 4. Offered autumn. Prereq., ANTY 314 and consent of instr. A detailed examination of the human skeleton with an emphasis on identifying individual bones and their structures. Specifically extended to fragmentary skeletal elements. Direct hands-on experience required.
- **ANTY 413 - Forensic and Mortuary Arch**
Credits: 3. Offered spring. Prereq., ANTY 314 and consent of instr. Practical approaches to locating, documenting and recovering human skeletal remains, including surface scatters and burials. Emphasis on interpretations of evidence for recovery scene formation and mortuary behavior.
- **ANTY 415 - Emergence Modern Humans**
Credits: 3. Offered intermittently. Prereq., ANTY 210N. An exploration of the emergence of "modern" humans and their relationships with Neanderthals. Exploration of what it means to be "a modern human" through an examination of human evolutionary history.
- **ANTY 416 - Dental Anthropology**
Credits: 3. Offered intermittently. Prereq., ANTY 210N. The use of information from teeth in investigating evolutionary trends, the relationships between human groups, subsistence change, and culture change.
- **ANTY 417 - Adaptation & Nutritional Anth**
Credits: 3. Offered intermittently. Prereq., ANTY 210N. An examination of the adaptation of human populations to the environment and food supply via evolutionary, physiological, and cultural mechanisms.
- **ANTY 418 - Ecol Genet Var Human Pops**
Credits: 3. Offered intermittently. Prereq., ANTY 210N Human genetic variation examined from an ecological perspective. Emphasis on the role of infectious disease as a selective factor in human evolution and exploration of the implications of these associations for human genetic variation.
- **ANTY 422 - Mind, Culture and Society**
Credits: 3. Offered autumn even-numbered years. Prereq., ANTY 220S or consent of instr. The study of socialization, personality, cognition, and mental health cross-culturally.
- **ANTY 423 - Culture and Identity**
Credits: 3. Offered spring. Prereq., ANTY 220S or consent of instr. The comparative study of identity formation along and across racial, ethnic, and ethno-national lines. Emphasis on issues of ethnogenesis, cultural resistance, transformation, domination, colonialism as well as sharing to understand both the cultural commonalties and differences in identity formation.
- **ANTY 426 - Culture, Health and Healing**
Credits: 3. Offered autumn. Cross-cultural comparisons of theories and concepts and health and illness. Examination of the impact of these concepts upon health practices and treatment of disease around the world.
- **ANTY 427 - Anthropology of Gender**
Credits: 3. Offered spring. Comparative study of the history and significance of gender in social life.

- **ANTY 430 - Social Anthropology**
 Credits: 3. Offered spring. Prereq., ANTY 220S. Seminar style senior capstone course for cultural anthropology students. This course focuses on bringing theory and methods together in written and visual ethnography.
- **ANTY 431 - Ethnographic Field Methods**
 Credits: 3. Offered spring. Prereq., ANTY 220S, ANTY 401, or consent of instr. Introduction to socio-cultural anthropological methods including participant observation, interviewing and narrative techniques and analysis of qualitative data.
- **ANTY 433 - Indig Global Health & Healing**
 Credits: 3. Offered alternate years. Examination of traditional and contemporary uses of medicine in Native American societies. Issues covered will include current health conditions of American Indians, and the relationship from a cultural perspective on health, healing and medicine.
- **ANTY 435 - Drugs, Culture and Society**
 Credits: 3. Offered intermittently. Drug use in a cross-cultural perspective. The role of drugs in cultural expression and social interaction. Examination of the prehistory of drug use, drug use in traditional non-Western and Western societies, and drug use in the context of global sociocultural change.
- **ANTY 440 - Cont. Issues of SSEA**
 Credits: 3. Offered intermittently. Prereq., ANTY 102H. An examination of the major issues that affect the contemporary experience of South and Southeast Asians. **Course Attributes:**
 Historical & Cultural Course Non-Western Course Writing Course-Upper-Division
- **ANTY 442 - Cities/Landscapes Central Asia**
 Credits: 3. Offered spring odd numbered years. Analysis of the main centers of civilization and culture, rich sites and monuments of Central Asia and Southwest Asia since ancient times.
- **ANTY 444 - Artistic Tradtns Central Asia**
 Credits: 3. Offered spring even numbered years. Analysis of the study of human artistic creativity and scientific innovations of various cultures in Central and Southwest Asia since ancient times.
- **ANTY 450 - Archaeological Theory**
 Credits: 3. Offered autumn. Prereq., ANTY 250S. Historical trends and current major theories and methods in archaeology. **Course Attributes:** Writing Course-Upper-Division
 Writing Course-Advanced
- **ANTY 451 - Cultural Resource Management**
 Credits: 3. Offered autumn. Introduction to the laws and practice of cultural resource/heritage property management. Focus on the management of archaeological sites, historic structures, and traditional cultural places due to federal laws. Emphasis is on laying foundation of CRM practices for students interested in pursuing it as a potential career. **Course Attributes:**
 Writing Course-Upper-Division Writing Course-Advanced
- **ANTY 452 - GIS in Archaeology**
 Credits: 3. Prereq., ANTY 250s. Anthropological and archaeological data acquisition, management, and analysis using Geographic Information Systems (GIS) tools and techniques.
- **ANTY 454 - Lithic Technology**
 Credits: 3. Offered autumn odd-numbered years. Prereq., ANTY 250S and consent of instr. Analysis of stone artifacts and debitage.
- **ANTY 455 - Artifact Analysis**
 Credits: 3. Offered spring. Prereq., ANTY 250S and consent of instr. Laboratory approaches and techniques for analyzing material culture from technological, stylistic, and chronological perspectives. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **ANTY 456 - Historical Archaeology**
 Credits: 3. Offered spring. Prereq., ANTY 250S or consent of instr. Understanding and interpreting the past through historical archaeological remains, methods, and theories. Focuses on historical archaeological sites and topics from the American West, but also examines the field's global perspective.
- **ANTY 457 - Arch of the Pacific Northwest**
 Credits: 3. Offered autumn even-numbered years. Introduction to the study of archaeology in the Pacific Northwest region inclusive of the Northwest Coast and Columbia/Fraser-Thompson Plateau. Understanding hunter-gatherer adaptations, evolution of social complexity, and ancient history of contemporary native peoples in the region.
- **ANTY 458 - Arch of Hunter-Gatherers**
 Credits: 3. Offered autumn even-numbered years. Introduction to the archaeological study of hunter-gatherer societies. Primary emphasis on archaeological method and theory.
- **ANTY 459 - Arch of the Arctic/Subarctic**
 Credits: 3. Offered spring even-numbered years. Introduction to the study of Arctic and Subarctic archaeology emphasizing the Pleistocene and Holocene prehistory of North America and eastern Siberia. Understanding of methodological problems associated with archaeology in a northern context, the evolution of Inuit, Eskimo, Aleut and Athapaskan cultures, and hunter-gatherer adaptations to northern interior and coastal environments.
- **ANTY 465 - Arch of the SW United States**
 Credits: 3. Offered intermittently. The development of the prehistoric communities in the southwestern United States from ancient times to the dawn of history in the area.
- **ANTY 466 - Archaeological Survey**
 Credits: 1 TO 12. (R-12) Prereq., ANTY 250S and consent of instr. Offered autumn. A field course in Montana archaeology.
- **ANTY 467 - Archaeological Field School**
 Credits: 3 TO 12. (R-12) Offered summer. Prereq., ANTY 250S and consent of instructor. Provides students with a well-rounded experience in archaeological field methods. Field schools will typically occur at archaeological site locations away from campus. During the archaeological field experience, students may learn methods of excavation, survey, research, and analysis to facilitate their transition to careers as professional archaeologists.
- **ANTY 476 - Methods for Native Languages**
 Credits: 3. (R-6) Offered Spring. In an effort to highlight promising methodologies that will advance the success of Native language acquisition and instruction, students will be exposed to an innovative methodology while being instructed in an Indigenous language.
- **ANTY 491 - Special Topics**
 Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ANTY 492 - Independent Study**
 Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **ANTY 494 - Seminar/Workshop**
 Credits: 3. Offered spring. Advanced analysis of historical and contemporary issues involving human communities, cultures, and economies of a particular region, and that region's role in the world.
- **ANTY 495 - Field Experience:**
 Credits: 1 TO 12. (R- 12) Offered intermittently. Prereq., consent of instr. Organized field experience

in anthropology. **Course Attributes:** Internships/Practicums

- **ANTY 500 - Cont Anthro Thought**

Credits: 3. Offered autumn and spring. Prereq., graduate standing or consent of instructor. A review of major contributions to current anthropological theory, with an emphasis on the application of theory to anthropological problems. Significant advances in general theory, symbolic anthropology, critical theory, cultural studies, and postmodernism. Level: Graduate

- **ANTY 501 - Historical Anthropology**

Credits: 3. Offered spring even numbered years. The location, use, and value of written records in anthropological research. Level: Graduate

- **ANTY 502 - Curatorial & Archival Mgmt**

Credits: 3. Offered intermittently. Theory and practice in the curation of anthropological collections and the maintenance of anthropological information and records. Level: Graduate

- **ANTY 503 - Cultl Resrc Interpretation**

Credits: 3. Offered intermittently. Practice of presenting anthropological knowledge of cultural resources to the public, with an emphasis on writing. Level: Graduate

- **ANTY 510 - Sem Human Var & Evol**

Credits: 3. (R-6) Offered autumn. Prereq., ANTY 515. Various topics related to genetic evidence of human biological evolution, morphological and genetic diversity of modern humans, and problems of "race". Level: Graduate

- **ANTY 512 - Adv Forensic Anthropology**

Credits: 3. (R-6) Offered spring. Prereq., ANTY 515 and consent of instr. Review of traditional methods and exploration of new methods of skeletal analysis, as applied to cases from the forensic collection. Level: Graduate

- **ANTY 513 - Sem Bioarch & Skel Biol**

Credits: 3. (R-6) Offered spring. Prereq., ANTY 515 or consent of instructor. Theoretical and methodological approaches to the analysis of human skeletal remains derived from archaeological contexts. Demography, health and disease, diet and nutrition, growth, activity patterns, and measures of biological relatedness are interpreted within a biocultural framework. Level: Graduate

- **ANTY 514 - Sem Paleoanth & Evol Analy**

Credits: 3. (R-6) Offered intermittently. Prereq., ANTY 515 or consent of instructor. Exploration of selected aspects of the human fossil, archaeological, & genetic records and the theories and methods of evolutionary analysis used to analyze them. Level: Graduate

- **ANTY 515 - Theor & Meth in Bioanth**

Credits: 3. Offered autumn. A detailed review of the body of theory that is foundational for the study of human evolution, human variation, bioarchaeology, forensic anthropology, and primatology, along with a consideration of major methods used to analyze data in these fields. Level: Graduate

- **ANTY 520 - Seminar in Ethnology**

Credits: 3. (R-6) Offered autumn. A review and discussion of current research. Topics vary. Level: Graduate

- **ANTY 521 - Applied Anthropology**

Credits: 3. Offered spring odd-numbered years. Study of ways in which anthropological skills may be used in non-academic fields. Level: Graduate

- **ANTY 522 - Medical Anthropology**

Credits: 3. Offered spring even-numbered years. An examination of selected issues and trends in contemporary theory and methodology within medical anthropology. Seminar assignments and

discussions focus on understanding the application of anthropological concepts and methods in medical settings and are organized around several topics, including cultural conceptualizations of health, illness and risk; global health; the social and cultural construction of illness; drug and pharmaceutical use; and mental health in cultural context. Level: Graduate

- **ANTY 550 - Seminar in Archaeology**

Credits: 3. Offered autumn odd-numbered years. A review and discussion of current research. Topics vary. Level: Graduate

- **ANTY 551 - Seminar Historical Archaeology**

Credits: 3. Offered autumn odd-numbered years. An exploration of theories, methods, and literature in historical archaeology. Level: Graduate

- **ANTY 552 - Power, Prestige & Things**

Credits: 3. Offered autumn even-numbered years. Investigation of power, prestige, leadership, and inequality in past social systems as interpreted through artifacts and architecture. Level: Graduate

- **ANTY 553 - Evolutionary Archaeology**

Credits: 3. Offered intermittently. Examination of method and theory in Darwinian evolutionary archaeology. Seminar assignments and discussions focus on human behavioral ecology, cultural transmission, and macroevolution. Level: Graduate

- **ANTY 593 - Professional Project**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., consent of instr. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Faculty-Led Study Abroad

- **ANTY 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **ANTY 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **ANTY 597 - Research**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

- **ANTY 598 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing and consent of faculty supervisor. Practical application of classroom learning through internship in a number of areas such as museology, cultural resource management and forensics. Written reports are required. Level: Graduate **Course Attributes:** Internships/Practicums

- **ANTY 599 - Thesis**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

- **ANTY 600 - Issues Cultural Herit**

Credits: 3. Offered autumn. Prereq., consent of instr. Doctoral dissertation research activities. A review of the range of topics that fall under the umbrella of cultural heritage and a review of theory and practice in one or more of these topics. Level: Graduate

- **ANTY 601 - Resrch Design & Proposal Prep**

Credits: 3. Offered spring. Prereq., graduate standing. Seminar in the development of

anthropological research designs and proposals. Level: Graduate

- **ANTY 602 - Cultl Herit Policy & Pract**

Credits: 3. Offered spring odd-numbered years. Prereq., graduate standing. Exploration of critical issues in cultural heritage policy emphasizing the regulatory basis for federal CRM, public anthropology, and indigenous people's issues. Hands-on training in the design and production of federal planning documents. Level: Graduate

- **ANTY 694 - Seminar Cultural Heritage**

Credits: 1 TO 6. (R-6) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

- **ANTY 697 - Advanced Research**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Independent research projects, other than dissertation. Level: Graduate

- **ANTY 699 - Dissertation**

Credits: 1 TO 10. (R-10) Offered every term. Doctoral dissertation research activities. Level: Graduate

Criminal Justice

- **CJUS 125N - Fund of Forensic Science**

Credits: 3. Offered autumn and online spring. A survey of the forensic sciences and related disciplines and their use in criminal investigations, the role of forensic scientists in the investigative process and as expert witnesses. **Course Attributes:** Natural Science Course

- **CJUS 488 - Foren Sci: Beyond Crime Lab**

Credits: 3. Offered spring and online in autumn. Prereq., ANTH 286N or consent of instr. Examination of the forensic sciences with emphases on the non-crime lab forensic sciences, new technologies, and new directions in the forensic sciences.

English as a Second Language

- **EASL 195 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **EASL 250 - Interm Eng Acad Purpose I**

Credits: 3. Offered autumn and spring. Prereq., 525 to 549 on the Paper-Based TOEFL or equivalent. Concentration on academic tasks prompting comprehension of evidence offered to support opinion; gathering facts to be stated in narrative/descriptive patterns is emphasized as distinct from practicing summary exposition. This course is highly recommended to all international students with TOEFL scores between 525 and 549. Student Option Grade Mode (traditional or credit/no credit).

- **EASL 251 - Inter Eng Acad Purposes II**

Credits: 3. Offered autumn and spring. Prereq., 525 to 549 on the Paper-Based TOEFL or equivalent. Concentration on academic tasks guiding identification of main ideas underlying formal speech (broadcasts, lectures, interviews); recognition of intent of discussion and status of detail therein bearing on readings is emphasized. This course is highly recommended to all international students with TOEFL scores between 525 and 549. Student Option Grade Mode (traditional or credit/no credit).

- **EASL 450 - Adv Eng Acad Purposes I**

Credits: 3. Offered autumn and spring. Prereq., 550 to 574 on the Paper-Based TOEFL or equivalent. Concentration on academic tasks prompting the collection and comprehension of

evidence used to draw inferences regarding debatable issues; explanation of connection between evidence and inference is emphasized. This course is highly recommended to all international students with TOEFL scores between 550 and 574. Student Option Grade Mode (traditional or credit/no credit).

- **EASL 451 - Adv Eng Acad Purposes II**

Credits: 3. Offered autumn and spring. Prereq., 550 to 574 on the Paper-Based TOEFL or equivalent. Concentration on academic tasks obliging comprehension of main ideas/details furnished in spoken media (broadcasts, lectures, discussions); detection of intended message and essential facts related to readings is emphasized. This course is highly recommended to all international students with TOEFL scores between 550 and 574. Student Option Grade Mode (traditional or credit/no credit).

Historic Preservation

- **HPRV 400 - Historic Preservation**

Credits: 3. This course is intended to provide a comprehensive foundation to historic preservation practice and issues. Topics include the history and theory of the American historic preservation movement, identification and documentation of historic properties, preservation technology, strategies for conservation of historic resources and a critical examination of the philosophy and principles of preservation.

Linguistics

- **LING 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **LING 198 - Internship**

Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Course Attributes: Internships/Practicums Internship graduation limit 6

- **LING 270S - Intro to Ling**

Credits: 3. Offered autumn and spring. An introduction to the field of modern linguistics and to the nature of language. Emphasis on the ways different cultures develop symbol systems for representing meaning. **Course Attributes:** Social Sciences Course

- **LING 375X - Endangered Languages**

Credits: 3. Offered spring. Survey of endangered languages and the communities in which those endangered languages are spoken. Topics to be addressed include linguistic diversity, language endangerment, language shift and loss, language maintenance efforts, and prospects for the future of these languages. **Course Attributes:** Indigenous and Global

- **LING 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **LING 398 - Internship**

Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Course Attributes: Internships/Practicums Internship graduation limit 6

- **LING 465 - Structure & History of English**
 Credits: 3. Offered one per year. The development of the English language from a historical perspective contrasted with the phonological and grammatical structure of English from a modern linguistic point of view; specifically designed for teachers.
- **LING 466 - Pedagogical Grammar**
 Credits: 3. Offered intermittently. Prereq., LING 470. Discussion of English grammar from a non-native speaker perspective focusing on items and structures that are difficult for non-native speakers.
- **LING 470 - Linguistic Analysis**
 Credits: 3. Offered autumn and spring. An in-depth examination of the formal properties of language, concentrating on the core areas of linguistic analysis (phonetics, phonology, morphology, syntax and semantics).
- **LING 471 - Phonetics and Phonology**
 Credits: 3. Offered autumn. Prereq., LING 470. A study of phonetic and phonological systems from as many as 20 languages, most of them non-Indo-European; training in how to do linguistic analysis as well as linguistic theory. This course co-convenes with LING 571. **Course Attributes:**
 Co-Convened Course
- **LING 472 - Generative Syntax**
 Credits: 3. Offered autumn. Prereq., LING 470. This course is Co-convened with LING 572. A study of the human language sentence-formation system, the means for expressing semantic information as propositional content. Emphasis on the abstraction of utterances in the form of mathematical objects. This course co-convenes with LING 572. **Course Attributes:**
 Co-Convened Course
- **LING 473 - Language and Culture**
 Credits: 3. Offered spring. Prereq., LING 470. Technical study of the relationships between grammatical categories and world view. This course co-convenes with LING 573. **Course Attributes:** Writing Course-Upper-Division Co-Convened Course Writing Course-Advanced
- **LING 474 - Historical Linguistics**
 Credits: 3. Offered spring. Prereq., LING 470. An introduction to the study of language change over time. Topics include: methods for studying language change (the comparative method and internal reconstruction); types of language change (sound change, borrowing, analogical change, lexical, syntactic, and semantic change); and explanations for language change. The principles of historical reconstruction and comparative method in the analysis of linguistic variation and change. This course co-convenes with LING 574. **Course Attributes:** Co-Convened Course
- **LING 475 - Linguistic Field Methods**
 Credits: 3. Offered spring odd-numbered years. Prereq., LING 470. Writing up linguistic data; developing techniques for eliciting linguistic data by working with a native speaker of a less commonly taught language. This course co-convenes with LING 575. **Course Attributes:**
 Co-Convened Course
- **LING 477 - Bilingualism**
 Credits: 3. Offered autumn. Prereq., LING 270S or equiv. Societal and individual bilingualism: topics include language policy, maintenance, interference, code-switching and mixing, and bilingual education.
- **LING 478 - Second Language Development**
 Credits: 3. Offered spring. Prereq., LING 471 and 472 or consent of instructor. Like studies in Second Language (L2) Acquisition, this course considers Interlanguage (i.e., a language system that develops non-natively) and includes analysis of L2 data taken from naturalistic and experimental setting.

- **LING 480 - Tchg Engl as For Lang**
 Credits: 3. Offered autumn. Prereq., LING 270 or equiv. Same as ENLI 480. The application of principles of modern linguistics to the problems of teaching English as a foreign language.
- **LING 481 - The ESL Professional**
 Credits: 3. Offered intermittently. Prereq. or coreq., LING 491; prereq., LING 480 or consent of instr. Professional development techniques for the independent language teacher: language test construction, self-critique of teaching strategies, materials development, curriculum evaluation and design, and electronic and print media resources for the language teaching professional.
- **LING 484 - NA Indigenous Lang & Ling**
 Credits: 3. Offered spring even-numbered years. Prereq. LING 470. Description and analysis of grammatical features of Indigenous languages of North America. This course co-convenes with LING 584. **Course Attributes:** Writing Course-Upper-Division Co-Convened Course Writing Course-Advanced
- **LING 489 - Morphology**
 Credits: 3. Offered spring. Prereq., LING 470. A survey of the morphological features of several unrelated languages to provide the student with a broad overview of how languages compare and contrast. This course co-convenes with LING 589. **Course Attributes:** Co-Convened Course
- **LING 491 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums
- **LING 492 - Independent Study**
 Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Special projects in linguistic analysis.
- **LING 495 - ESL Practicum**
 Credits: 1 TO 3. Offered autumn and spring. Prereq., or coreq., LING 480. Offered every term. Same as ENLI 491. Students with a teaching major take the course for 3 credits; others take it for 1 credit and do one third of the work. **Course Attributes:** Internships/Practicums
- **LING 498 - Internship**
 Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6
- **LING 559 - Preceptorship**
 Credits: 1. (R-4) Offered autumn and spring. Prereq., consent of instr. Materials development, assessment and evaluation of learners' needs and interests in teaching English as an academic second Language to international students attending universities with English instruction. Level: Graduate
- **LING 570 - Seminar in Linguistics**
 Credits: 3. (R-12) Offered autumn and spring. Advanced topics in linguistic analysis. Level: Graduate
- **LING 571 - Phonetics and Phonology**
 Credits: 3. Offered autumn. A study of phonetic and phonological systems from as many as 20 languages, most of them non-Indo-European; training in how to do linguistic analysis as well as linguistic theory. This course co-convenes with LING 471. Graduate students taking LING 571 will complete additional requirements and their work will be of a more advanced nature. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 572 - Generative Syntax**

Credits: 3. Offered autumn. Prereq., LING 470 or equivalent. An inquiry in foundations of common human language sentence-formation system, understood as a type of mapping function (a computational world of calculations) that relates human utterances (the physical world of sound) and their propositions (the mental world of meaning). An emphasis on the abstraction of observable forms (cross-linguistic data) as prime mathematical objects. This course is Co-convened with LING 472. Graduate Requirements: weekly data-analysis problem-sets assigned to undergraduates plus additional exercises that extend several particular methods of analysis, consequently exploring the margins of generative-syntactic theory, which also includes one extra item on the midterm and final exams that complicates the theory, thus provoking the necessity for graduates to provide their observations of how these data confound the theory and to furnish plausible revisions to a theory of generative syntax as construed at that point during the course of the term. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 573 - Language and Culture**

Credits: 3. Offered spring. Technical study of the relationships between grammatical categories and world view. This course co-convenes with LING 473. Graduate students will complete additional requirements and their work will be of a more advanced nature. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 574 - Historical Linguistics**

Credits: 3. Offered spring. An introduction to the study of language change over time. Topics include: methods for studying language change (the comparative method and internal reconstruction); types of language change (sound change, borrowing, analogical change, lexical, syntactic, and semantic change); and explanations for language change. The principles of historical reconstruction and comparative method in the analysis of linguistic variation and change. This course co-convenes with LING 474. Graduate students will complete additional requirements and their work will be of a more advanced nature. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 575 - Linguistic Field Methods**

Credits: 3. Offered spring odd-numbered years. Writing up linguistic data; developing techniques for eliciting linguistic data by working with a native speaker of a less commonly taught language. This course co-convenes with LING 475. Graduate students will complete additional requirements and their work will be of a more advanced nature. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 584 - NA Indigenous Lang and Ling**

Credits: 3. Offered intermittently. Description and analysis of grammatical features of Indigenous languages of North America. This course co-convenes with LING 484. Graduate students will complete additional requirements and their work will be of a more advanced nature. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 589 - Morphology**

Credits: 3. Offered spring. A survey of the morphological features of several unrelated languages to provide the student with a broad overview of how languages compare and contrast. This course co-convenes with LING 489. Graduate students taking LING 589 will complete additional requirements and their work will be of a more advanced nature. Level: Graduate **Course Attributes:** Co-Convened Course

- **LING 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **LING 596 - Independent Study**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:**

Service Learning/Volunteer

- **LING 598 - Internship**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate
Attributes: Internships/Practicums

- **LING 599 - Professional Paper**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

- **LING 699 - Thesis**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Archaeology

Bachelor of Arts - Anthropology; Archaeology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: For a degree in Anthropology with an option in Archeology, student must complete all the general major requirements, including a total of nine credits of Archeology Option core requirements. Note that in addition to fulfilling option requirements these ANTY courses also fulfill certain major requirements.

Lower Division Core Courses

Rule: Complete all courses

Course	Credits
ANTY 210N - Intro to Physical Anthropology	3 Credits
ANTY 220S - Culture & Society	3 Credits
ANTY 250S - Intro to Archaeology	3 Credits
LING 270S - Intro to Ling	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: The student must complete six credits from one of the following allied disciplines (Biology, Geography, Geology) and six credits from one of the following allied disciplines (Computer Science, Environmental Studies, Forestry, History, Mathematical Sciences, or Native American Studies).

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Course	Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 403E - Ethics and Anthropology	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
LING 473 - Language and Culture	3 Credits
LING 484 - NA Indigenous Lang & Ling	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Rule: Complete one of the following

Course	Credits
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ANTY 312 - Human Evolution	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 403E - Ethics and Anthropology	3 Credits
ANTY 404 - Anthropological Museology	3 Credits
ANTY 415 - Emergence Modern Humans	3 Credits
ANTY 430 - Social Anthropology	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 456 - Historic Archaeology	3 Credits
ANTY 458 - Arch of Hunter-Gatherers	3 Credits
LING 470 - Linguistic Analysis	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Anthropological Methods

Rule: Complete one of the following

Course	Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 412 - Osteology	4 Credits
ANTY 413 - Forensic and Mortuary Arch	3 Credits
ANTY 416 - Dental Anthropology	3 Credits
ANTY 431 - Ethnographic Field Methods	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 454 - Lithic Technology	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
ANTY 466 - Archaeological Survey	1 To 12 Credits

ANTY 476 - Methods for Native Languages	3 Credits
ANTY 495 - Field Experience:	1 To 12 Credits
LING 474 - Historical Linguistics	3 Credits
LING 475 - Linguistic Field Methods	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 Subareas

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

Course	Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 133H - Food and Culture	3 Credits
ANTY 211N - Anthropological Genetics	3 Credits
ANTY 227 - Human Sexuality	3 Credits
ANTY 310 - Human Variation	3 Credits
ANTY 333 - Culture and Population	3 Credits
ANTY 417 - Adaptation & Nutritional Anth	3 Credits
ANTY 418 - Ecol Genet Var Human Pops	3 Credits
ANTY 426 - Culture, Health and Healing	3 Credits
LING 375X - Endangered Languages	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea III: World Societies and Cultures

Rule: Complete one of the following

—	Course	Credits
	ANTY 141H - The Silk Road	3 Credits
	ANTY 241H - Central Asian Culture and Civ	3 Credits
	ANTY 251H - Foundations of Civilization	3 Credits
	ANTY 254H - Arch Wonders of the World	3 Credits
	ANTY 323X - Native Peoples of Montana	3 Credits
	ANTY 330X - Peoples and Cultures of World	3 Credits
	ANTY 347 - Central Asia and Its Neighbors	3 Credits
	ANTY 351H - Archaeology of North America	3 Credits
	ANTY 352X - Archaeology of Montana	3 Credits
	ANTY 353 - PaleoIndian Archaeology	3 Credits
	ANTY 354H - Mesoamerican Prehistory	3 Credits
	ANTY 442 - Cities/Landscapes Central Asia	3 Credits
	ANTY 444 - Artistic Tradtns Central Asia	3 Credits
	ANTY 457 - Arch of the Pacific Northwest	3 Credits
	ANTY 459 - Arch of the Arctic/Subarctic	3 Credits
	ANTY 465X - Arch of the SW United States	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Subarea IV: Concepts and Issues

Rule: Complete one of the following

—	Course	Credits
	ANTY 216 - Primates in Peril	3 Credits
	ANTY 314 - Principles of Forensic Anthro	3 Credits

ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ANTY 336 - Myth, Ritual and Religion	3 Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
ANTY 422 - Mind, Culture and Society	3 Credits
ANTY 423 - Culture and Identity	3 Credits
ANTY 427 - Anthropology of Gender	3 Credits
ANTY 435 - Drugs, Culture and Society	3 Credits
ANTY 440 - Contemporary Issues of SE Asia	3 Credits
LING 473 - Language and Culture	3 Credits
LING 477 - Bilingualism	3 Credits
LING 484 - NA Indigenous Lang & Ling	3 Credits
LING 489 - Morphology	3 Credits
NASX 306X - Contemp Global Iss Indg People	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Archeology Core Courses

Rule: Complete one course from each of the 3 Archeology Core Courses Subcategories (Area, Theory, Methods)

Minimum Required Grade: C

9 Total Credits Required

Area

Rule: Complete one course

Course	Credits
ANTY 351H - Archaeology of North America	3 Credits
ANTY 352X - Archaeology of Montana	3 Credits
ANTY 353 - PaleoIndian Archaeology	3 Credits
ANTY 354H - Mesoamerican Prehistory	3 Credits

	ANTY 451 - Cultural Resource Management	3 Credits
	ANTY 457 - Arch of the Pacific Northwest	3 Credits
	ANTY 459 - Arch of the Arctic/Subarctic	3 Credits
	ANTY 465X - Arch of the SW United States	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Theory

Rule: complete one course

—	Course	Credits
	ANTY 450 - Archaeological Theory	3 Credits
	ANTY 456 - Historic Archaeology	3 Credits
	ANTY 458 - Arch of Hunter-Gatherers	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Methods

Rule: complete one course

—	Course	Credits
	ANTY 454 - Lithic Technology	3 Credits
	ANTY 455 - Artifact Analysis	3 Credits
	ANTY 466 - Archaeological Survey	1 To 12 Credits
	ANTY 467 - Archaeological Field School	3 To 12 Credits
Minimum Required Grade: C		3 Total Credits Required

Cultural and Ethnic Diversity

Bachelor of Arts - Anthropology; Cultural and Ethnic Diversity Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: For a degree in Anthropology with an option in Cultural and Ethnic Diversity, the student must meet all the general requirements for the major, including the four required courses for this option (ANTY 122S, ANTY 310, ANTY 423, and ANTY 330X). Note that in addition to fulfilling option requirements these ANTY courses also fulfill certain major requirements.

Lower Division Core Courses

Rule: Complete all courses

Course	Credits
ANTY 210N - Intro to Physical Anthropology	3 Credits
ANTY 220S - Culture & Society	3 Credits
ANTY 250S - Intro to Archaeology	3 Credits
LING 270S - Intro to Ling	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: The student must complete six credits, with adviser approval, in one of the following disciplines (Anthropology, History, or Sociology), and six upper-division credits in one of the following allied disciplines (African-American Studies, Central and Southwest Asian Studies, East Asian Studies, Latin American Studies, Native American Studies, or Women's and Gender Studies).

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Course	Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits

	ANTY 403E - Ethics and Anthropology	3 Credits
	ANTY 408 - Advanced Anthro Statistics	3 Credits
	ANTY 450 - Archaeological Theory	3 Credits
	ANTY 451 - Cultural Resource Management	3 Credits
	ANTY 455 - Artifact Analysis	3 Credits
	LING 473 - Language and Culture	3 Credits
	LING 484 - NA Indigenous Lang & Ling	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Rule: Complete one of the following

	Course	Credits
	ANTY 312 - Human Evolution	3 Credits
	ANTY 400 - History of Anthropology	3 Credits
	ANTY 403E - Ethics and Anthropology	3 Credits
	ANTY 404 - Anthropological Museology	3 Credits
	ANTY 415 - Emergence Modern Humans	3 Credits
	ANTY 430 - Social Anthropology	3 Credits
	ANTY 450 - Archaeological Theory	3 Credits
	ANTY 456 - Historic Archaeology	3 Credits
	ANTY 458 - Arch of Hunter-Gatherers	3 Credits
	LING 470 - Linguistic Analysis	3 Credits

Minimum Required Grade: C

3 Total Credits Required

Anthropological Methods

Rule: Complete one of the following

Course	Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 412 - Osteology	4 Credits
ANTY 413 - Forensic and Mortuary Arch	3 Credits
ANTY 416 - Dental Anthropology	3 Credits
ANTY 431 - Ethnographic Field Methods	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 454 - Lithic Technology	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
ANTY 466 - Archaeological Survey	1 To 12 Credits
ANTY 476 - Methods for Native Languages	3 Credits
ANTY 495 - Field Experience:	1 To 12 Credits
LING 474 - Historical Linguistics	3 Credits
LING 475 - Linguistic Field Methods	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 Subareas

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

Course	Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 133H - Food and Culture	3 Credits
ANTY 211N - Anthropological Genetics	3 Credits
ANTY 227 - Human Sexuality	3 Credits
ANTY 310 - Human Variation	3 Credits
ANTY 333 - Culture and Population	3 Credits
ANTY 417 - Adaptation & Nutritional Anth	3 Credits
ANTY 418 - Ecol Genet Var Human Pops	3 Credits
ANTY 426 - Culture, Health and Healing	3 Credits
LING 375X - Endangered Languages	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea III: World Societies and Cultures

Rule: Complete one of the following

Course	Credits
ANTY 141H - The Silk Road	3 Credits
ANTY 241H - Central Asian Culture and Civ	3 Credits
ANTY 251H - Foundations of Civilization	3 Credits
ANTY 254H - Arch Wonders of the World	3 Credits
ANTY 323X - Native Peoples of Montana	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
ANTY 347 - Central Asia and Its Neighbors	3 Credits
ANTY 351H - Archaeology of North America	3 Credits

ANTY 352X - Archaeology of Montana	3 Credits
ANTY 353 - PaleoIndian Archaeology	3 Credits
ANTY 354H - Mesoamerican Prehistory	3 Credits
ANTY 442 - Cities/Landscapes Central Asia	3 Credits
ANTY 444 - Artistic Tradtns Central Asia	3 Credits
ANTY 457 - Arch of the Pacific Northwest	3 Credits
ANTY 459 - Arch of the Arctic/Subarctic	3 Credits
ANTY 465X - Arch of the SW United States	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea IV: Concepts and Issues

Rule: Complete one of the following

Course	Credits
ANTY 216 - Primates in Peril	3 Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ANTY 336 - Myth, Ritual and Religion	3 Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
ANTY 422 - Mind, Culture and Society	3 Credits
ANTY 423 - Culture and Identity	3 Credits
ANTY 427 - Anthropology of Gender	3 Credits
ANTY 435 - Drugs, Culture and Society	3 Credits
ANTY 440 - Contemporary Issues of SE Asia	3 Credits
LING 473 - Language and Culture	3 Credits
LING 477 - Bilingualism	3 Credits

	LING 484 - NA Indigenous Lang & Ling	3 Credits
	LING 489 - Morphology	3 Credits
	NASX 306X - Contemp Global Iss Indg People	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Culultural and Ethnic Diversity Option Requirements

Rule: Complete all courses

—	Course	Credits
	ANTY 122S - Race and Minorities	3 Credits
	ANTY 310 - Human Variation	3 Credits
	ANTY 330X - Peoples and Cultures of World	3 Credits
	ANTY 423 - Culture and Identity	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Linguistics

Bachelor of Arts - Anthropology; Linguistics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Note: For a degree in Anthropology with an option in Linguistics the student must meet all the general requirements for the major, in addition to completing LING 470, LING 473, and two courses from the following: LING 375X, 471, 472, 474, 475, 477, 478, 484, or 489.

Lower Division Core Courses

Rule: Complete all courses

—	Course	Credits

ANTY 210N - Intro to Physical Anthropology	3 Credits
ANTY 220S - Culture & Society	3 Credits
ANTY 250S - Intro to Archaeology	3 Credits
LING 270S - Intro to Ling	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: Speak to your academic adviser for a full list of approved Anthropology or Cognate electives.

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Course	Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 403E - Ethics and Anthropology	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
LING 473 - Language and Culture	3 Credits
LING 484 - NA Indigenous Lang & Ling	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

*Anthropological Theory***Rule:** Complete one of the following

—	Course	Credits
	ANTY 312 - Human Evolution	3 Credits
	ANTY 400 - History of Anthropology	3 Credits
	ANTY 403E - Ethics and Anthropology	3 Credits
	ANTY 404 - Anthropological Museology	3 Credits
	ANTY 415 - Emergence Modern Humans	3 Credits
	ANTY 430 - Social Anthropology	3 Credits
	ANTY 450 - Archaeological Theory	3 Credits
	ANTY 456 - Historic Archaeology	3 Credits
	ANTY 458 - Arch of Hunter-Gatherers	3 Credits
	LING 470 - Linguistic Analysis	3 Credits
Minimum Required Grade: C		3 Total Credits Required

*Anthropological Methods***Rule:** Complete one of the following

—	Course	Credits
	ANTY 402 - Quan Ethnographic Field Methds	3 Credits
	ANTY 408 - Advanced Anthro Statistics	3 Credits
	ANTY 412 - Osteology	4 Credits
	ANTY 413 - Forensic and Mortuary Arch	3 Credits
	ANTY 416 - Dental Anthropology	3 Credits
	ANTY 431 - Ethnographic Field Methods	3 Credits

ANTY 451 - Cultural Resource Management	3 Credits
ANTY 454 - Lithic Technology	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
ANTY 466 - Archaeological Survey	1 To 12 Credits
ANTY 476 - Methods for Native Languages	3 Credits
ANTY 495 - Field Experience:	1 To 12 Credits
LING 474 - Historical Linguistics	3 Credits
LING 475 - Linguistic Field Methods	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 Subareas

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

Course	Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 133H - Food and Culture	3 Credits
ANTY 211N - Anthropological Genetics	3 Credits
ANTY 227 - Human Sexuality	3 Credits
ANTY 310 - Human Variation	3 Credits
ANTY 333 - Culture and Population	3 Credits
ANTY 417 - Adaptation & Nutritional Anth	3 Credits
ANTY 418 - Ecol Genet Var Human Pops	3 Credits
ANTY 426 - Culture, Health and Healing	3 Credits

LING 375X - Endangered Languages	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea III: World Societies and Cultures

Rule: Complete one of the following

Course	Credits
ANTY 141H - The Silk Road	3 Credits
ANTY 241H - Central Asian Culture and Civ	3 Credits
ANTY 251H - Foundations of Civilization	3 Credits
ANTY 254H - Arch Wonders of the World	3 Credits
ANTY 323X - Native Peoples of Montana	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
ANTY 347 - Central Asia and Its Neighbors	3 Credits
ANTY 351H - Archaeology of North America	3 Credits
ANTY 352X - Archaeology of Montana	3 Credits
ANTY 353 - PaleoIndian Archaeology	3 Credits
ANTY 354H - Mesoamerican Prehistory	3 Credits
ANTY 442 - Cities/Landscapes Central Asia	3 Credits
ANTY 444 - Artistic Tradtns Central Asia	3 Credits
ANTY 457 - Arch of the Pacific Northwest	3 Credits
ANTY 459 - Arch of the Arctic/Subarctic	3 Credits
ANTY 465X - Arch of the SW United States	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea IV: Concepts and Issues

Rule: Complete one of the following

—	Course	Credits
	ANTY 216 - Primates in Peril	3 Credits
	ANTY 314 - Principles of Forensic Anthro	3 Credits
	ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
	ANTY 336 - Myth, Ritual and Religion	3 Credits
	ANTY 349 - Social Change in NnWstrn Socts	3 Credits
	ANTY 422 - Mind, Culture and Society	3 Credits
	ANTY 423 - Culture and Identity	3 Credits
	ANTY 427 - Anthropology of Gender	3 Credits
	ANTY 435 - Drugs, Culture and Society	3 Credits
	ANTY 440 - Contemporary Issues of SE Asia	3 Credits
	LING 473 - Language and Culture	3 Credits
	LING 477 - Bilingualism	3 Credits
	LING 484 - NA Indigenous Lang & Ling	3 Credits
	LING 489 - Morphology	3 Credits
	NASX 306X - Contemp Global Iss Indg People	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Linguistics Option Requirements

Rule: Must complete the following subcategories

12 Total Credits Required

Option Requirements

Rule: Complete all courses

—	Course	Credits
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	LING 470 - Linguistic Analysis	3 Credits
	LING 473 - Language and Culture	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Option Electives

Rule: Complete 2 courses

	Course	Credits
	LING 375X - Endangered Languages	3 Credits
	LING 471 - Phonetics and Phonology	3 Credits
	LING 472 - Generative Syntax	3 Credits
	LING 474 - Historical Linguistics	3 Credits
	LING 475 - Linguistic Field Methods	3 Credits
	LING 477 - Bilingualism	3 Credits
	LING 478 - Second Language Development	3 Credits
	LING 484 - NA Indigenous Lang & Ling	3 Credits
	LING 489 - Morphology	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Medical Anthropology

Bachelor of Arts - Anthropology; Medical Anthropology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: For a degree in Anthropology with an option in Medical Anthropology, the student must meet all of the general requirements for the major, including completing ANTY 426, in addition to completing three of the following courses: ANTY 333, ANTY 336, NASX 338, ANTY 418, ANTY 422, or ANTY 435. Note that in addition to fulfilling option requirements these ANTY courses also fulfill certain major requirements.

Lower Division Core Courses

Rule: Complete all courses

Course	Credits
ANTY 210N - Intro to Physical Anthropology	3 Credits
ANTY 220S - Culture & Society	3 Credits
ANTY 250S - Intro to Archaeology	3 Credits
LING 270S - Intro to Ling	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: Speak to your academic adviser for a full list of approved Anthropology or Cognate electives.

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Course	Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 403E - Ethics and Anthropology	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 455 - Artifact Analysis	3 Credits

	LING 473 - Language and Culture	3 Credits
	LING 484 - NA Indigenous Lang & Ling	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Rule: Complete one of the following

—	Course	Credits
	ANTY 312 - Human Evolution	3 Credits
	ANTY 400 - History of Anthropology	3 Credits
	ANTY 403E - Ethics and Anthropology	3 Credits
	ANTY 404 - Anthropological Museology	3 Credits
	ANTY 415 - Emergence Modern Humans	3 Credits
	ANTY 430 - Social Anthropology	3 Credits
	ANTY 450 - Archaeological Theory	3 Credits
	ANTY 456 - Historic Archaeology	3 Credits
	ANTY 458 - Arch of Hunter-Gatherers	3 Credits
	LING 470 - Linguistic Analysis	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Anthropological Methods

Rule: Complete one of the following

—	Course	Credits
	ANTY 402 - Quan Ethnographic Field Methds	3 Credits

ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 412 - Osteology	4 Credits
ANTY 413 - Forensic and Mortuary Arch	3 Credits
ANTY 416 - Dental Anthropology	3 Credits
ANTY 431 - Ethnographic Field Methods	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 454 - Lithic Technology	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
ANTY 466 - Archaeological Survey	1 To 12 Credits
ANTY 476 - Methods for Native Languages	3 Credits
ANTY 495 - Field Experience:	1 To 12 Credits
LING 474 - Historical Linguistics	3 Credits
LING 475 - Linguistic Field Methods	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 Subareas

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

Course	Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 133H - Food and Culture	3 Credits
ANTY 211N - Anthropological Genetics	3 Credits
ANTY 227 - Human Sexuality	3 Credits

ANTY 310 - Human Variation	3 Credits
ANTY 333 - Culture and Population	3 Credits
ANTY 417 - Adaptation & Nutritional Anth	3 Credits
ANTY 418 - Ecol Genet Var Human Pops	3 Credits
ANTY 426 - Culture, Health and Healing	3 Credits
LING 375X - Endangered Languages	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea III: World Societies and Cultures

Rule: Complete one of the following

Course	Credits
ANTY 141H - The Silk Road	3 Credits
ANTY 241H - Central Asian Culture and Civ	3 Credits
ANTY 251H - Foundations of Civilization	3 Credits
ANTY 254H - Arch Wonders of the World	3 Credits
ANTY 323X - Native Peoples of Montana	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
ANTY 347 - Central Asia and Its Neighbors	3 Credits
ANTY 351H - Archaeology of North America	3 Credits
ANTY 352X - Archaeology of Montana	3 Credits
ANTY 353 - PaleoIndian Archaeology	3 Credits
ANTY 354H - Mesoamerican Prehistory	3 Credits
ANTY 442 - Cities/Landscapes Central Asia	3 Credits
ANTY 444 - Artistic Tradtns Central Asia	3 Credits

ANTY 457 - Arch of the Pacific Northwest	3 Credits
ANTY 459 - Arch of the Arctic/Subarctic	3 Credits
ANTY 465X - Arch of the SW United States	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea IV: Concepts and Issues

Rule: Complete one of the following

Course	Credits
ANTY 216 - Primates in Peril	3 Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ANTY 336 - Myth, Ritual and Religion	3 Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
ANTY 422 - Mind, Culture and Society	3 Credits
ANTY 423 - Culture and Identity	3 Credits
ANTY 427 - Anthropology of Gender	3 Credits
ANTY 435 - Drugs, Culture and Society	3 Credits
ANTY 440 - Contemporary Issues of SE Asia	3 Credits
LING 473 - Language and Culture	3 Credits
LING 477 - Bilingualism	3 Credits
LING 484 - NA Indigenous Lang & Ling	3 Credits
LING 489 - Morphology	3 Credits
NASX 306X - Contemp Global Iss Indg People	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Rule: Must complete the following subcategories

12 Total Credits Required

Option Requirements

Rule: Complete the following course

—	Course	Credits
	ANTY 426 - Culture, Health and Healing	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Option Electives

Rule: Complete 3 courses

—	Course	Credits
	ANTY 333 - Culture and Population	3 Credits
	ANTY 336 - Myth, Ritual and Religion	3 Credits
	ANTY 418 - Ecol Genet Var Human Pops	3 Credits
	ANTY 422 - Mind, Culture and Society	3 Credits
	ANTY 435 - Drugs, Culture and Society	3 Credits
	NASX 388 - Native Amer Health & Healing	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Anthropology Minor

Anthropology B.A.

Anthropology is an interconnected discipline and majors are urged to acquire a broad background especially in the natural and social sciences and the humanities. Recommended areas of study are biology, economics, English, geography, geology, history, communication studies, linguistics, Native American studies, philosophy, political science, psychology, religious studies, and sociology.

English as a Second Language Certificate

Certificate of Art - Engl as a Sec Lang

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Note: The Certificate is issued by the University upon the recommendation of the Linguistics Program and the Faculty Senate

Core Courses

Rule: Must complete the following subcategories

16 Total Credits Required

Required Courses

Rule: All courses are required

Note: Ling 495 ESL Practicum may be taken for 1 credit on a credit/no credit basis.

Course	Credits
LING 470 - Linguistic Analysis	3 Credits
LING 471 - Phonetics and Phonology	3 Credits
LING 472 - Generative Syntax	3 Credits
LING 480 - Tchg Engl as For Lang	3 Credits
LING 495 - ESL Practicum	1 To 3 Credits
Minimum Required Grade: C-	13 Total Credits Required

Core Options

Rule: Complete 1 of the following courses

—	Course	Credits
	LING 477 - Bilingualism	3 Credits
	LING 478 - Second Language Development	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Elective Courses

Rule: Complete 2 of the following courses

Note: Ling 477 or Ling 478 may be taken as an Elective if not taken as a Required Course.

—	Course	Credits
	LING 466 - Pedagogical Grammar	3 Credits
	LING 473 - Language and Culture	3 Credits
	LING 481 - The ESL Professional	3 Credits
	LING 489 - Morphology	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Forensic Anthropology

Bachelor of Arts - Anthropology; Forensic Anthropology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: For a degree in Anthropology with an option in Forensic Anthropology the student must meet all the general requirements for the major, including the completion of ANTY 310, ANTY 314, and ANTY 412 OR ANTY 413. Note that in addition to fulfilling option requirements these ANTY courses also fulfill certain major requirements.

Lower Division Core Courses

Rule: Complete all courses

Course	Credits
ANTY 210N - Intro to Physical Anthropology	3 Credits
ANTY 220S - Culture & Society	3 Credits
ANTY 250S - Intro to Archaeology	3 Credits
LING 270S - Intro to Ling	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: The student must complete CJUS 125N, and either SOCI 211S OR SOCI 221 for 6 of the required 12 elective credits. The student should work with the advisor to select other elective courses.

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Course	Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 403E - Ethics and Anthropology	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 451 - Cultural Resource Management	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
LING 473 - Language and Culture	3 Credits
LING 484 - NA Indigenous Lang & Ling	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Rule: Complete one of the following

Course	Credits
ANTY 312 - Human Evolution	3 Credits
ANTY 400 - History of Anthropology	3 Credits
ANTY 403E - Ethics and Anthropology	3 Credits
ANTY 404 - Anthropological Museology	3 Credits
ANTY 415 - Emergence Modern Humans	3 Credits
ANTY 430 - Social Anthropology	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 456 - Historic Archaeology	3 Credits
ANTY 458 - Arch of Hunter-Gatherers	3 Credits
LING 470 - Linguistic Analysis	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Anthropological Methods

Rule: Complete one of the following

Course	Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 408 - Advanced Anthro Statistics	3 Credits
ANTY 412 - Osteology	4 Credits
ANTY 413 - Forensic and Mortuary Arch	3 Credits

	ANTY 416 - Dental Anthropology	3 Credits
	ANTY 431 - Ethnographic Field Methods	3 Credits
	ANTY 451 - Cultural Resource Management	3 Credits
	ANTY 454 - Lithic Technology	3 Credits
	ANTY 455 - Artifact Analysis	3 Credits
	ANTY 466 - Archaeological Survey	1 To 12 Credits
	ANTY 476 - Methods for Native Languages	3 Credits
	ANTY 495 - Field Experience:	1 To 12 Credits
	LING 474 - Historical Linguistics	3 Credits
	LING 475 - Linguistic Field Methods	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 Subareas

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

	Course	Credits
	ANTY 122S - Race and Minorities	3 Credits
	ANTY 133H - Food and Culture	3 Credits
	ANTY 211N - Anthropological Genetics	3 Credits
	ANTY 227 - Human Sexuality	3 Credits
	ANTY 310 - Human Variation	3 Credits
	ANTY 333 - Culture and Population	3 Credits

ANTY 417 - Adaptation & Nutritional Anth	3 Credits
ANTY 418 - Ecol Genet Var Human Pops	3 Credits
ANTY 426 - Culture, Health and Healing	3 Credits
LING 375X - Endangered Languages	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea III: World Societies and Cultures

Rule: Complete one of the following

Course	Credits
ANTY 141H - The Silk Road	3 Credits
ANTY 241H - Central Asian Culture and Civ	3 Credits
ANTY 251H - Foundations of Civilization	3 Credits
ANTY 254H - Arch Wonders of the World	3 Credits
ANTY 323X - Native Peoples of Montana	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
ANTY 347 - Central Asia and Its Neighbors	3 Credits
ANTY 351H - Archaeology of North America	3 Credits
ANTY 352X - Archaeology of Montana	3 Credits
ANTY 353 - PaleoIndian Archaeology	3 Credits
ANTY 354H - Mesoamerican Prehistory	3 Credits
ANTY 442 - Cities/Landscapes Central Asia	3 Credits
ANTY 444 - Artistic Tradtns Central Asia	3 Credits
ANTY 457 - Arch of the Pacific Northwest	3 Credits
ANTY 459 - Arch of the Arctic/Subarctic	3 Credits

ANTY 465X - Arch of the SW United States	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subarea IV: Concepts and Issues

Rule: Complete one of the following

Course	Credits
ANTY 216 - Primates in Peril	3 Credits
ANTY 314 - Principles of Forensic Anthro	3 Credits
ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ANTY 336 - Myth, Ritual and Religion	3 Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
ANTY 422 - Mind, Culture and Society	3 Credits
ANTY 423 - Culture and Identity	3 Credits
ANTY 427 - Anthropology of Gender	3 Credits
ANTY 435 - Drugs, Culture and Society	3 Credits
ANTY 440 - Contemporary Issues of SE Asia	3 Credits
LING 473 - Language and Culture	3 Credits
LING 477 - Bilingualism	3 Credits
LING 484 - NA Indigenous Lang & Ling	3 Credits
LING 489 - Morphology	3 Credits
NASX 306X - Contemp Global Iss Indg People	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Forensic Anthropology Option

Rule: Must complete the following subcategories

15-16 Total Credits Required

Option Requirements

Rule: Complete the following courses

—	Course	Credits
	ANTY 310 - Human Variation	3 Credits
	ANTY 314 - Principles of Forensic Anthro	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Option Electives

Rule: Choose 1 of the following courses

—	Course	Credits
	ANTY 412 - Osteology	4 Credits
	ANTY 413 - Forensic and Mortuary Arch	3 Credits
Minimum Required Grade: C		3-4 Total Credits Required

Forensic Studies Certificate

The certificate in forensic studies is designed so that students may complete the requirements either as resident students at UM-Missoula or completely online through UM-Missoula's online facility.

To earn a certificate in forensic studies the student must complete a minimum of 18 credits, including 6 credits in core forensic science courses.

Certificate of Art - Forensic Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Note: The Certificate in Forensic Studies is primarily designed as a step toward a baccalaureate degree for those interested in a career in the forensic sciences or a related field. It is also designed as an avenue for law enforcement agents, forensic scientists, or other professionals in the justice system to satisfy mandatory continuing education requirements for continued employment or promotion.

Core Courses

Rule: All courses required.

Course	Credits
CJUS 125N - Fund of Forensic Science	3 Credits
CJUS 488 - Foren Sci: Beyond Crime Lab	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Science Electives

Rule: Must complete 6 credits

Note: To meet this requirement, students must complete six credits in courses listed above, or any courses with a suffix of "N" (courses that have been designated as University of Montana- Missoula General Education Group XI, Natural Sciences, courses in any department) in the following departments: Biology, Chemistry, Computer Science, Geology, Physics, or Psychology. Any Criminology courses offered through the Sociology department also count towards meeting this requirement. Courses numbered under 100 may not be counted toward meeting this requirement.

Course	Credits
ANTY 210N - Intro to Physical Anthropology	3 Credits
ANTY 450 - Archaeological Theory	3 Credits
ANTY 454 - Lithic Technology	3 Credits
ANTY 455 - Artifact Analysis	3 Credits
ANTY 456 - Historic Archaeology	3 Credits
ANTY 458 - Arch of Hunter-Gatherers	3 Credits
ANTY 466 - Archaeological Survey	1 To 12 Credits
ANTY 467 - Archaeological Field School	3 To 12 Credits
ENSC 105N - Environmental Science	3 Credits
PHAR 110N - Use & Abuse of Drugs	3 Credits
SCI 225N - General Physical/Chem Sci	5 Credits
SCI 226N - General Earth/Life Science	5 Credits
SOCI 101S - Introduction to Sociology	3 Credits
STAT 216 - Introduction to Statistics	4 Credits

Minimum Required Grade: C

6 Total Credits Required

Communication Elective

Rule: Must complete a 3 credit course

Note: To meet this requirement, student must complete one, 3-credit course related to written, oral, or pictorial communication, including selected courses in Art, Curriculum & Instruction, Communication Studies, Computer Science, English, Forestry, Journalism, Linguistics, and Media Arts. Courses numbered under 100 may not be counted toward meeting this requirement.

Minimum Required Grade: C

3 Total Credits Required

Ethics Elective

Rule: Must complete a 3 credit course

Note: To meet this requirement, student must complete one, 3-credit course that has been designated as a University of Montana - Missoula General Education Group VIII (Ethics and Human Values) course in any department.

Minimum Required Grade: C

3 Total Credits Required

Historic Preservation Certificate

Historic Preservation is the interdisciplinary field that seeks to identify, document, preserve and protect significant structures, sites and landscapes.

Certificate of Applied Science - Historic Preservation

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Note: Historic Preservation is the interdisciplinary field that seeks to identify, document, preserve and protect significant structures, sites and landscapes. To earn a certificate in historic preservation the student must complete a minimum of 21 credits.

Core Courses

Rule: must complete all courses

Course	Credits
ANTY 451 - Cultural Resource Management	3 Credits

	ANTY 456 - Historic Archaeology	3 Credits
	GPHY 465 - Planning Princ & Processes	3 Credits
	HPRV 400 - Historic Preservation	3 Credits
	THTR 335H - Architectural History	3 Credits
Minimum Required Grade: C		15 Total Credits Required

History Electives

Rule: Must complete three credits

	Course	Credits
	HSTA 320 - Birth of Modern US	3 Credits
	HSTA 321 - America in Crisis	3 Credits
	HSTA 322 - American History: WWII to Pres	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Internship or Independent Study

Rule: Must complete three credits

Note: Internship must be with an approved, appropriate preservation-based agency or focused on an approved preservation-based topic.

	Course	Credits
	ANTY 398 - Internship	1 To 6 Credits
	ANTY 492 - Independent Study	1 To 6 Credits
Minimum Required Grade: C		3 Total Credits Required

Linguistics Minor

Minor - Linguistics (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Note: To earn a Minor in Linguistics, students must complete 18 credits beyond their major degree requirements.

Upper Division Core Courses

Rule: Complete the following subcategories of courses

9 Total Credits Required

Core Course

Rule: Must complete the following course

—	Course	Credits
	LING 470 - Linguistic Analysis	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Additional Core Courses

Rule: Must complete 2 of the following 3 courses

—	Course	Credits
	LING 471 - Phonetics and Phonology	3 Credits
	LING 472 - Generative Syntax	3 Credits
	LING 489 - Morphology	3 Credits
	Minimum Required Grade: C	6 Total Credits Required

Elective Courses

Rule: Must complete 3 of the following courses

Note: Please note: neither LING 270S nor LING 465 may be taken after LING 470. In addition, only 1 of LING 270S and LING 465 may be counted towards the minor. LING 471, LING 472, and LING 489 may be taken as an elective, if not taken as a required core course.

—	Course	Credits
	LING 270S - Intro to Ling	3 Credits

	LING 375X - Endangered Languages	3 Credits
	LING 465 - Structure & History of English	3 Credits
	LING 466 - Pedagogical Grammar	3 Credits
	LING 471 - Phonetics and Phonology	3 Credits
	LING 472 - Generative Syntax	3 Credits
	LING 473 - Language and Culture	3 Credits
	LING 474 - Historical Linguistics	3 Credits
	LING 475 - Linguistic Field Methods	3 Credits
	LING 477 - Bilingualism	3 Credits
	LING 478 - Second Language Development	3 Credits
	LING 484 - NA Indigenous Lang & Ling	3 Credits
	LING 489 - Morphology	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Applied Science B.A.

Lynn Stocking, Advisor

The Bachelor of Applied Science program is available to students completing an Associate of Applied Science degree program at a regionally accredited institution. The Missoula College section of the University of Montana-Missoula catalog identifies Associate of Applied Science degree programs offered at The University of Montana.

Students considering a B.A.S. degree program must have completed an accredited A.A.S. degree program with a 2.50 grade point average. Because approval of a B.A.S. degree plan is required, students considering such a degree must meet with a designated B.A.S. advisor to identify a degree plan, to create a Degree Program Committee, and to identify the procedure required for degree plan approval.

Students are urged to begin the application process one semester prior to the completion of an AAS degree if the degree is in process.

Bachelor of Applied degree students must meet all the University of Montana requirements for graduation. Fifty credits from an accredited A.A.S. program will count toward the total credits required for graduation. Student earning this degree will receive a diploma identifying the degree of Bachelor of Applied Science without designation of an area of concentration.

Bachelor of Applied Science - Applied Science

Catalog Year: 2014-2015

Degree Specific Credits: 127

Required Cumulative GPA: 2.0

Symbolic System/Foreign Language

Rule: Students must complete either a Symbolic System OR a Foreign Language.

Minimum Required Grade: C-

3-10 Total Credits Required

Symbolic Systems

Rule: Successful completion of 1 course from the list below.

Note: Prerequisites apply for all courses listed above; some courses from this list are major-restricted. Other baccalaureate major-specific Symbolic Systems may be used in lieu of course list above; speak with your advisor for more information.

Course	Credits
M 136 - Math for K-8 Teachers II	4 Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
PSYX 222 - Psychological Statistics	3 Credits
SOCI 202 - Social Statistics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Foreign Language

Rule: Successful completion of first-year sequence of a Modern and Classical Language (MCLL).

Note: A first-year sequence consists of 101 & 102 courses (5 credits each) for all MCLL majors except Irish; 101, 102, & 103 courses of Irish (3 credits each) must be completed. Students may take placement test to demonstrate proficiency to receive non-credit exemption from this requirement. Speak with your advisor for more information.

Writing Skills

Rule: Both WRIT 101 AND an Approved Writing Course are required.

Note: NOTE: Students who place into and successfully complete WRIT 201 are considered to have satisfied both the WRIT 101 and the Lower-Division Approved Writing Course General Education Requirements.

Minimum Required Grade: C-

6 Total Credits Required

WRIT 101

Rule: Take 1 of the courses below.

Note: Appropriate placement into WRIT 101/201 required. Prerequisites may apply.

Course	Credits
WRIT 101 - College Writing I	3 Credits
WRIT 201 - College Writing II	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

Perspectives

Rule: A minimum of 3 credits towards each Perspective Category is required.

Note: Some courses satisfy multiple Perspectives or GER Categories. Some courses in the area(s) of concentration may overlap with Perspective or other GER categories; visit with your advisor for more information.

Minimum Required Grade: C-

27 Total Credits Required

Expressive Arts (A)

Rule: A minimum of three credits is required.

Literary & Artistic Studies (L)

Rule: A minimum of three credits is required.

Historical & Cultural Studies (H)

Rule: A minimum of three credits is required.

Social Sciences (S)

Rule: A minimum of three credits is required.

Ethical & Human Values (E)

Rule: A minimum of three credits is required.

American & European Perspectives (Y)

Rule: A minimum of three credits is required.

Indigenous & Global Perspectives (X)

Rule: A minimum of three credits is required.

Natural Sciences (N)

Rule: A minimum of six credits is required. At least one course must have a laboratory component.

Mathematics

Rule: Any Mathematics course level 104 or higher (excluding M 111 Technical Mathematics).

Note: Appropriate placement into mathematics courses required. Prerequisites may apply. If a student successfully places into and completes a mathematics (either "M" or "STAT") course that is also considered a Symbolic System, that course may be used to count towards both the Mathematics and Symbolic Systems General Education Requirements.

Minimum Required Grade: C-

3-4 Total Credits Required

Upper-Division Credit Requirement

Rule: 39 upper-division courses required for UM GERs. At least 30 of the 39 upper-division credits must be from the degree area(s) of concentration.

Note: null

39 Total Credits Required

Upper-Division Writing

Rule: At least one upper-division writing course is required for UM GERs.

Note: This course may overlap with area(s) of concentration selected or total Upper-Division Credits.

3 Total Credits Required

AAS Degree Credits

Rule: Up to 50 credits earned from AAS may be counted towards the 127 required for the BAS.

Minimum Required Grade: C-

38-50 Total Credits Required

Applied Science

Biochemistry

Bruce E. Bowler, Program Director

The Biochemistry Program is a joint program between the Department of Chemistry and Biochemistry and the Division of Biological Sciences. Biochemistry is an interdisciplinary science that integrates chemistry and biology to understand the molecular basis of life. The program offers a B.S. in Biochemistry and M.S. and Ph.D. degrees in Biochemistry & Biophysics.

Undergraduate majors receive a solid foundation in both chemistry and biology. Biochemistry courses are usually taken in the junior year allowing majors to become involved in research with faculty and to take electives in their senior year. The major also introduces students to computer science and bioinformatics, essential tools in modern biochemistry. The B.S. in Biochemistry prepares students for advanced degrees in biochemistry or biophysics, for medical, dental or veterinary schools and for careers in the pharmaceutical and biotechnology industries. A Health Professions option is also offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry. This option allows more flexibility in upper division electives, permitting students to tailor the degree to their needs.

The graduate degrees in Biochemistry & Biophysics prepare students to be independent researchers in academic laboratories or in the biotechnology and pharmaceutical industries. Through coursework and independent research, graduate students in this program will become adept at the physical and structural methods necessary to probe important problems in the life sciences at the molecular level. In collaboration with the Center for Biomolecular Structure & Dynamics, the Biochemistry Program provides state-of-the-art facilities for research in biochemistry, biophysics and structural biology.

Prospective students desiring further information on these degrees should contact the Program Director by visiting the [Biochemistry Program web site](#).

High School Preparation: In addition to the general University admission requirements, it is strongly recommended that a student take four years of mathematics, four years of science, and a foreign language.

Department Faculty

Professor

Bruce Bowler, Professor and Director, Biochemistry Program
J. Stephen Lodmell, Professor
J.B. Alexander (Sandy) Ross, Dean of the Graduate School and Professor of Chemistry and Biochemistry
D. Scott Samuels, Professor
Stephen Sprang, Professor, DBS & Director, CBSD
Kent Sugden, Professor of Chemistry and Biochemistry

Associate Professor

Klara Briknarova, Associate Professor
Bradley Layton, Energy Technology Program Director/Associate Professor
Douglas Raiford, Computer Science Department Chair, Bioinformatics, Modeling, Machine Learning, Pattern Recognition, Data Science

Assistant Professor

Kasper Hansen, Assistant Professor
Brent Ryckman, Assistant Professor
Valeriy Smirnov, Assistant Professor
Ekaterina Voronina, Assistant Professor
Travis Wheeler, Assistant Professor

Research Faculty

Brooke Martin

Emeritus

Walter Hill, Professor Emeritus

Course Descriptions

Biochemistry

- **BCH 110 - Intro Biology for Biochemists**
Credits: 3. Offered spring. Prereq. CHMY 141N or equivalent. Prereq. or Coreq., CHMY 143N. Coreq., BCH 111. An introductory course that explores biomolecules and their roles in life processes. Provides a foundation for Cellular and Molecular Biology (BIOB 260), Genetics and Evolution (BIOB 272), Introductory Biochemistry Seminar (BCH 294), and many other advanced science courses.
- **BCH 111 - Intro Biol for Biochemists Lab**
Credits: 1. Offered spring. Prereq., CHMY 141N or equivalent. Prereq., or Coreq., CHMY 143N. Coreq., BCH 110. Introduction to the experimental techniques used to study biomolecules and their roles in life processes. Provides a foundation for other advanced level laboratory courses in chemistry and biochemistry.
- **BCH 294 - Seminar/Workshop**
Credits: 1. Offered spring. Prereq., BCH 110/111 or equivalent. An introduction to important advances in biochemistry through readings from the primary literature and discussion of this literature. Faculty members will also make presentations on their research. Graded credit/no credit.
- **BCH 380 - Biochemistry**
Credits: 4. Offered autumn and spring. Prereq., CHMY 223 or BIOB 260. Fundamental biochemistry; chemistry and metabolism of biomolecules, energy relationships in metabolism; storage, transmission, and expression of genetic information. Credit not allowed for both BCH 380 and 480-482.
- **BCH 480 - Advanced Biochemistry I**
Credits: 3. Offered autumn. Prereq., CHMY 223. Primarily for science majors. The chemistry of biomolecules, with emphasis on the structure and function of proteins, carbohydrates, lipids and nucleic acids. The chemistry and regulation of the transfer and expression of genetic information, protein synthesis. Credit not allowed for both BCH 380 and 480-482.
- **BCH 482 - Advanced Biochemistry II**
Credits: 3. Offered spring. Prereq., BCH 480 or equiv. Continuation of BCH 480. Enzyme kinetics, metabolism, especially macromolecule biosyntheses and energy acquisition pathways, and the associated energetics and molecular physiology. Credit not allowed for both BCH 380 and BCH 480-482.

- **BCH 486 - Biochemistry Research Lab**
 Credits: 3. Offered spring. Prereq., BCH 380 or 480. Applications of biochemical principles to modern protein biochemistry. Basic micro- and molecular biology techniques are used to produce mutant proteins; then students learn basic and advanced biophysical techniques to characterize the mutant proteins.
- **BCH 490 - Undergraduate Research**
 Credits: 1 TO 10. (R-10) Offered every term. Prereq., junior or senior standing and consent of instr. Independent research under the direction of a faculty member. **Course Attributes:**
 Research & Creative Schlrshp
- **BCH 491 - Special Topics**
 Credits: 1 TO 10. (R-10) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **BCH 499 - Senior Thesis/Capstone**
 Credits: 3 TO 6. (R-6) Offered every term. Prereq., senior standing and consent of instr. Preparation of a thesis or manuscript based on undergraduate research for presentation and/or publication. Student must give an oral or poster presentation at the Undergraduate Research Symposium or a scientific meeting.
- **BCH 547 - Exptl Mol/Cell/Chem Biol**
 Credits: 1. (R-8) Offered every term. Prereq., graduate standing or consent of instr. Same as BIOB 547. Focus on experimental design, methods, and presentation of experimental results for graduate students in laboratories with a molecular, cellular or chemical biological focus. Level: Graduate
- **BCH 561 - RNA Structure & Function**
 Credits: 1. (R-8) Offered every semester. Prereq., BCH 482, BIOB 260, and consent of instr. Exploration of current scientific literature and new data that focuses on RNA biochemistry. Emphasis on literature relevant to research on RNA viruses and ribosomes and protein synthesis. Level: Graduate
- **BCH 570 - Intro to Research**
 Credits: 1. Offered autumn and spring. Prereq., graduate standing. Required course for Biochemistry and Biophysics graduate students. Students are acquainted with faculty research projects. Instruction in basic research techniques, research equipment. Introduction to relevant scientific research literature. Level: Graduate
- **BCH 581 - Physical Biochemistry**
 Credits: 3. Offered spring odd-numbered years. Prereq., CHMY 360 or CHMY 373 or CHMY 371; BCH 480. Techniques of physical chemistry used in studying biological structure and function of macromolecules. Emphasis is on spectroscopic methods, hydrodynamic methods and x-ray and other scattering and diffraction techniques. Level: Graduate
- **BCH 582 - Proteins and Enzymes**
 Credits: 3. Offered autumn even-numbered years. Prereq., BCH 482 or equivalent. An investigation into the structure/function relationship in proteins and a detailed exploration of enzyme kinetics, using examples from current literature. Level: Graduate
- **BCH 584 - Nucleic Acids**
 Credits: 3. Offered autumn odd-numbered years. Prereq., BCH 482 or equivalent. Emphasis on critical reading of current literature that investigates structure, chemistry, and function of nucleic acids. Level: Graduate
- **BCH 595 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing and consent of instr. Experimental offering of new courses by resident or visiting faculty. Level: Graduate **Course**

Attributes: Internships/Practicums

- **BCH 597 - Research**

Credits: 1 TO 18. (R-18) Offered intermittently. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate

- **BCH 599 - Thesis**

Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., master's student in biochemistry and biophysics. Laboratory research for and preparation of a master's thesis. Level: Graduate

- **BCH 600 - Cell Organization & Mechanisms**

Credits: 3. Offered spring even-numbered years. Prereq., BCH 480 or consent of instr. Same as BMED 600. Primary literature exploration of the regulation of structure, function, and dynamics of eukaryotic cells. Topics include membranes, cytoskeleton, transcription, translation, signal transduction, cell motility, cell proliferation, and programmed cell death. Level: Graduate

- **BCH 694 - Biochemistry & Biophysics Seminar**

Credits: 1. (R-10) Credit/No credit only. Offered Autumn and Spring. Prereq., graduate standing or consent of instructor. Presentation of current research in Structural Biology, Biochemistry, Biophysics, or related fields by invited outside speakers, UM faculty, and senior graduate students. Level: Graduate

- **BCH 699 - Dissertation**

Credits: 1 TO 20. (R-20) Offered intermittently. Prereq., doctoral student in biochemistry. Laboratory research for and preparation of a doctoral dissertation. Level: Graduate

Biochemistry B.S.

The Biochemistry Program is a joint program between the Department of Chemistry and Biochemistry and the Division of Biological Sciences. Biochemistry is an interdisciplinary science that integrates chemistry and biology to understand the molecular basis of life. The program offers a B.S. in Biochemistry and M.S. and Ph.D. degrees in Biochemistry & Biophysics.

Undergraduate majors receive a solid foundation in both chemistry and biology. Biochemistry courses are usually taken in the junior year allowing majors to become involved in research with faculty and to take electives in their senior year. The major also introduces students to computer science and bioinformatics, essential tools in modern biochemistry. The B.S. in Biochemistry prepares students for advanced degrees in biochemistry or biophysics, for medical, dental or veterinary schools and for careers in the pharmaceutical and biotechnology industries. A Health Professions option is also offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry. This option allows more flexibility in upper division electives, permitting students to tailor the degree to their needs.

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Prospective students desiring further information on these degrees should contact the Program Director by visiting the Biochemistry Program web site: <http://www.cas.umd.edu/chemistry/biochemistryProgram/>.

Bachelor of Science - Biochemistry

Catalog Year: 2014-2015

Degree Specific Credits: 96

Required Cumulative GPA: 2.0

Lower Division Core

Rule: Must complete the following subcategories

54 Total Credits Required

Biochemistry

Rule: All of the following courses are required

—	Course	Credits
	BCH 110 - Intro Biology for Biochemists	3 Credits
	BCH 111 - Intro Biol for Biochemists Lab	1 Credits
	BCH 294 - Seminar/Workshop	1 Credits
Minimum Required Grade: C-		5 Total Credits Required

Biology

Rule: All of the following courses are required

—	Course	Credits
	BIOB 260 - Cellular and Molecular Biology	4 Credits
	BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

General and Organic Chemistry

Rule: All of the following courses are required

—	Course	Credits
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	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		20 Total Credits Required

Physics

Rule: All of the following courses are required

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Mathematics

Rule: All of the following courses are required

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Computer Science

Rule: The following course is required

Note: We advise that students take CSCI 250 in their third year after completing lower division biochemistry, biology, chemistry, mathematics and physics coursework.

—	Course	Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core

Rule: Must complete the following subcategories

29 Total Credits Required

Biochemistry

Rule: All of the following courses are required

—	Course	Credits
	BCH 480 - Advanced Biochemistry I	3 Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Biology

Rule: The following course is required

—	Course	Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Analytical Chemistry

Rule: All of the following courses are required

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 421 - Advanced Instrument Analysis	4 Credits

Minimum Required Grade: C-

8 Total Credits Required

Inorganic Chemistry

Rule: The following course is required

—	Course	Credits
	CHMY 401 - Advanced Inorganic Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Chemistry

Rule: Choose 1 of the following courses

Note: Students planning to attend graduate school in biochemistry or biophysics are strongly advised to take the CHMY 373-371 sequence

—	Course	Credits
	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Computer Science

Rule: The following course is required

—	Course	Credits
	CSCI 451 - Computational Biology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Advanced Electives

Rule: Choose 13 credits from the courses listed

Note: No more than 3 credits combined of BIOB 490, CHMY 490, CHMY 498 and BCH 490. No more than 3 credits combined of CHMY 397 and CHMY 494.

—	Course	Credits
	BCH 490 - Undergraduate Research	1 To 10 Credits
	BIOB 301 - Developmental Biology	3 Credits

BIOB 375 - General Genetics	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOB 440 - Biological Electron Microscopy	2 Credits
BIOB 486 - Genomics	3 Credits
BIOB 490 - Adv Undergrad Research	1 To 10 Credits
BIOH 360 - Intro Neuroscience	3 Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits
BIOH 370 - Human AP II for Health Profsns	4 Credits
BIOH 405 - Hematology	3 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits
BIOM 400 - Medical Microbiology	3 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 411 - Exprmntl Microbial Genetcs Lab	1 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 428 - General Parasitology Lab	2 Credits
BIOM 435 - Virology	3 Credits
CHMY 371 - Phys Chem-Qntm Chm & Spctrscopy	4 Credits
CHMY 397 - Teaching Chemistry	1 Credits
CHMY 402 - Advanced Inorganic Chem Lab	2 Credits
CHMY 403 - Descriptive Inorganic Chem	3 Credits
CHMY 442 - Aquatic Chemistry	3 Credits
CHMY 465 - Organic Spectroscopy	3 Credits

	CHMY 466 - FT-NMR Optn for Undrgrd Rsrch	1 Credits
	CHMY 485 - Laboratory Safety	1 Credits
	CHMY 490 - Undergraduate Research	1 To 9 Credits
	CHMY 494 - Seminar/Workshop	1 To 9 Credits
	CHMY 498 - Internship/Cooperative Educ	1 To 6 Credits
	PHAR 421 - Medicinal Chem I	3 Credits
	PHAR 422 - Medicinal Chem II	3 Credits
Minimum Required Grade: C-		13 Total Credits Required

Biochemistry Health Professions

The B.S. in Biochemistry prepares students for advanced degrees in biochemistry or biophysics, for medical, dental or veterinary schools and for careers in the pharmaceutical and biotechnology industries. A Health Professions option is also offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry. This option allows more flexibility in upper division electives, permitting students to tailor the degree to their needs.

Bachelor of Science - Biochemistry; Health Professions Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 99

Required Cumulative GPA: 2.0

Lower Division Core

Rule: Must complete the following subcategories

50 Total Credits Required

Biochemistry

Rule: All of the following courses are required

—	Course	Credits
	BCH 110 - Intro Biology for Biochemists	3 Credits
	BCH 111 - Intro Biol for Biochemists Lab	1 Credits
	BCH 294 - Seminar/Workshop	1 Credits
Minimum Required Grade: C-		5 Total Credits Required

Biology

Rule: All of the following courses are required

—	Course	Credits
	BIOB 260 - Cellular and Molecular Biology	4 Credits
	BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

General and Organic Chemistry

Rule: All of the following courses are required

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		20 Total Credits Required

Physics

Rule: Either the PHSX 205N-208N or the PHSX 215N-218N sequence may be completed

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Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
PHSX 215N - Fund of Physics w/Calc I	4 Credits
PHSX 216N - Physics Laboratory I w/Calc	1 Credits
PHSX 217N - Fund of Physics w/Calc II	4 Credits
PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Mathematics

Rule: Either the M162/M274 sequence or the M171/M172 sequence may be completed

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
M 172 - Calculus II	4 Credits
M 274 - Intro to Differential Equation	3 Credits
Minimum Required Grade: C-	7-8 Total Credits Required

Upper Division Core

Rule: Must complete the following subcategories

25 Total Credits Required

Biochemistry

Rule: All of the following courses are required

Course	Credits
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	BCH 480 - Advanced Biochemistry I	3 Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Microbiology

Rule: All of the following courses are required

—	Course	Credits
	BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
	BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits
Minimum Required Grade: C-		5 Total Credits Required

Analytical Chemistry

Rule: All of the following courses are required

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 421 - Advanced Instrument Analysis	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Inorganic Chemistry

Rule: The following course is required

—	Course	Credits
	CHMY 401 - Advanced Inorganic Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Chemistry

Rule: Choose 1 of the following courses

—	Course	Credits
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	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Advanced Electives

Rule: Choose 21 credits from the courses listed

Note: No more than 3 credits combined of BIOB 490, CHMY 490, CHMY 498 and BCH 490. No more than 3 credits combined of CHMY 397 and CHMY 494.

Course	Credits
BCH 486 - Biochemistry Research Lab	3 Credits
BCH 490 - Undergraduate Research	1 To 10 Credits
BIOB 301 - Developmental Biology	3 Credits
BIOB 375 - General Genetics	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOB 440 - Biological Electron Microscopy	2 Credits
BIOB 486 - Genomics	3 Credits
BIOB 490 - Adv Undergrad Research	1 To 10 Credits
BIOH 360 - Intro Neuroscience	3 Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits
BIOH 370 - Human AP II for Health Profsns	4 Credits
BIOH 405 - Hematology	3 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOM 400 - Medical Microbiology	3 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 411 - Exprmntl Microbial Genetcs Lab	1 Credits

	BIOM 427 - General Parasitology	2 Credits
	BIOM 428 - General Parasitology Lab	2 Credits
	BIOM 435 - Virology	3 Credits
	CHMY 371 - Phys Chem-Qntm Chm & Spctrscopy	4 Credits
	CHMY 397 - Teaching Chemistry	1 Credits
	CHMY 402 - Advanced Inorganic Chem Lab	2 Credits
	CHMY 403 - Descriptive Inorganic Chem	3 Credits
	CHMY 442 - Aquatic Chemistry	3 Credits
	CHMY 465 - Organic Spectroscopy	3 Credits
	CHMY 466 - FT-NMR Optn for Undrgrd Rsrch	1 Credits
	CHMY 485 - Laboratory Safety	1 Credits
	CHMY 490 - Undergraduate Research	1 To 9 Credits
	CHMY 494 - Seminar/Workshop	1 To 9 Credits
	CHMY 498 - Internship/Cooperative Educ	1 To 6 Credits
	PHAR 421 - Medicinal Chem I	3 Credits
	PHAR 422 - Medicinal Chem II	3 Credits
Minimum Required Grade: C-		21 Total Credits Required

Ethics

Rule: Complete the following course

	Course	Credits
	CHMY 302E - Chem Lit and Science Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Biological Sciences

Charles H. Janson, Associate Dean for the Biological Sciences

The Division of Biological Sciences offers undergraduate and graduate programs representing the full range of the biological sciences. The Division offers bachelor degrees in Biology (with a broad array of formal options described in more detail below), Medical Technology, Microbiology including microbial ecology, Wildlife Biology (a cooperative program administered by the College of Forestry and Conservation), and Biochemistry (an interdepartmental degree administered by the Chemistry Department). The Division also advises students in pre-health sciences and offers a series of summer field courses at the University's Flathead Lake Biological Station (<http://www2.umt.edu/flbs/>). The Flathead Lake Biological Station is a year-round academic center in ecological sciences, located 85 miles north of Missoula near Kalispell and Glacier National Park. The Division is one of the leading research units in the University. Research programs in the Division provide abundant opportunities for students to enhance their educational experience by participating in mentored research. Several sources of funding are available to support undergraduate student research, and the Division participates in the University of Montana Conference on Undergraduate Research each spring.

Graduate degrees offered by the Division of Biological Sciences include both Master's of Science and Doctor of Philosophy degrees in Cellular, Molecular and Microbial Biology (CMMB), in Organismal Biology and Ecology (OBE), and Systems Ecology (SE). The Division also participates in the graduate (M.S. and Ph.D.) program in Wildlife Biology, administered by the College of Forestry and Conservation and in the Ph.D. program in Biochemistry and Biophysics, administered by the Chemistry Department. Information on graduate study and program requirements is available from the Graduate School or the Division of Biological Sciences.

The Division offers a Bachelor's degree in **Biology** that provides a solid foundation in core areas of the biological sciences and in supporting physical sciences and mathematics. Several options are provided within the biology degree:

Cellular and molecular biology: For students interested in the cellular and molecular aspects of biology, and for students interested in health-related professions.

Ecology and organismal biology: For students interested in the biology of organisms (plants and animals) and populations or communities, and for students interested in veterinary school.

Field ecology: For students interested in field-based ecology. Students with this option spend one or two summers taking field courses at the Flathead Lake Biological Station.

Genetics and evolution: For students interested in all aspects of genetics, as well as evolutionary biology, and for students interested in health-related professions.

Human biological sciences: Provides a strong background in the biological sciences for students interested in pursuing further study in a health sciences professional program.

Natural history: For students who would like to combine basic natural history and biological sciences with another field such as art, journalism, or creative writing.

Biological Education and General Sciences Broadfield: Two separate options designed for students interested in a career teaching biology or all sciences at the secondary level.

The Division also offers a Bachelor's degree in **Microbiology**. Microbiology is the study of microorganisms, including the bacteria, yeasts, molds, viruses, protozoa and other microscopic parasites. The Bachelor's degree in Microbiology is offered as a general degree or with an option in microbial ecology. The general option emphasizes microbial structure, function, and interactions and relationships with humans. The microbial ecology option emphasizes microbial structure, function, and interactions and relationships with the environment and other organisms.

The Division also offers a Bachelor's degree in **Medical Technology** (Michael Minnick, Professor of Microbiology, Advisor). Medical Technology or clinical laboratory science is a combined study of chemistry, physiology and microbiology (see <http://www.umt.edu/medtech/>). A medical technologist performs chemical, microscopic, and microbiological procedures used in the diagnosis, study and treatment of disease. Medical technologists are in high demand in hospital labs, clinical labs, research institutions and government health departments. Certification is required for clinical practice.

To be certified by the Board of Registry, a student, after satisfying the minimum course requirements, serves a clinical practicum of at least 12 consecutive months in an approved school of medical technology endorsed by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) or American Society of Clinical Pathology (ASCP) of the American Medical Association. After completing a clinical practicum and passing the Registry exam, the student receives a diploma from the Board of Registry with the professional designation of Medical Technologist M.T. ASCP.

The University of Montana has two coursework options for the medical technology degree. The 3+1 option includes the practicum at one of our affiliated programs as part of the degree, while the practicum is not included in the 4+1 option.

Degree requirements for all three majors and courses are described below (see the College of Forestry and Conservation for information about Wildlife Biology and the Biochemistry Program in the College of Humanities and Sciences about Biochemistry).

The Division of Biological Sciences is committed to providing coursework and experiences for non-science majors. The world faces many problems and opportunities that include significant biological components. Courses for non-science majors have the goal of fostering understanding of the process of science and enhancing biological knowledge as it relates to environmental, medical, social, and other issues. A number of introductory courses are open both to majors and non-majors. In addition, the Division offers courses designed specifically for non-majors: Microbiology for Health Sciences, Introductory Ecology, Survey of Montana Wildlife and Habitats, and others.

Department Faculty

Professor

Creagh Breuner, Professor
Ragan Callaway, Professor
Chris Comer, Dean / Professor
Kenneth Dial, Professor
Douglas Emlen, Professor
Willard Granath Jr., Professor
Erick Greene, Professor
F. Richard Hauer, UM Director-Institute on Ecosystems
Jesse Hay, Professor
William Holben, Professor
Charles Janson, Associate Dean / Professor
J. Stephen Lodmell, Professor
Gordon Luikart, Professor of Conservation Ecology and Genetics
John Maron, Professor
Michael Minnick, Professor
Jack Nunberg, Professor and Director of MBC
Frank Rosenzweig, Professor
Anna Sala, Professor
D. Scott Samuels, Professor
Stephen Sprang, Professor, DBS & Director, CBSD
Jack Stanford, Bierman Professor & Director of Flathead Lake Biological Station
H. Maurice Valett, Professor of Systems Ecology, Director - Systems Ecology Intercollegiate Graduate Program

Associate Professor

Lila Fishman, Associate Professor
Mark Grimes, Associate Professor
Winsor Lowe, Associate Professor
Scott Miller, Associate Professor
Bret Tobalske, Associate Professor, Director Field Research Station
Scott Wetzel, Associate Professor
Art Woods, Associate Professor

Assistant Professor

Sarah Certel, Assistant Professor
Zachary Cheviron, Assistant Professor
Jeffrey Good, Assistant Professor
John McCutcheon, Assistant Professor

Brent Ryckman, Assistant Professor
Ekaterina Voronina, Assistant Professor

Lecturer

Heather Labbe, Lecturer
Laurie A. Minns, Lecturer, Division of Biological Sciences
Kevin Murray, Lecturer

Research Faculty

Jim Battisti
Dan Drecktrah, Assistant Research Professor
Bonnie Ellis, Assistant Research Professor
Matthew Herron, Research Assistant Professor
John S. Kimball, Research Professor
Evgueny Kroll, Research Assistant Professor
Penelope Kukuk, Retired Research Professor
Jean-Marc Lanchy, Research Assistant Professor
Erin Landguth, Assistant Research Professor
Mark Lorang, Associate Research Professor
Tung-Chung Mou, Assistant Research Professor
Daniel Mummey
Dean Pearson, Research Ecologist - USFS
Barbara Wright, Retired Research Professor

Affiliates

Ashley Ballantyne, Assistant Professor of Bioclimatology
Len Broberg, Professor
Barry Brown
James Burchfield, Professor of Forest Social Sciences
Cory Cleveland, Associate Professor of Terrestrial Ecosystem Ecology
Robert Crabtree, Research Associate Professor
Solomon Dobrowski, Associate Professor of Forest Landscape Ecology
Lisa Eby, Associate Professor of Aquatic Vertebrate Ecology
Kelsey Jencso, Assistant Professor, Watershed Hydrologist
Ulrich Kamp, Professor
Anna Klene, Associate Professor
Henriette Lowisch, Associate Professor
Thomas E Martin, DBS Associated Faculty
Alexander L. Metcalf, Research Assistant Professor
Elizabeth Covelli Metcalf, Assistant Professor of Recreation Management and Human Dimensions of Natural Resources
Jakki Mohr, Professor
Clint Muhlfeld, Research Assistant Professor
Helen Naughton, Associate Professor
Cara Nelson, Associate Professor of Restoration Ecology; Undergraduate Program Director, Ecological Restoration
Alison Perkins, Adjunct Professor
Douglas Raiford, Computer Science Department Chair, Bioinformatics, Modeling, Machine Learning, Pattern Recognition, Data Science
Jeff Renz, Clinical Professor
Steve Running, Regents Professor of Ecology; Director, Numerical Terradynamics Simulation Group
Diana Six, Professor of Forest Entomology/Pathology; Chair, Department of Ecosystems & Conservation Sciences
Linda Vance, Senior Ecologist/Spatial Analysis Lab Director
Vicki Watson, Professor

Fred Allendorf, Regents Professor Emeritus
Kerry Foresman, Professor Emeritus
James Gannon, Professor Emeritus
Walter Hill, Professor Emeritus
Richard Hutto, Professor Emeritus

Course Descriptions

Biology-General

- **BIOB 101N - Discover Biology**

Credits: 3. Offered every term. Contemporary exploration of the organization and complexity of living organisms and the systems in which they live. The central question of biology--relationship between form and function, acquisition and use of energy, and continuity between generations will be addressed through lectures and laboratory investigations. Credit not allowed toward a major in biology. Credit not allowed for both BIOB 101N and BIOB 160N. **Course Attributes:**
Natural Science Lab Course

- **BIOB 130N - Evolution and Society**

Credits: 3. Offered spring. A focus on relationships between evolutionary biology and important social issues, including the evolution of drug-resistant diseases, the construction and use of genetically-modified organism, human evolutionary biology, and experimental laboratory evolution. **Course Attributes:** Natural Science Course

- **BIOB 160N - Principles of Living Systems**

Credits: 4. Offered autumn and summer. Unifying principles of biological structure-function relationships at different levels of organization and complexity. Consideration of reproduction, genetics, development, evolution, ecosystems, as well as the inter-relationships of the human species to the rest of life. Lab experiences illustrate biological principles underlying growth, reproduction, development, genetics and physiology. Credit not allowed for both BIOB 101N and 160N. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **BIOB 170N - Princpls Biological Diversity**

Credits: 3. Offered spring and summer. Survey of the diversity, evolution and ecology of life including prokaryotes, viruses, protista, fungi, plants and animals. **Course Attributes:**
Natural Science Course

- **BIOB 171N - Princpls Biological Dvrsty Lab**

Credits: 2. Offered spring and summer. Coreq., BIOB 170N. The diversity of life including prokaryotes, viruses, protista, fungi, plants and animals including structure and evolutionary relationships. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **BIOB 191 - Special Topics**

Credits: 1 TO 6. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOB 191N - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Internships/Practicums Natural Science Course

- **BIOB 198 - Internship**

Credits: 1 TO 6. Prereq., consent of Division. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the

faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **BIOB 226N - Gen Science: Earth & Life Sci**

Credits: 5. Offered spring. Prereq., PHSX 225N and M 132 or M 135 or equiv. Integrated lectures, laboratory exercises, and field trips on topics in earth and biological science for prospective elementary school teachers and the non-scientist. A two-hour laboratory session is required each week and one or two Saturday field trips. **Course Attributes:** Natural Science Lab Course

- **BIOB 260 - Cellular and Molecular Biology**

Credits: 4. Offered autumn and summer. Prereq. BIOB 160N (preferred) or BCH 110/111 (preferred) or B- or higher in BIOH 112; and either CHMY 123 or CHMY 143. Analytical exploration of the structure and function of the cell, the fundamental unit of life, with an emphasis on energy transformations and information flow. Topics include molecular building blocks, membranes, organelles, and mechanisms of replication, gene expression, metabolism, signal transduction, cell birth, cell death, and cell differentiation.

- **BIOB 272 - Genetics and Evolution**

Credits: 4. Offered spring. Prereq., either BIOB 260 OR both BIOB 160N and BIOB 170N/171N; and one of M 121, 122, 151, 162, or 171. Principles and mechanisms of inheritance and evolution. Population genetics, fossil record, macroevolution, speciation, extinction, systematics, molecular evolution.

- **BIOB 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOB 298 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of Division. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **BIOB 301 - Developmental Biology**

Credits: 3. Offered autumn. Prereq., BIOB 260; BIOB 272 recommended. An analysis of the origin and development of form and patterns in organisms, stressing the processes of growth and differentiation in plants and animals. Graded traditional letter grade only.

- **BIOB 375 - General Genetics**

Credits: 3. Offered spring. Prereq., BIOB 260 and 272. This course will focus on the molecular genetics of eukaryotes, with special emphasis on transmission genetics and gene structure and regulation.

- **BIOB 390 - Undergrad Research**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit. **Course Attributes:** Research & Creative Schlrshp

- **BIOB 391 - Special Topics**

Credits: 1 TO 10. (R-10) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOB 392 - Independent Study**

Credits: 1 TO 10. (R-10) Offered every term. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOB 398 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., consent of the Division. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **BIOB 410 - Immunology**

Credits: 3. Offered autumn. Prereq., BIOB 260. Current concepts and methods in Immunology.

- **BIOB 411 - Immunology Laboratory**

Credits: 2. Offered autumn. Coreq., BIOB 410. Modern techniques for analysis of immune responses.

- **BIOB 425 - Adv Cell & Molecular Biology**

Credits: 3. Offered spring. Prereq., BIOB 260 and 272; BCH 380 strongly recommended. Cell structure and function, cell cycle, cellular signaling, molecular basis of cancer, regulated cell death, membrane transport, organelle dynamics, cytoskeleton, cell adhesion, and the molecular basis of learning and memory.

- **BIOB 440 - Biological Electron Microscopy**

Credits: 2. Offered spring. Prereq., senior standing or consent of instr. Theory of electron microscopy, recent developments in transmission and scanning electron microscopy. Limited experience with the instruments.

- **BIOB 468 - Endocrinology**

Credits: 3. Offered alternate years. Prereq., BIOB 260 and 272. Integration of fundamental concepts of endocrinology (such as hormone release, hormone transport and receptor activation) into complex systems (such as reproduction).

- **BIOB 480 - Conservation Genetics**

Credits: 3. Offered intermittently. Prereq., BIOB 272. Genetic basis for solving biological problems in conservation including the genetics of small populations, the application of molecular genetic techniques to conservation biology and case studies of the application of genetics to conservation problems.

- **BIOB 483 - Phylogenics and Evolution**

Credits: 3. Offered alternating spring semesters. Prereq., BIOB 260 and BIOB 272. Phylogenies, or evolutionary trees, provide insights into the history of life on Earth, including our own origins. This course focuses on the theoretical foundations of popular methods of reconstructing phylogenies from molecular sequence data and how to implement these methods with computational software for real data sets. Other current methods for testing evolutionary hypotheses with sequence data will also be introduced.

- **BIOB 486 - Genomics**

Credits: 3. Offered autumn. Prereq., BIOB 272. Principles and mechanisms of genome biology of animals and microbes, including genome function, evolution, and basic molecular and computational methodology used in genome biology.

- **BIOB 490 - Adv Undergrad Research**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., junior or senior standing and consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit. **Course Attributes:** Research & Creative Schlrshp

- **BIOB 491 - Special Topics**

Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOB 492 - Independent Study**
 Credits: 1 TO 10. Offered every term. Prereq., consent of instr. Independent work under the University omnibus option. See index. **Course Attributes:** Omnibus Course
- **BIOB 494 - Seminar in Biology**
 Credits: 1. (R-3) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.
- **BIOB 498 - Internship**
 Credits: 1 TO 6. Offered every term. Prereq., consent of the Division. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6
- **BIOB 499 - Undergraduate Thesis**
 Credits: 3 TO 6. (R-6) Offered every term. Prereq., senior standing and consent of instr. Preparation of a thesis or manuscript based on undergraduate research for presentation and/or publication. Student must give oral or poster presentation at the Biological Sciences Undergraduate Research Symposium or a scientific meeting. Graded credit/no credit.
- **BIOB 501 - Grad Issues and Policies**
 Credits: 1. Prereq., graduate standing in biological sciences. Discussion of issues of importance to new graduate students, including the philosophy of graduate education, the mentor-student relationship, the role of the teaching assistant, handling ethical quandaries, library resources and bibliographic searches, animal use policies and issues, proposal writing and the publication process. Review of ongoing research by faculty in the organismal biology and ecology program. Level: Graduate
- **BIOB 505 - OBE Core Course - Genetics and Evolution**
 Credits: 3. Offered alternate years. Prereq., graduate standing. Exploration of the fundamental concepts and approaches in evolutionary biology and evolutionary genetics. Lectures and discussions, with an emphasis on primary literature, classic and contemporary. Level: Graduate
- **BIOB 506 - OBE Core Course - Ecology**
 Credits: 3. Offered alternate years. Prereq., graduate standing. Broad overview of population and community ecology. Lectures and discussions, introducing theoretic foundations and exploring classic and more recent empirical tests of theory. Level: Graduate
- **BIOB 507 - OBE Core Course - Organismal Function**
 Credits: 3. Offered alternate years. Prereq., graduate standing. Exploration of the physical and chemical mechanisms that underlie the relationship between form and function in organisms. Lectures and discussions are pursued using a comparative, ecological and evolutionary framework. Level: Graduate
- **BIOB 513 - Community Ecology**
 Credits: 3. Offered alternate years. Prereq., BIOE 370 or equiv., consent of instr. Current concepts of species interactions, succession, food webs, temporal and spatial patterns and quantitative characterization of community structure. Level: Graduate
- **BIOB 517 - Adv Plant Ecology**
 Credits: 3. Prereq., upper-division course in ecology or consent of instr. Offered alternate years. Review and discussion of recent advances in plant ecology. Level: Graduate
- **BIOB 518 - Plant-Consumer Interactions**
 Credits: 3. Offered alternate years. Prereq. BIOE 370 or equiv. Ecology and evolution of plant-consumer interactions. Review of classic and contemporary literature on plant-consumer interactions. Level: Graduate

- **BIOB 522 - Rdgs Morph, Phys, and Zool**
Credits: 1. (R-8) Prereq., graduate standing and consent of instr. Review and discussion of current literature in the fields of morphology, physiology, and ecology. Level: Graduate
- **BIOB 524 - Physiological Plant Ecology**
Credits: 3. Offered alternate years. Prereq., BIOE 370 and BIOO 433. The physiological basis of plant adaptation and response to the environment. Level: Graduate
- **BIOB 526 - Trends in Plant Ecology**
Credits: 2. (R-16) Prereq., graduate standing. Current concepts, theory, and experiments in plant ecology. Level: Graduate
- **BIOB 541 - Electron Microscopy Lab**
Credits: 1 TO 6. (R-6) Prereq. or coreq., BIOB 440 or equiv. Practical laboratory experience in the preparation of various samples and hands-on operation of the transmission and/or scanning electron microscopes. Level: Graduate
- **BIOB 547 - Exptl Mol/Cell/Chem Biol**
Credits: 1. (R-8) Offered every term. Prereq., graduate standing or consent of instr. Focus on experimental design, methods, and presentation of experimental results for graduate students in laboratories with a molecular, cellular or chemical biological focus. Level: Graduate
- **BIOB 551 - Environmental Field Study**
Credits: 1 TO 3. (R-3) Prereq. or coreq., ENSC 540 or ENST 560. Same as ENSC 551. Designing, executing, and interpreting environmental studies. Project oriented. Level: Graduate
- **BIOB 561 - Population Genetics Seminar**
Credits: 1 TO 2. (R-12) Prereq., consent of instr. or graduate standing. Current topics in population genetics, evolutionary biology, molecular evolution and related topics. Level: Graduate
- **BIOB 565 - Membrane Dynamics Res Sem**
Credits: 1. (R-8) Offered every term. Prereq., graduate standing or consent of instr. Focus on experimental design, methods, and presentation of experimental results for students conducting research in membrane cell biology, including membrane trafficking and intracellular signaling. Level: Graduate
- **BIOB 594 - Seminar in Biology**
Credits: 1. (R-6) Prereq., graduate standing or consent of instr. A review and discussion of current research in biology. Topics vary. Level: Graduate
- **BIOB 595 - Special Topics**
Credits: 1 TO 4. (R-8) Prereq., graduate standing and consent of instr. Experimental offering of new courses by resident or visiting faculty. Level: Graduate **Course Attributes:**
Internships/Practicums
- **BIOB 596 - Independent Study**
Credits: 1 TO 8. (R-8) Prereq., consent of instr. Credit for independent research project unrelated to thesis or dissertation. Level: Graduate **Course Attributes:** Service Learning/Volunteer
- **BIOB 597 - Research**
Credits: 1 TO 8. (R-12) Prereq., consent of instr. Library work involved with preparation of a thesis or dissertation proposal. Level: Graduate
- **BIOB 598 - Internship**
Credits: 1 TO 8. (R-8) Prereq., consent of the Division, graduate standing. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

- **BIOB 599 - Thesis**
Credits: 1 TO 10. (R-10) Prereq., masters student in biology. Field and laboratory research on, and writing of, a student's master's thesis. Level: Graduate
- **BIOB 699 - Dissertation**
Credits: 1 TO 10. (R-20) Prereq., doctoral student in biology. Credit for field and laboratory research on, and writing of, a student's doctoral dissertation. Level: Graduate

Biology - Ecological

- **BIOE 172N - Introductory Ecology**
Credits: 3. Offered autumn. An introduction to ecological principles, stressing the structure and function of natural communities and examining human's role in these ecosystems. **Course Attributes:** Natural Science Course
- **BIOE 342 - Field Ecology**
Credits: 5. Offered summers only at Flathead Lake Biological Station. Prereq., BIOB 272 and one year of college math, including statistics. The principles and practices of the study of animals and plants in their natural environments, including human influences, with focus on the Crown of the Continent area of the Rock Mountains and taught entirely outdoors.
- **BIOE 370 - General Ecology**
Credits: 3. Offered autumn. Prereq., BIOB 272. Analysis of the distribution and abundance of plants and animals. Includes individual, population and community-level processes (e.g., population growth and regulation, competition, predation, succession, nutrient cycling, energy flow and community organization).
- **BIOE 371 - Gen Ecology Lab (equiv to 271)**
Credits: 2. Offered autumn. Prereq. or Coreq., BIOE 370 and either STAT 216 or WILD 240. Methods of describing and testing alternative explanations for patterns in nature. The use of scientific methodology in ecology.
- **BIOE 394 - Seminar/Workshop**
Credits: 2. Offered autumn. Preparatory readings and attendance at seminars on a wide variety of ecological and wildlife management topics followed by critiques.
- **BIOE 403 - Vert Design & Evolution**
Credits: 5. Offered spring. Prereq., BIOB 170N, 171N and 272 and PHSX 205N/206N or 215N/216N. Evolutionary patterns of animal morphology and the importance of body size on life history patterns. Phylogenetic study of major extant and extinct vertebrate groups. Laboratory includes systematic study of organ systems and workshops in experimental functional morphology.
- **BIOE 406 - Behavior & Evolution**
Credits: 3. Offered autumn. Prereq., BIOB 272. Diversity of animal behavior in an evolutionary context including inheritance of behavior, diets, avoidance responses, mating systems and sexual selection, parental care, and evolution of animal groups and societies.
- **BIOE 409 - Behavior & Evolution Discussion**
Credits: 1. Offered autumn. Co-req., BIOE 406. Diversity of animal behavior in an evolutionary context including inheritance of behavior, diets, avoidance responses, mating systems and sexual selection, parental care, and evolution of animal groups and societies. This discussion course complements the lectures of BIOE 406 by examining both landmark and recent literature. It also includes a written component.
- **BIOE 416 - Alpine Ecology**
Credits: 3. Offered summers only at Flathead Lake Biological Station. Prereq., BIOE 342 or BIOE 370/371. Distribution, abundance and life cycles of plants and animals and their unique

ecophysiological adaptations to life in the rigorous environments of the high mountains above the timberline, with emphasis on the Crown of the Continent area.

- **BIOE 428 - Freshwater Ecology**

Credits: 5. Offered autumn. Prereq., BIOB 160N and either CHMY 123N or 143N. Physical and chemical dynamics of lakes and streams. Diversity, distribution and dynamics of freshwater organisms.

- **BIOE 439 - Stream Ecology**

Credits: 3. Offered summers only at Flathead Lake Biological Station. Prereq., BIOE 342 or BIOE 370/371, CHMY 121N. The biota and biogeochemical processes of running waters with unifying principles and contemporary research approaches.

- **BIOE 440 - Conservation Ecology**

Credits: 3. Offered summers only at Flathead Lake Biological Station. Prereq., BIOE 342 or BIOE 370/371. Concepts and approaches for sustaining biodiversity and other natural goods and services provided by terrestrial and aquatic systems.

- **BIOE 447 - Terrestrial Ecosystem Ecology**

Credits: 3. Offered alternate years. Prereq., BIOB 160N and any ecology-themed course or consent of instr. Introduction to systems thinking and the ecosystem concept, review of water and energy balance, carbon cycling and production processes, nutrient cycling, trophic dynamics, and species effects on ecosystem functioning.

- **BIOE 448 - Terrestrial Plant Ecology**

Credits: 4. Offered autumn. Prereq., an introductory college course in ecology. The interrelationships between plants and plant communities and their natural environment.

- **BIOE 449 - Plant Biogeography**

Credits: 3. Prereq., consent of instr. Offered alternate years. Description of the distribution of plants and animals at global, continental and regional scales. Analysis of ecological and historical factors influencing distribution and association.

- **BIOE 451 - Landscape Ecology**

Credits: 3. Offered summers only at Flathead Lake Biological Station. Prereq., BIOE 342 or BIOE 370/371. Biophysical processes that determine landscape and ecosystem structure and function using remote sensing tools, geographic information systems and dynamic models to demonstrate landscape change.

- **BIOE 453 - Ecology of Small & Large Lakes**

Credits: 3. Offered summers only at Flathead Lake Biological Station. Prereq., BIOE 342 or BIOE 370/371, CHMY 121N and CHMY 123N. The physical, chemical and biological characteristics of lake ecosystems with an emphasis on nutrient cycling, food web interactions and water quality.

- **BIOE 458 - Forest and Grassland Ecol**

Credits: 3. Offered summers only at Flathead Lake Biological Station. Prereq., BIOE 342 or BIOE 370/371. Patterns and processes of the forests and grasslands of the northern Rocky Mountains in the context of principles of population community and ecosystem ecology.

- **BIOE 490 - Adv Undergrad Research**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., junior or senior standing and consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit.

- **BIOE 594 - Seminar**

Credits: 1 TO 4. (R-12). Offered intermittently. Prereq. graduate standing. Presentations by student, faculty, and associates on issues and topics in their field. Level: Graduate

Biology-Human

- **BIOH 112 - Human Form and Function I**

Credits: 3. Offered autumn. Explores the fundamentals of structure and function at basic cellular and tissue levels, in addition to the anatomy and physiology of the integumentary, musculoskeletal, and nervous systems.

- **BIOH 113 - Human Form and Function II**

Credits: 3. Offered spring. Explores the fundamental structures and functions of the endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems.

- **BIOH 191 - Special Topics**

Credits: 1 TO 6. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOH 280 - From Molecules to Mind - Fundamentals of Neuroscience**

Credits: 3. Course will focus on the molecular and cellular underpinnings of the functions of the brain and nervous system. The topics will range from the basis of electrical and chemical signaling to the organization of the sensory systems and mechanisms involved in learning, memory, and complex behaviors.

- **BIOH 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOH 365 - Human AP I for Health Profsns**

Credits: 0 TO 4. Offered autumn and summer. Prereq., CHMY 121N or CHMY 141N; BIOB 160N or BIOH 112 or 113. Introduction to basic cellular structure and function. The fundamental facts and concepts of the anatomy and physiology of cells and tissues, the integumentary, musculoskeletal, nervous and special senses with an emphasis on clinical application for students preparing for careers in health care. Laboratory component includes presentation of cadaver prosections and models.

- **BIOH 370 - Human AP II for Health Profsns**

Credits: 0 TO 4. Offered spring. Prereq., BIOH 365. The fundamental facts and concepts of the anatomy and physiology of the endocrine, circulatory, respiratory, digestive, urinary and reproductive systems with an emphasis on clinical application for students preparing for careers in health care. Laboratory component includes presentation of cadaver prosections and models.

- **BIOH 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of the Division. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internship graduation limit 6

- **BIOH 405 - Hematology**

Credits: 3. Offered autumn. Prereq., junior level or consent of instr., BIOM 360. Study of blood and diseases of the circulatory system. Blood banking and serology.

- **BIOH 423 - TA: Form & Function I**

Credits: 1 TO 3. (R-4) Offered autumn. Prereq., "A" or "B" in BIOH 112 and 113 and/or one year upper division anatomy and physiology coursework with cadaver lab. Consent of instr. This select group of students teaches regularly scheduled cadaver lab prosection experiences for students enrolled in BIOH 112; assists in preparation and grading of lecture and laboratory visit teaching materials; and assists with proctoring and grading exams of undergraduate students enrolled in BIOH 112.

- **BIOH 424 - TA: Form & Function II**

Credits: 1 TO 3. (R-4) Offered spring. Prereq., "A" or "B" in BIOH 112 and 113 and/or one year upper division anatomy and physiology coursework with cadaver lab. Consent of instr. This select group of students teaches regularly scheduled cadaver lab prosection experiences for students enrolled in BIOH 113; assists in preparation and grading of lecture and laboratory visit teaching materials; and assists with proctoring and grading exams of undergraduate students enrolled in BIOH 113.

- **BIOH 456 - Cadaver Dissection I**

Credits: 2. Offered autumn. Prereq., "A" or "B" in BIOH 365 and 370 or equivalent with cadaver experience. Consent of instr. This course is a practicum that provides the participant the ability to expand their anatomical knowledge base, professional growth, and public speaking skills. The participant will have the unique opportunity to dissect, within a small group, a region of a cadaver and present visible structures to their peers. The cadavers prepared by these students are used for teaching in DBS A&P offerings. Systems presented in autumn semester include integumentary, musculoskeletal and nervous systems.

- **BIOH 457 - Cadaver Dissection II**

Credits: 2. Offered spring. Prereq., "A" or "B" in BIOH 365 and 370 or equivalent with cadaver experience, and a grade of "A" in BIOH 456. Consent of instr. This course is a practicum that provides the participant the ability to expand their anatomical knowledge base, professional growth, and public speaking skills. The participant will have the unique opportunity to dissect, within a small group, a region of a cadaver and present visible structures to their peers. The cadavers prepared by these students are used for teaching in DBS A&P offerings. Systems prepared and presented in spring semester include endocrine, cardiovascular, lymphatic, digestive, urinary and reproductive.

- **BIOH 458 - Neuroscience Research**

Credits: 4. Prereq., senior standing in Neuroscience. Theory and practical experience in neuroscience experiment design, data collection, results analysis and report creation. Students will generally assist with ongoing research as well as attend formal classroom presentations and discussions. Students will be required to work with the course writing instructor to undertake the writing process and develop a primary literature review, an abstract and final report based on the experiments conducted and the data collected. Students with well-developed research ideas and skills may be allowed to undertake supplemental independent research. **Course Attributes:**

Writing Course-Advanced

- **BIOH 461 - Human Anat/Phys I Tutor/Honors**

Credits: 3. Offered autumn. Prereq., "A" or "B" in BIOH 365 or equiv. and consent of instr. This select group of students performs tutoring for students enrolled in BIOH 365; assists in preparation and grading of lecture and laboratory course teaching materials to undergraduate students enrolled in BIOH 365. Students enrolled in BIOH 461 have the option of co-enrolling in the cadaver dissection course.

- **BIOH 462 - Principles Medical Physiology**

Credits: 3. Offered spring. Prereq., C (2.00) or better in BIOH 365, 370, and either CHMY 123N or 143N or consent of instr. An advanced course in human physiology for students preparing for careers in health care. **Course Attributes:** Writing Course-Advanced

- **BIOH 463 - Human Anat/Phys II Tutor/Honor**

Credits: 3. Offered spring. Prereq., "A" or "B" in BIOH 370 or equiv. and consent of instr. This select group of students performs tutoring for students enrolled in BIOH370; assists in preparation and grading of lecture and laboratory course teaching materials to undergraduate students enrolled in BIOH 370. Students enrolled in BIOH 463 have the option of co-enrolling in the cadaver dissection course.

- **BIOH 470 - Summer Clinical Laboratory**

Credits: 12. Offered summer. Prereq., successful completion of medical technology 3+1 on-campus curriculum, admittance into one of our affiliated clinical practicum programs, and consent of instructor. Professional training in clinical laboratory sciences (medical technology).

- **BIOH 471 - Professional Training I**

Credits: 13. Offered autumn. Prereq., BIOH 470. Continuation of BIOH 470. Professional training at clinical site(s).

- **BIOH 472 - Professional Training II**

Credits: 12. Offered spring. Prereq., BIOH 471. Continuation of BIOH 471. Professional training at clinical site(s).

- **BIOH 480 - Tchg Anatomy & Physiology I**

Credits: 3 TO 4. Offered autumn. Prereq., "A" or "B" in BIOH 365 and 370 or equiv. and consent of instr. This select group of students assists in preparation and grading of demonstrations and laboratory teaching materials; and provides laboratory anatomy and physiology instruction to undergraduate students enrolled in BIOH 365. Students enrolling for the 4 credit option will also provide occasional comparable assistance for BIOH 112.

- **BIOH 481 - Tchg Anatomy & Physiology II**

Credits: 3 TO 4. Offered spring. Prereq., "A" or "B" in BIOH 365 and 370 or equiv. and consent of instr. This select group of students assists in the preparation and grading of demonstrations and laboratory teaching materials; and provides laboratory anatomy and physiology instruction to undergraduate students enrolled in BIOH 370. Students enrolling for the 4 credit option will also provide occasional comparable assistance for BIOH 113.

- **BIOH 491 - Special Topics**

Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Biology

- **BIOL 315 - Peer Advising Internship**

Credits: 1. (R-6) Offered autumn and spring. Prereq., consent of instr. Supervised training and internship for peer advisors who will gain knowledge and ability to communicate degree requirements and relate the various degree offerings to professional and career goals. No more than two credits are allowed toward upper-division major requirements.

- **BIOL 435 - Comparative Animal Physiology**

Credits: 3. Offered spring. Prereq., BIOB 260 or equivalent. Animal physiology with emphasis on diversity of functional processes, with strong links to broader ecological and evolutionary contexts.

- **BIOL 484 - Plant Evolution**

Credits: 3. Offered fall, alternate years. Prereq., BIOB 272. Lecture, reading and discussion on the evolutionary processes that shape major patterns of plant diversity. Topics include but are not restricted to: local adaptation, floral and mating system evolution, polyploidy, genome evolution, and speciation.

- **BIOL 492 - Seminars in Ecol & Res Man**

Credits: 1. Offered summers only at Flathead Lake Biological Station. Prereq., BIOL 342 or BIOE 370/371 or taken concurrently with BIOL 342. Seminar course that meets weekly for 2 hours in the evening. Includes seminar speaker and discussion.

Biology-Microbiology

- **BIOM 135N - Hot Spring Micb: Yellowstone**

Credits: 3. Offered autumn alternate years. A field and laboratory based exploration of the microbial diversity of the thermal features of our first national park. Topics to be discussed include how these communities are shaped by the physical and chemical conditions of the environment and how microorganisms can thrive at life's extremes. Includes a field trip to Yellowstone National Park. **Course Attributes:** Natural Science Course

- **BIOM 227 - Vectors and Parasites**

Credits: 3. Offered spring. Prereq., college level general biology class is recommended but not required. An introduction to the major groups of parasites and arthropod-borne pathogens infecting humans worldwide. The class will stress the biology, transmission dynamics, prevention and control of these organisms.

- **BIOM 250N - Microbiology for Hlth Sciences**

Credits: 3. Offered spring. Infectious diseases, including concepts of virulence, resistance, prevention and control of microbial diseases in the individual and in the community. If laboratory experience is desired, the student may enroll concurrently in BIOM 251. Credit not allowed toward a major in microbiology. **Course Attributes:** Natural Science Course

- **BIOM 251 - Microbiology Hlth Sciences Lab**

Credits: 1. Offered spring. Prereq. or coreq., BIOM 250N. Observation of live microorganisms, their characteristics and activities. Experience with microbiological techniques. Credit not allowed toward a major in microbiology.

- **BIOM 291 - Special Topics**

Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BIOM 360 - General Microbiology**

Credits: 3. Offered autumn. Prereq., CHMY 123N or 143N; Prereq. or coreq., BIOB 260. Microbial structure and function, growth and reproduction, physiology, ecology, genetics, environmental factors, control of microorganisms and sterility, antimicrobial agents, microbial diversity.

- **BIOM 361 - General Microbiology Lab**

Credits: 2. Offered autumn. Prereq. or coreq., BIOM 360. Basic microbiology procedures and techniques.

- **BIOM 390 - Undergraduate Research**

Credits: 1 TO 6. (R-10) Offered every term. Prereq., consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit.

- **BIOM 400 - Medical Microbiology**

Credits: 3. Offered autumn. Microbial structure and functions, pathogenic microorganisms, virology, immunology. Credit not allowed toward a major in microbiology.

- **BIOM 402 - Medical Bacteriology& Mycology**

Credits: 3. Offered spring. Prereq., BIOM 360, 361. A study of the pathogenic bacteria and fungi and the diseases they produce.

- **BIOM 403 - Medical Bacteriology & Mycology Lab**

Credits: 2. Offered spring. Prereq. or coreq., BIOM 402. Laboratory study of pathogenic bacteria and fungi.

- **BIOM 407 - Clinical Diagnosis**

Credits: 2. Offered spring. Prereq., BIOM 360-361 or BIOH 365 or BIOM 402/403 (may concur). Principles of blood chemistry, urinalysis, blood banking, serology and other clinical parameters of disease and health.

- **BIOM 408 - Clinical Diagnosis Lab**

Credits: 1. Offered spring. Prereq., or coreq., BIOM 407, and BIOM 360-361 or BIOH 365 or BIOM 402/403 (may concur). Clinical diagnostic methods.

- **BIOM 410 - Microbial Genetics**

Credits: 3. Offered spring. Prereq., BIOM 360 and 361. The molecular genetics of prokaryotic organisms including: structure and replication of the prokaryotic chromosome; gene expression;

mutagenesis and DNA repair; plasmids and other tools of genetic engineering; transmission of genetic material and recombination in prokaryotes; regulation of gene expression in prokaryotes; recombinant DNA and biotechnology.

- **BIOM 411 - Exprmntl Microbial Genetcs Lab**

Credits: 1. Offered spring. Prereq. or coreq., BIOM 410. Experiments in microbial genetics: Analysis of genes and genomes.

- **BIOM 415 - Microbial Dvrsty Eclgy & Evltn**

Credits: 3. Offered spring. Prereq., BIOB 260, 272, BIOM 360-361 or consent of instr. A broad overview of the physiological, phylogenetic and genomic diversity and ecology of microorganisms within a framework of general ecological principles. Focuses on microbial interactions with their environment at the level of the individual, population and community, including intimate associations with plants and animals. Surveys current methods for studying microbial ecology and diversity in the environment.

- **BIOM 427 - General Parasitology**

Credits: 2. Offered autumn. Prereq., BIOB 272. Parasitism as a biological phenomenon, origin of parasitism, adaptations and life cycles, parasite morphology, fine structure, physiology, parasites and their environment.

- **BIOM 428 - General Parasitology Lab**

Credits: 2. Offered autumn. Coreq., BIOM 427. Taxonomy, morphology and identification of parasitic protozoa, helminths and arthropods.

- **BIOM 435 - Virology**

Credits: 3. Offered spring. Prereq., BIOB 260, and either BIOM 360 or BIOM 400. The general nature of viruses, with emphasis on the molecular biology of animal and human viruses. Co-convenes with BIOM 535. **Course Attributes:** Co-Convened Course

- **BIOM 450 - Microbial Physiology**

Credits: 3. Offered autumn. Prereq., BIOM 360-361. Microbial structure and function, physiological diversity, microbial metabolism, role of microbial activity in the environment.

- **BIOM 451 - Microbial Physiology Lab**

Credits: 1. Offered autumn. Coreq., BIOM 450. Experimental approaches to analysis of microbial structure, composition and metabolism.

- **BIOM 490 - Adv Undergrad Research**

Credits: 1 TO 10. (R-10) Offered every term. Prereq., BIOM 360, junior or senior standing and consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit. **Course Attributes:** Research & Creative Schlrshp

- **BIOM 491 - Special Topics**

Credits: 1 TO 10. (R-10) Offered intermittently. Experimental offerings of new courses, experimental offerings of visiting professors, or one-time offerings of current topics.

- **BIOM 494 - Seminar**

Credits: 1. (R-3) Offered intermittently. Prereq., senior standing in natural sciences. Recent topics in microbiology and related subjects.

- **BIOM 498 - Internship**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **BIOM 499 - Undergraduate Thesis**

Credits: 3 TO 6. (R-6) Offered every term. Prereq., senior standing and consent of instr.

Preparation of a thesis or manuscript based on undergraduate research for presentation and/or publication. Student must give an oral or poster presentation at the Biological Sciences Undergraduate Research Symposium or a scientific meeting. Graded credit/no credit.

- **BIOM 502 - Advanced Immunology**

Credits: 3. Offered autumn even-numbered years. Advanced topics and immunological techniques used in modern immunology. Level: Graduate

- **BIOM 505 - Advanced Topics in Metagenomics**

Credits: 1. (R-8) The course comprises a study group of four faculty 4-6 graduate students and select advanced undergraduates that meets weekly to consider and discuss advances in the areas of metagenomics and bioinformatics research based on recent publications in the primary literature or on their own research findings. There are no specific course prerequisites, but the course is only appropriate for microbiology and computer science graduate and advanced undergraduate students and requires permission of the instructor for enrollment. Level: Graduate

- **BIOM 509 - Advanced Virology**

Credits: 3. Offered spring odd-numbered years. Prereq., BIOM 435 (MICB 420). Students are presented with research papers that have been pivotal to the understanding of important molecular or genetic concepts in virology. Level: Graduate

- **BIOM 535 - Advanced Virology**

Credits: 3. Coreq., BIOB 596. A "principles-based" discussion of virology, focusing on the molecular processes and events that must be completed by all viruses for successful replication within an individual host, and spread through host populations. The molecular basis of alternative replication strategies, the interactions of viruses with hosts organisms, and how these interactions lead to disease will be presented with examples drawn from a representative set of more well-understood animal viruses. BIOM 535 emphasizes independent, creative, critical thought. Co-convenes with BIOM 435. Level: Graduate **Course Attributes:** Co-Convened Course

- **BIOM 540 - Microbial Pathogenesis**

Credits: 3. Offered fall. Prereq., graduate standing. Current concepts in pathogenesis at the molecular and cellular levels. Focus is on microbial (viral, bacterial) and genetic factors leading to disease and the host's involvement in the process. Level: Graduate

- **BIOM 545 - Adv Topics in Microb Ecol**

Credits: 1. (R-4) Offered every term. Prereq., graduate standing or consent of instr. Discussion of selected themes of the ecology of microorganisms with a focus on the recent primary literature. Level: Graduate

- **BIOM 546 - Experimental Microb Ecol**

Credits: 1. Offered every term. Prereq., graduate standing or consent of instr. Focus on experimental design, methods, and presentation of experimental results in the area of microbial ecology. Level: Graduate

- **BIOM 570 - Intro to Research**

Credits: 1. (R-2) Offered autumn and spring. Prereq., graduate standing. Required course for biochemistry and microbiology graduate students. Instruction in basic research techniques, research equipment and reading in the relevant scientific literature. Students conduct research projects under faculty mentors of their choosing. Level: Graduate

- **BIOM 594 - Seminar**

Credits: 1. (R-4) Offered autumn and spring. Prereq., graduate standing or consent of instr. Same as BCH 594. Presentation of current research in biochemistry and molecular biology by senior graduate students, faculty, and invited outside speakers. Level: Graduate

- **BIOM 595 - Special Topics**

Credits: 1 TO 3. (R-6) Offered intermittently. Prereq., graduate standing. Experimental offerings of

visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Level: Graduate Course Attributes: Internships/Practicums

- **BIOM 596 - Independent Study**

Credits: 1 TO 6. (R-6) Prereq., consent of instr. Credit for independent research project unrelated to thesis or dissertation. Level: Graduate

- **BIOM 597 - Research**

Credits: 1 TO 18. (R-18) Offered intermittently. Prereq., graduate standing, one semester residence. Level: Graduate

- **BIOM 599 - Thesis**

Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., master's student in microbiology. Laboratory research for and preparation of a master's thesis. Level: Graduate

- **BIOM 699 - Dissertation**

Credits: 1 TO 20. (R-20) Offered intermittently. Prereq., doctoral student in microbiology. Laboratory research for and preparation of a doctoral dissertation. Level: Graduate

Biology - Organismal

- **BIOO 101N - Survey MT Wildlife & Habitats**

Credits: 3. Offered autumn. Prereq., one course in biology. Interpreting biological patterns associated with selected Montana wildlife species, including mammals, birds, reptiles and amphibians. Course Attributes: Natural Science Course

- **BIOO 105N - Introduction to Botany**

Credits: 3. Offered spring. Introduction to the plant kingdom including anatomy, physiology and ecology. Course Attributes: Natural Science Lab Course Natural Science Course

- **BIOO 320 - General Botany**

Credits: 5. Offered autumn. Prereq., BIOB 170N-171N, 260. Prereq. or coreq., BIOB 272. Anatomy, morphology, ecology and physiology of photosynthetic organisms.

- **BIOO 335 - Rocky Mountain Flora**

Credits: 3. Offered spring. Prereq., one college-level course in Biology or consent of instr. Elements of the evolution, geography and natural affinities of flowering plants. Identification using a manual of native plants of Montana.

- **BIOO 340 - Biology and Mgmt of Fishes**

Credits: 4. Offered autumn. Prereq., BIOB 272 and either STAT 216 or WILD 240. Diversity, adaptations and ecology of fishes. Analysis and management of fish populations and communities.

- **BIOO 433 - Plant Physiology**

Credits: 3. Offered spring. Prereq., BIOB 260 or consent of the instructor. The molecular, biochemical and biophysical basis of plant function, from the subcellular to the whole organism level.

- **BIOO 434 - Plant Physiology Lab**

Credits: 1. Offered spring. Prereq or coreq., BIOO 433. Laboratory exercises designed to familiarize students with concepts and techniques in plant physiology.

- **BIOO 462 - Entomology**

Credits: 4. Offered alternate springs. Prereq. or Coreq., BIOB 272. The classification, morphology, anatomy, development, life-history, behavior and ecology of insects. Labs include identification of major insect groups, internal and external anatomy and student collections.

- **BIOO 470 - Ornithology**
Credits: 4. Offered spring. Prereq. or Coreq., BIOB 272; major of biology, Pre-Wildlife Biology, or Wildlife Biology, and must be of junior or senior standing. The classification, structure, evolution, behavior and ecology of birds.
- **BIOO 475 - Mammalogy**
Credits: 4. Offered autumn. Prereq., BIOB 272. The evolution, systematics, anatomy, physiology and ecology of mammals.
- **BIOO 486 - Field Techniq in Mammalogy**
Credits: 2. Offered intermittently. Prereq., BIOO 475 or equiv. and consent of instr. A "hands-on" approach to lab and field techniques employed for the study of mammals. Includes mark/recapture live trapping methods, remote cameras, and tracking plates of non-invasive censussing.
- **BIOO 490 - Adv Undergrad Research**
Credits: 1 TO 10. (R-10) Offered every term. Prereq., junior or senior standing and consent of instr. Independent research under the direction of a faculty member.

Biology - Systems Ecology

- **BIOS 532 - Ecosystem Ecology**
Credits: 3. Offered autumn every other year. Prereq. CHMY 141N or the equivalent. Coreq. CHMY 143N and BCH 111. This course includes the fundamentals of an ecosystem approach to ecological research by emphasizing relationships among physical, chemical, and biotic elements of interactive systems. It will provide a fundamental basis for more advanced Systems Ecology courses (e.g., Limnology, Integrated Systems Ecology, Landscape Genetics, etc.). Level: Graduate
- **BIOS 534 - Integrated Systems Ecology**
Credits: 3. Offered spring semester alternate years. Principles, theories and empirical studies that describe the complex attributes and processes of coupled natural and human systems. Landscape, climate, economic and social change dynamics and processes emphasized. Flagship course of the UM-DBS Systems Ecology Program. Students strongly advised but not required to take BIOS 532 Fundamentals of Ecosystem Ecology prior to this course. Level: Graduate
- **BIOS 599 - Thesis**
Credits: 1 TO 10. R-10

Microbiology

- **MICB 699 - Dissertation**
Credits: 1 TO 20. (R-20) Offered intermittently. Prereq., doctoral student in microbiology. Laboratory research for and preparation of a doctoral dissertation. Level: Graduate

Cellular and Molecular Biology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 81

Required Cumulative GPA: 2.0

Note: Cellular and molecular biology is the study of cellular, molecular, and physiological aspects of biology. This option is a graduate prep program, and is for students interested in academia or research jobs in private or government laboratories. It is also an excellent option for pre-medical sciences students.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by Cellular & Molecular Biology option

Rule: All of the following courses are required.

Course	Credits
BCH 480 - Advanced Biochemistry I	3 Credits
BCH 482 - Advanced Biochemistry II	3 Credits
BIOB 301 - Developmental Biology	3 Credits
BIOB 375 - General Genetics	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits

Minimum Required Grade: C-

20 Total Credits Required

Additional UD Major Courses Required for the Cellular & Molecular Biology Option

Rule: Complete one or two courses in each subcategory (as indicated)

Minimum Required Grade: C-

Disease Elective

Rule: Complete at least one of the following courses

Course	Credits
BIOB 410 - Immunology	3 Credits
BIOM 435 - Virology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional UD Depth Courses (Lecture)

Rule: Complete at least one of the following lecture courses

Note: If B100 433, then the lab B100 434 must also be taken.

Course	Credits
BIOB 440 - Biological Electron Microscopy	2 Credits
BIOB 468 - Endocrinology	3 Credits
BIOB 486 - Genomics	3 Credits
BIOL 435 - Comparative Animal Physiology	3 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 450 - Microbial Physiology	3 Credits
B100 433 - Plant Physiology	3 Credits
Minimum Required Grade: C-	2-4 Total Credits Required

Additional UD Depth Courses (Laboratory)

Rule: Complete at least two of the following laboratory courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BIOB 411 - Immunology Laboratory	2 Credits
	BIOM 411 - Exprmntl Microbial Genetcs Lab	1 Credits
	BIOM 451 - Microbial Physiology Lab	1 Credits
	BIOM 490 - Adv Undergrad Research	1 To 10 Credits
Minimum Required Grade: C-		2-5 Total Credits Required

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Required

Note: M 171 Calculus I may be substituted for M 162.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Chemistry

Rule: All of the following courses are required.

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits

	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		20 Total Credits Required

Additional Depth in Chemistry

Rule: Complete at least one of the following chemistry courses

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3 or 4 Total Credits Required

Physics

Rule: All of the following courses are required.

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & PHSX 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Cellular & Molecular Biology Option requires two 1/3 writing courses: BCH 482 and BIOB 425. The UD Writing Expectation for the Major is completed with one more course, chosen from either list.

Minimum Required Grade: C-

1/3 UD Writing Courses

—	Course	Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	BIOB 410 - Immunology	3 Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits
	BIOE 406 - Behavior & Evolution	4 Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
	BIOM 402 - Medical Bacteriology& Mycology	3 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
	Minimum Required Grade: C-	

2/3 UD Writing Courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits

BIOB 499 - Undergraduate Thesis	3 To 6 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOL 342 - Field Ecology	5 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-	

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	

Ecology and Organismal Biology

Bachelor of Arts - Biology; Ecology and Organismal Biology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Note: The Ecology and Organismal Biology option is for students interested in the biology of organisms (plants or animals) or the biology of populations and communities. Course offerings include those from organismal biology, ecology, evolutionary biology, and conservation biology. This option is a graduate prep program, and it

is designed for students interested in academia or employment with government agencies (e.g. National Biological Survey, U.S. FWS, etc.), or environmental consulting agencies. This option is also an excellent choice for pre-veterinary students.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by Ecology & Organismal Biology Option

Rule: All of the following courses are required.

Note: BIOE 342 Field Ecology at the Flathead Lake Biological Station may be substituted for BIOE 370/371

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
Minimum Required Grade: C-	5 Total Credits Required

Additional Upper Division Major Courses Required for the Ecology & Organismal Biology Option

Rule: Complete a minimum of 21 credits of UD BIOB, BIOE, BIOH, BIOL, BIOM, BIOO, or BCH, with at least one course from each subcategory

Note: Other recommended courses include BCH 380 or BCH 480-482.

Minimum Required Grade: C-

21 Total Credits Required

Rule: Complete at least one organismal course (lab must also be taken, if available) from the following list

Note: If BIOO 433 Plant Physiology, then BIOO 434 Plant Physiology Lab must also be taken.

—	Course	Credits
	BIOB 301 - Developmental Biology	3 Credits
	BIOB 375 - General Genetics	3 Credits
	BIOB 468 - Endocrinology	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits
	BIOL 435 - Comparative Animal Physiology	3 Credits
	BIOO 433 - Plant Physiology	3 Credits
Minimum Required Grade: C-		

-Ology Course Requirement

Rule: Complete at least one course with a focus on a group of organisms (lab must also be taken, if available) from the following list

Note: If BIOM 360 General Microbiology, then BIOM 361 General Microbiology Lab must also be taken. If BIOM 427 General Parasitology, then BIOM 428 General Parasitology Lab must also be taken.

—	Course	Credits
	BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
	BIOM 427 - General Parasitology	2 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 335 - Rocky Mountain Flora	3 Credits
	BIOO 340 - Biology and Mgmt of Fishes	4 Credits
	BIOO 462 - Entomology	4 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-		

Specialized Ecology Course Requirement

Rule: Complete at least one specialized ecology course from the following list

Note: A specialized ecology course taken at the Flathead Lake Biological Station (BIOE 416, 439, 440, 451, 453, or 458) may be substituted for this requirement.

—	Course	Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOE 447 - Terrestrial Ecosystem Ecology	3 Credits
	BIOE 448 - Terrestrial Plant Ecology	4 Credits
	BIOE 449 - Plant Biogeography	3 Credits
	BIOM 415 - Microbial Diversity Ecology & Evolution	3 Credits
	WILD 346 - Wildlife Physiological Ecology	3 Credits
	WILD 470 - Conservation of Wildlife Populations	3 Credits
Minimum Required Grade: C-		

Evolution Course Requirement

Rule: Complete at least one evolutionary biology course from the following list

—	Course	Credits
	BIOB 480 - Conservation Genetics	3 Credits
	BIOB 486 - Genomics	3 Credits
	BIOE 406 - Behavior & Evolution	4 Credits
	BIOE 482 - Evolution & Development	3 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
Minimum Required Grade: C-		

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Mathematics - Statistics

Rule: Complete either one semester of statistics (STAT 216) or a full year of statistics (STAT 451/457 and 452/458)

Note: Choose the full year of statistics for graduate preparation in ecology.

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
	STAT 451 - Statistical Methods I	3 Credits
	STAT 452 - Statistical Methods II	3 Credits
	STAT 457 - Computer Data Analysis I	1 Credits
	STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-		4 or 8 Total Credits Required

Chemistry

Rule: Complete either one year of chemistry (CHMY 121N, 123N/124N) or two years of chemistry (CHMY 141N, 143N, 221/222, 223/224)

Note: Choose the two year sequence of chemistry for graduate preparation in organismal biology, or if you are pre-veterinary.

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits

	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		8 or 20 Total Credits Required

Physics

Rule: All of the following courses are required.

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Ecology & Organismal Biology Option requires one 2/3 writing course (BIOE 371). The UD Writing Expectation for the Major is completed with one more course, chosen from either list.

Minimum Required Grade: C-

1/3 UD Writing Courses

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Course	Credits
BCH 482 - Advanced Biochemistry II	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOE 403 - Vert Design & Evolution	5 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOL 484 - Plant Evolution	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOO 320 - General Botany	5 Credits
BIOO 434 - Plant Physiology Lab	1 Credits
BIOO 470 - Ornithology	4 Credits
BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-	

2/3 UD Writing Courses

Course	Credits
BCH 486 - Biochemistry Research Lab	3 Credits
BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOB 499 - Undergraduate Thesis	3 To 6 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOL 342 - Field Ecology	5 Credits

	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	

Field Ecology

Bachelor of Arts - Biology; Field Ecology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Note: The Field Ecology option is for students interested in field-based ecology. Students with this option spend one or two summers taking field courses at the Flathead Lake Biological Station. This option is a graduate prep program, and is for students interested in academia or employment at a governmental, private or non-profit agency.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required for the Field Ecology Option

Rule: Complete the on-campus general ecology lecture and lab (BIOE 370/371) or the field ecology course at the Flathead Lake Biological Station (BIOL 342)

Course	Credits
BIOE 342 - Field Ecology	5 Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
Minimum Required Grade: C-	5 Total Credits Required

Additional Upper Division Major Courses Required for the Field Ecology Option

Rule: Complete a minimum of 8 credits of Upper Division Biology or Microbiology, with at least one course from each subcategory

Minimum Required Grade: C-

8 Total Credits Required

Evolution Course Requirement

Rule: Complete at least one evolutionary biology course from the following list

Course	Credits
BIOB 480 - Conservation Genetics	3 Credits
BIOB 486 - Genomics	3 Credits
BIOE 406 - Behavior & Evolution	4 Credits

	BIOE 482 - Evolution & Development	3 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
Minimum Required Grade: C-		

-Ology Course Requirement

Rule: Complete at least one course with a focus on a group of organisms (lab must also be taken, if available) from the following list

Note: If BIOM 360 General Microbiology, then BIOM 361 General Microbiology Lab must also be taken. If BIOM 427 General Parasitology, then BIOM 428 General Parasitology Lab must also be taken.

—	Course	Credits
	BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
	BIOM 427 - General Parasitology	2 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 335 - Rocky Mountain Flora	3 Credits
	BIOO 340 - Biology and Mgmt of Fishes	4 Credits
	BIOO 462 - Entomology	4 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-		

Ecology Requirement at the Flathead Lake Biological Station

Rule: Complete either the Aquatic Emphasis or the Terrestrial Emphasis

Minimum Required Grade: C-

Aquatic Emphasis

Rule: All of the following courses are required for the Aquatic Emphasis

—	Course	Credits
	BIOE 439 - Stream Ecology	3 Credits

	BIOE 440 - Conservation Ecology	3 Credits
	BIOE 451 - Landscape Ecology	3 Credits
	BIOE 453 - Ecology of Small & Large Lakes	3 Credits
	BIOL 492 - Seminars in Ecol & Res Man	1 Credits
Minimum Required Grade: C-		13 Total Credits Required

Terrestrial Emphasis

Rule: All of the following courses are required for the Terrestrial Emphasis

—	Course	Credits
	BIOE 416 - Alpine Ecology	3 Credits
	BIOE 440 - Conservation Ecology	3 Credits
	BIOE 451 - Landscape Ecology	3 Credits
	BIOE 458 - Forest and Grassland Ecol	3 Credits
	BIOL 492 - Seminars in Ecol & Res Man	1 Credits
Minimum Required Grade: C-		13 Total Credits Required

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Required

Note: M 171 (Calculus I) may be substituted for M 162.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Mathematics - Statistics

Rule: Complete either one semester of statistics (STAT 216) or a full year of statistics (STAT 451/457 and 452/458)

Course	Credits
STAT 216 - Introduction to Statistics	4 Credits
STAT 451 - Statistical Methods I	3 Credits
STAT 452 - Statistical Methods II	3 Credits
STAT 457 - Computer Data Analysis I	1 Credits
STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-	4 or 8 Total Credits Required

Chemistry

Rule: Complete either one year of chemistry (CHMY 121N, 123N/124N) or two years of chemistry (CHMY 141N, 143N, 221/222, 223/224)

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
CHMY 221 - Organic Chem I	3 Credits
CHMY 222 - Org Chm I Lab	2 Credits
CHMY 223 - Organic Chm II	3 Credits
CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-	8 or 20 Total Credits Required

Physics

Rule: All of the following courses are required

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Upper Division Writing Expectations for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Field Ecology Option requires BIOE 371 or BIOL 342 (both 2/3 writing courses). The UD writing requirement is completed with one more course, chosen from either list.

Minimum Required Grade: C-

1/3 UD Writing Courses

Course	Credits
BCH 482 - Advanced Biochemistry II	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOE 403 - Vert Design & Evolution	5 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOL 484 - Plant Evolution	3 Credits

BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOO 320 - General Botany	5 Credits
BIOO 434 - Plant Physiology Lab	1 Credits
BIOO 470 - Ornithology	4 Credits
BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-	

2/3 UD Writing Courses

Course	Credits
BCH 486 - Biochemistry Research Lab	3 Credits
BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOB 499 - Undergraduate Thesis	3 To 6 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOL 342 - Field Ecology	5 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-	

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits

Minimum Required Grade: C-	
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Human Biological Sciences

Bachelor of Arts - Biology; Human Biological Sciences Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 74

Required Cumulative GPA: 2.0

Note: The Human Biological Sciences option is a pre-professional program for students planning careers in a health-related field. The following is a partial list of possible professions: physical therapy, medicine, dentistry, physician's assistant, alternative medicine, nutrition, and public health.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by Human Biological Sciences Option

Rule: All of the following courses are required.

Course	Credits
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BIOB 301 - Developmental Biology	3 Credits
BIOB 375 - General Genetics	3 Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits
BIOH 370 - Human AP II for Health Profsns	4 Credits
Minimum Required Grade: C-	14 Total Credits Required

Additional Upper Division Major Courses Required for the Human Biological Sciences Option

Minimum Required Grade: C-

Biochemistry Requirement

Rule: Complete either one semester of biochemistry (BCH 380) or a full year of biochemistry (BCH 480-482)

Note: If one year of chemistry is completed, then BCH 380 must be taken. Either BCH 380 or BCH 480-482 may be taken if two years of chemistry are completed.

Course	Credits
BCH 380 - Biochemistry	4 Credits
BCH 480 - Advanced Biochemistry I	3 Credits
BCH 482 - Advanced Biochemistry II	3 Credits
Minimum Required Grade: C-	4 or 6 Total Credits Required

Microbiology Requirement

Rule: Complete either BIOM 400 or both BIOM 360 and 361

Course	Credits
BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits
BIOM 400 - Medical Microbiology	3 Credits
Minimum Required Grade: C-	3 or 5 Total Credits Required

Additional Depth in Human Biological Sciences

Rule: Complete at least two courses from the following list

Note: If BIOM 427 General Parasitology taken, then BIOM 428 General Parasitology Lab must also be taken.

Course	Credits
BCH 486 - Biochemistry Research Lab	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOB 468 - Endocrinology	3 Credits
BIOB 486 - Genomics	3 Credits
BIOB 499 - Undergraduate Thesis	3 To 6 Credits
BIOE 403 - Vert Design & Evolution	5 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOE 482 - Evolution & Development	3 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOL 435 - Comparative Animal Physiology	3 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 435 - Virology	3 Credits
BIOM 450 - Microbial Physiology	3 Credits
Minimum Required Grade: C-	6 - 9 Total Credits Required

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics and Psychology

Rule: All of the following courses are required

Note: M 171 Calculus I may be substituted for M 162.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		12 Total Credits Required

Chemistry

Rule: Complete either one year of chemistry (CHMY 121N, 123N/124N) or two years of chemistry (CHMY 141N, 143N, 221/222, 223/224)

Note: If you plan to apply to a graduate or professional school such as medical or dental, you should plan to complete the two year sequence in chemistry. If you plan to pursue nursing or a graduate program in physical therapy, the one year sequence of chemistry is sufficient. The two year chemistry option is more flexible, and keeps more options open for future careers.

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		8 or 20 Total Credits Required

Physics

Rule: All of the following courses are required.

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Human Biological Sciences Option does not require a specific writing course.

Minimum Required Grade: C-

1/3 UD Writing Courses

Course	Credits
BCH 482 - Advanced Biochemistry II	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOE 403 - Vert Design & Evolution	5 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOL 484 - Plant Evolution	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits

	BIOO 320 - General Botany	5 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-		

2/3 UD Writing Courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits
	BIOB 499 - Undergraduate Thesis	3 To 6 Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOH 462 - Principles Medical Physiology	3 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits

Minimum Required Grade: C-	
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Natural History

Bachelor of Arts - Biology; Natural History Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 74

Required Cumulative GPA: 2.0

Note: The natural history option is designed for students who seek an interdisciplinary science program. This option is not research-oriented, and is not considered a preparatory program for traditional research-based graduate programs. It is, however, designed for students seeking careers in environmental education, science writing or illustration, natural history or wildlife film-making, or natural history centers or museums. There is enough latitude in the requirements to allow for a minor or even a double major in a related field of interest (e.g. journalism, art, media arts, etc.).

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by Natural History Option

Rule: All of the following courses are required.

Note: BIOE 342 Field Ecology at the Flathead Lake Biological Station may be substituted for BIOE 370/371

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOO 320 - General Botany	5 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
BIOO 462 - Entomology	4 Credits
Minimum Required Grade: C-	21 Total Credits Required

Additional Upper Division Major Courses Required for Natural History Option

Rule: Complete one of the following courses

Course	Credits
BIOO 470 - Ornithology	4 Credits
BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Required Courses Outside of the Major

Minimum Required Grade: C-

Chemistry and Geology

Rule: Complete all of the following courses

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
GEO 101N - Intro to Physical Geology	3 Credits

GEO 102N - Intro to Physical Geology Lab	1 Credits
Minimum Required Grade: C-	12 Total Credits Required

Cognate Electives

Rule: Complete 20 credits from the following disciplines (maximum of 10 credits/discipline): ANTY, ASTR, CHMY (excluding 121N, 123N, 124N), GPHY, GEO (excluding 101N, 102N), FORS, M, PHSX, STAT, or WILD

Note: Students interested in combining the Natural History Option with another subject area may, with the advisor's permission, substitute 20 credits in English - writing, journalism, photography, art, foreign language, business management, or other appropriate field.

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Natural History Option requires one 2/3 writing course (BIOE 371) and several 1/3 writing courses (BIOO 320, BIOO 470 or BIOO 475). No additional writing courses must be taken to meet this requirement.

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses will satisfy this requirement. The Natural History Option does not require a calculus course; the Natural History student may choose to take one year of a modern or classical language, or they may take one of these calculus courses.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	

Biological Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course

requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - Biology; Biological Education Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 62

Required Cumulative GPA: 2.75

Note: This option provides students with coursework in biology and related science and mathematics needed to be certified by the State of Montana to teach secondary biology (in middle and high school). This option is appropriate for students interested in teaching biology in a larger, more urban school. In order to be licensed to teach secondary biology, students must be admitted to the Teacher Education Program through the Phyllis J. Washington College of Education and Human Sciences.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by the Biological Education Option

Rule: All of the following courses are required.

Course	Credits
BIOE 370 - General Ecology	3 Credits

	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
	BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits
	BIOO 433 - Plant Physiology	3 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
Minimum Required Grade: C-		14 Total Credits Required

Animal-Based Organismal Requirement

Rule: Complete one of the following courses

—	Course	Credits
	BIOB 301 - Developmental Biology	3 Credits
	BIOL 435 - Comparative Animal Physiology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Required Content Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Mathematics - Statistics

Rule: The following course is required

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—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Chemistry

Rule: All of the following courses are required

Note: CHMY 141N, 143N, 123N (required for the general science broadfield teaching option) will substitute for CHMY 121N, 123N/124N.

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		9 Total Credits Required

Physics

Rule: All of the following courses are required

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics courses, PHSX 215N/216N (which require M 171), may be substituted for PHSX 205N/206N.

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
Minimum Required Grade: C-		5 Total Credits Required

Environmental Geosciences

Rule: Complete one of the following courses

—	Course	Credits
	GEO 105N - Oceanography	3 Credits
	GEO 108N - Climate Change	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Education

Rule: The following course is required

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" is required for the Biological Education option.

—	Course	Credits
	EDU 497 - Teaching and Assessing Reading	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Biological Education Option requires one 2/3 writing course (BIOE 371) and one 1/3 writing course (BIOO 434). No additional courses are needed to meet this requirement.

Minimum Required Grade: C-

1/3 UD Writing Courses

—	Course	Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	BIOB 410 - Immunology	3 Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits
	BIOE 406 - Behavior & Evolution	4 Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
	BIOM 402 - Medical Bacteriology& Mycology	3 Credits

	BIOO 320 - General Botany	5 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-		

2/3 UD Writing Courses

	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits
	BIOB 499 - Undergraduate Thesis	3 To 6 Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOH 462 - Principles Medical Physiology	3 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Secondary Teaching Licensure

Note: For endorsement to teach biology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education & Human Sciences)

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	

General Science Broadfield

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program
- Licensure Degree Requirements

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Arts - Biology; Track: Teaching General Science Broadfield

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.75

Note: This option provides students with coursework in biology, chemistry, physics, earth sciences and mathematics needed to be certified by the State of Montana in broad-field science. This allows students to teach secondary science--biology, chemistry, physics, and earth science (in middle and high schools). This option is appropriate for students interested in teaching science in smaller, more rural schools. In order to be licensed to teach secondary science, students must be admitted to the Teacher Education Program through the Phyllis J. Washington College of Education and Human Sciences.

Lower Division Courses in the Content Areas - Biology, Chemistry, Earth Sciences, and Physics

Note: A minimum of 10 credits is required in each of the four content areas.

Rule: All of the following courses are required

Note: AP Biology will substitute for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Chemistry Content Courses

Rule: All of the following courses are required.

Note: CHMY 141N & 143N should be completed before attempting CHMY 123N.

Course	Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-	14 Total Credits Required

Earth Sciences Content Courses

Rule: All of the following courses are required

Note: ASTR 132N/135N are NOT acceptable substitutes for ASTR 131N/134N.

Course	Credits
ASTR 131N - Elementary Astronomy I	3 Credits
ASTR 134N - Elementary Astronomy Lab I	1 Credits
GEO 101N - Intro to Physical Geology	3 Credits

GEO 102N - Intro to Physical Geology Lab	1 Credits
Minimum Required Grade: C-	8 Total Credits Required

Earth Sciences Content Courses - Environmental Geosciences

Rule: Complete at least one of the following courses

Course	Credits
GEO 105N - Oceanography	3 Credits
GEO 108N - Climate Change	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Physics Content Courses

Rule: All of the following courses are required.

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Upper Division Content Courses

Rule: All of the following courses are required.

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
Minimum Required Grade: C-	5 Total Credits Required

Required Content Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Mathematics - Statistics

Rule: The following course is required

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Education

Rule: The following course is required

Note: The course number EDU 497 covers many different teaching methods courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" is required for the General Science Broadfield.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The General Science Broadfield requires one 2/3 writing course (BIOE 371). The Upper Division Writing Expectation is completed with one more course, chosen from either list. The recommended course is BIOC 434 Plant Physiology lab (taken with BIOC 433 Plant Physiology), which are required for the Teaching Biology endorsement.

1/3 UD Writing Courses

—	Course	Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	BIOB 410 - Immunology	3 Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits
	BIOE 406 - Behavior & Evolution	4 Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
	BIOM 402 - Medical Bacteriology& Mycology	3 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-		

2/3 UD Writing Courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits

	BIOB 499 - Undergraduate Thesis	3 To 6 Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOH 462 - Principles Medical Physiology	3 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Secondary Teaching Licensure

Note: For endorsement to teach general science, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education & Human Sciences)

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		

Genetics and Evolution

Bachelor of Arts - Biology; Genetics and Evolution Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 70

Required Cumulative GPA: 2.0

Note: Genetics and evolution is for students interested in genetics, including molecular genetics, population genetics, ecological genetics, and genomics. This option is a graduate prep program, and is for students interested in academia or research jobs in private or government laboratories. It is also an excellent option for students interested in a professional health program such as medical school or a genetic counseling graduate program.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by the Genetics & Evolution Option

Rule: All of the following courses are required.

Course	Credits
BIOB 375 - General Genetics	3 Credits
BIOB 486 - Genomics	3 Credits
BIOE 370 - General Ecology	3 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
Minimum Required Grade: C-	11 Total Credits Required

Additional UD Major Courses Required for the Genetics & Evolution Option

Minimum Required Grade: C-

Biochemistry

Rule: Complete either one semester of biochemistry (BCH 380) or two semesters of biochemistry (BCH 480-482)

Note: If one year of chemistry is completed, then BCH 380 must be taken. Either BCH 380 or BCH 480-482 may be taken if two years of chemistry are completed.

—	Course	Credits
	BCH 380 - Biochemistry	4 Credits
	BCH 480 - Advanced Biochemistry I	3 Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	Minimum Required Grade: C-	4 or 6 Total Credits Required

Genetics/Evolution Depth Courses

Rule: Complete at least three of the following genetics/evolution courses

—	Course	Credits
	BIOB 480 - Conservation Genetics	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits
	BIOE 406 - Behavior & Evolution	4 Credits
	BIOE 482 - Evolution & Development	3 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 415 - Microbial Dvrsty Eclgy & Evltn	3 Credits
	CSCI 451 - Computational Biology	3 Credits
	Minimum Required Grade: C-	9-12 Total Credits Required

Physiology Requirement

Rule: Complete at least one of the following courses (labs must also be taken, if available)

Note: If BIOM 450 Microbial Physiology, then BIOM 451 Microbial Physiology Lab must also be taken.

If BIOC 433 Plant Physiology, then BIOC 434 Plant Physiology Lab must also be taken.

—	Course	Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
	BIOL 435 - Comparative Animal Physiology	3 Credits
	BIOM 450 - Microbial Physiology	3 Credits
	BIOC 433 - Plant Physiology	3 Credits
	Minimum Required Grade: C-	3 or 4 Total Credits Required

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171 if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Mathematics - Statistics

Rule: Complete either one semester of statistics (STAT 216) or a full year of statistics (STAT 451/457 and 452/458)

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
	STAT 451 - Statistical Methods I	3 Credits
	STAT 452 - Statistical Methods II	3 Credits

	STAT 457 - Computer Data Analysis I	1 Credits
	STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-		4 or 8 Total Credits Required

Chemistry

Rule: Complete either one year of chemistry (CHMY 121N, 123N/124N) or two years of chemistry (CHMY 141N, 143N, 221/222, 223/224)

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		8 or 20 Total Credits Required

Physics

Rule: All of the following courses are required

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits

PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Biology students take 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course). The Genetics & Evolution Option requires one 2/3 writing course: BIOE 371. The UD Writing Expectation for the Major is completed with one more course, chosen from either list.

Minimum Required Grade: C-

1/3 UD Writing Courses

Course	Credits
BCH 482 - Advanced Biochemistry II	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOE 403 - Vert Design & Evolution	5 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOL 484 - Plant Evolution	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOO 320 - General Botany	5 Credits
BIOO 434 - Plant Physiology Lab	1 Credits
BIOO 470 - Ornithology	4 Credits
BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-	

2/3 UD Writing Courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits
	BIOB 499 - Undergraduate Thesis	3 To 6 Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOH 462 - Principles Medical Physiology	3 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		

Medical Technology 3+1

Bachelor of Science - Medical Technology; Track: 3 + 1

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 101

Required Cumulative GPA: 2.0

Note: A Medical Technology degree prepares students to perform various chemical, histological, and microbial laboratory procedures used in the diagnosis, study, and treatment of disease. Students with this degree seek employment in hospital laboratories, physicians' offices, and health departments. For clinical practice, a student must be certified through the Board of Registry by completing a one year clinical practicum. The 3+1 track is the faster option, as the clinical practicum year is part of the degree. Three years are spent on the UM campus, and then the clinical practicum year with the MUS CLS program (or with one of our affiliated programs) is the fourth year of the Bachelor's degree. Note: this degree requires a total of 130 credits.

Lower Division Biology Courses

Rule: All of the following courses are required.

Note: The prerequisites for BIOB 260 include either BIOB 160N or BCH 110/111 (not required for the major, but must be taken as a prerequisite; AP Biology will substitute for either of these prerequisite courses).

Course	Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Required Major Courses for Medical Technology 3 + 1

Rule: All of the following courses are required

Course	Credits
BCH 380 - Biochemistry	4 Credits
BIOB 410 - Immunology	3 Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits
BIOH 405 - Hematology	3 Credits
BIOM 360 - Gen Microbiolgy (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiolgy Lb (equiv 261)	2 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOM 403 - Medicl Bacteriolgy & Myclgy Lb	2 Credits

	BIOM 427 - General Parasitology	2 Credits
	BIOM 428 - General Parasitology Lab	2 Credits
	BIOM 435 - Virology	3 Credits
Minimum Required Grade: C-		31 Total Credits Required

Required Professional Practicum

Rule: All of the following courses are required

Note: You must apply for the professional practicum during the autumn prior to enrollment. To be competitive for this practicum, you must be in good academic standing with a minimum GPA of ~3.0, and demonstrate a commitment to the clinical laboratory profession. For more information, visit: <http://www.umd.edu/medtech/default.html>. Contact Dr. Mike Minnick to apply for the practicum.

—	Course	Credits
	BIOH 470 - Summer Clinical Laboratory	12 Credits
	BIOH 471 - Professional Training I	13 Credits
	BIOH 472 - Professional Training II	12 Credits
Minimum Required Grade: C-		37 Total Credits Required

Required Courses Outside the Major

Mathematics - Calculus

Rule: Complete one of the following calculus courses

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Mathematics - Statistics

Rule: The following course is required

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Chemistry

Rule: All of the following courses are required

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
Minimum Required Grade: C-		15 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Medical Technology 3+1 students take two 1/3 writing courses (BIOB 410 and BIOM 402). The Upper Division Writing Expectation for the Major is completed with one more course, chosen from either list. The recommended course is BIOB 411 Immunology Lab (which is recommended by many of the clinical practicum affiliates).

Minimum Required Grade: C-

1/3 UD Writing Courses

—	Course	Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	BIOB 410 - Immunology	3 Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits

BIOE 406 - Behavior & Evolution	4 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOL 484 - Plant Evolution	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOO 320 - General Botany	5 Credits
BIOO 434 - Plant Physiology Lab	1 Credits
BIOO 470 - Ornithology	4 Credits
BIOO 475 - Mammalogy	4 Credits

2/3 UD Writing Courses

Course	Credits
BCH 486 - Biochemistry Research Lab	3 Credits
BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOB 499 - Undergraduate Thesis	3 To 6 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOL 342 - Field Ecology	5 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 499 - Undergraduate Thesis	3 To 6 Credits

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Languages Requirement. Either of these calculus courses (required by the major) will satisfy this requirement.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Medical Technology 4+1

Bachelor of Science - Medical Technology; Track: 4+1

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 86

Required Cumulative GPA: 2.0

Note: A Medical Technology degree prepares students to perform various chemical, histological, and microbial laboratory procedures used in the diagnosis, study, and treatment of disease. Students with this degree seek employment in hospital laboratories, physicians' offices, and health departments. For clinical practice, a student must be certified through the Board of Registry by completing a one year clinical practicum. The 4+1 track is the more flexible option, in which students complete the four years of the Bachelor's degree on the UM campus. Students may apply to a clinical practicum program anywhere in the country.

Lower Division Biology Courses

Rule: All of the following courses are required.

Note: The prerequisites for BIOB 260 include either BIOB 160N or BCH 110/111 (not required for the major, but must be taken as a prerequisite; AP Biology will substitute for either of these prerequisite courses).

Course	Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Required Major Courses for Medical Technology 4 + 1

Rule: All of the following courses are required

Note: BCH 480-482 may be substituted for BCH 380.

Course	Credits
BCH 380 - Biochemistry	4 Credits
BIOB 410 - Immunology	3 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOH 365 - Human AP I for Health Profsns	4 Credits
BIOH 405 - Hematology	3 Credits
BIOM 360 - Gen Microbiolgy (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiolgy Lb (equiv 261)	2 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOM 403 - Medicl Bacteriolgy & Myclgy Lb	2 Credits
BIOM 407 - Clinical Diagnosis	2 Credits
BIOM 408 - Clinical Diagnosis Lab	1 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 428 - General Parasitology Lab	2 Credits
BIOM 435 - Virology	3 Credits
Minimum Required Grade: C-	36 Total Credits Required

Required Courses Outside the Major

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Mathematics - Statistics

Rule: The following course is required

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Chemistry

Rule: All of the following courses are required

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
Minimum Required Grade: C-		24 Total Credits Required

Physics

Rule: All of the following courses are required

Note: These are algebra- and trigonometry-based physics courses. The calculus-based sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits

	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Medical Technology 4+1 students take BIOB 410 (a 1/3 writing course) and BIOB 411 (a 2/3 writing course).

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Languages Requirement. Either of these calculus courses (required by the major) will satisfy this requirement.

	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Microbiology B.S.

Bachelor of Science - Microbiology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 91

Required Cumulative GPA: 2.0

Note: Microbiology is the study of microorganisms including bacteria, fungi, viruses, and protozoa. This general microbiology option emphasizes microbial structure and function, as well as interactions with humans. This is a graduate prep program, and is appropriate for students interested in research careers in academia or private or government laboratories. It is also an excellent option for pre-medical sciences students.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Microbiology Core Courses

Rule: All of the following courses are required.

Course	Credits
BIOE 370 - General Ecology	3 Credits
BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 411 - Exprmntl Microbial Genetcs Lab	1 Credits
BIOM 415 - Microbial Dvrsty Eclgy & Evltn	3 Credits
BIOM 450 - Microbial Physiology	3 Credits
BIOM 451 - Microbial Physiology Lab	1 Credits
Minimum Required Grade: C-	19 Total Credits Required

Additional UD Major Courses Required for Microbiology

Minimum Required Grade: C-

Biochemistry

Rule: Complete either one semester of biochemistry (BCH 380) or one year of biochemistry (BCH 480-482)

Course	Credits
BCH 380 - Biochemistry	4 Credits
BCH 480 - Advanced Biochemistry I	3 Credits
BCH 482 - Advanced Biochemistry II	3 Credits
Minimum Required Grade: C-	4 or 6 Total Credits Required

Additional UD Depth Courses in Microbiology

Rule: Complete 7 - 9 credits from the following list (labs must be taken with lectures, if available). 7 credits if BCH 480-482 taken; 9 credits if BCH 380 taken.

Note: If BIOB 410 Immunology, then BIOB 411 Immunology Lab must also be taken.

If BIOM 402 Medical Bacteriology & Mycology, then BIOM 403 Medical Bacteriology & Mycology Lab must also be taken.

If BIOM 407 Clinical Diagnosis, then BIOM 408 Clinical Diagnosis Lab must also be taken.

If BIOM 427 General Parasitology, then BIOM 428 General Parasitology Lab must also be taken.

Course	Credits
BIOB 410 - Immunology	3 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOH 405 - Hematology	3 Credits
BIOM 402 - Medical Bacteriology & Mycology	3 Credits
BIOM 403 - Medical Bacteriology & Mycology Lab	2 Credits
BIOM 407 - Clinical Diagnosis	2 Credits
BIOM 408 - Clinical Diagnosis Lab	1 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 428 - General Parasitology Lab	2 Credits
BIOM 435 - Virology	3 Credits
BIOM 490 - Adv Undergrad Research	1 To 10 Credits
MICB 483 - Phylogenetics & Evolution	3 Credits

Minimum Required Grade: C-	7 or 9 Total Credits Required
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Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics

Rule: All of the following courses are required.

Note: M 171 Calculus I may be substituted for M 162.

Course	Credits
M 162 - Applied Calculus	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Chemistry

Rule: All of the following courses are required.

Course	Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
CHMY 221 - Organic Chem I	3 Credits
CHMY 222 - Org Chm I Lab	2 Credits
CHMY 223 - Organic Chm II	3 Credits
CHMY 224 - Org Chm II Lab	2 Credits
CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
Minimum Required Grade: C-	24 Total Credits Required

Physics

Rule: All of the following courses are required.

Note: These are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & PHSX 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N & 207N/208N.

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Microbiology students take at least 2 partial writing courses. The Microbiology degree requires one 2/3 writing course (BIOM 410). The UD Writing Expectation for the Major is completed with one more course, chosen from either list.

Minimum Required Grade: C-

1/3 UD Writing Courses

Course	Credits
BCH 482 - Advanced Biochemistry II	3 Credits
BIOB 410 - Immunology	3 Credits
BIOB 425 - Adv Cell & Molecular Biology	3 Credits
BIOE 403 - Vert Design & Evolution	5 Credits
BIOE 406 - Behavior & Evolution	4 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOL 483 - Phylogenetics & Evolution	3 Credits
BIOL 484 - Plant Evolution	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits

	BIOO 320 - General Botany	5 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
Minimum Required Grade: C-		

2/3 UD Writing Courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits
	BIOB 499 - Undergraduate Thesis	3 To 6 Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
	BIOH 462 - Principles Medical Physiology	3 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits

Minimum Required Grade: C-	
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Microbial Ecology

Bachelor of Science - Microbiology; Microbial Ecology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Note: Microbiology is the study of microorganisms including bacteria, fungi, viruses, and protozoa. The option in Microbial Ecology emphasizes microbial structure and function as well as interactions and relationships with the environment and other organisms. Students may continue their studies at the graduate level and seek research careers in government, or private laboratories.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Microbiology Core Courses

Rule: All of the following courses are required.

Course	Credits
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BIOE 370 - General Ecology	3 Credits
BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiology Lb (equiv 261)	2 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 411 - Exprmntl Microbial Genetcs Lab	1 Credits
BIOM 415 - Microbial Dvrsty Eclgy & Evltn	3 Credits
BIOM 450 - Microbial Physiology	3 Credits
BIOM 451 - Microbial Physiology Lab	1 Credits
Minimum Required Grade: C-	19 Total Credits Required

Additional UD Major Courses Required for Microbial Ecology Option

Minimum Required Grade: C-

Biochemistry

Rule: Complete either one semester of biochemistry (BCH 380) or one year of biochemistry (BCH 480-482)

Note: If one year of chemistry is completed, then BCH 380 must be taken. Either BCH 380 or BCH 480-482 may be taken if two years of chemistry are completed.

Course	Credits
BCH 380 - Biochemistry	4 Credits
BCH 480 - Advanced Biochemistry I	3 Credits
BCH 482 - Advanced Biochemistry II	3 Credits
Minimum Required Grade: C-	4 or 6 Total Credits Required

Additional UD Depth Courses in Microbiology

Rule: Complete 7 - 9 credits from the following list (labs must be taken with lectures, if available). 7 credits if BCH 480-482 taken; 9 credits if BCH 380 taken.

Note: If BIOB 410 Immunology, then BIOB 411 Immunology Lab must also be taken.
 If BIOM 427 General Parasitology, then BIOM 428 General Parasitology Lab must also be taken.
 If BIOC 433 Plant Physiology, then BIOC 434 Plant Physiology Lab must also be taken.

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Course	Credits
BIOB 410 - Immunology	3 Credits
BIOB 411 - Immunology Laboratory	2 Credits
BIOB 440 - Biological Electron Microscopy	2 Credits
BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits
BIOE 428 - Freshwater Ecology	5 Credits
BIOE 439 - Stream Ecology	3 Credits
BIOE 453 - Ecology of Small & Large Lakes	3 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 428 - General Parasitology Lab	2 Credits
BIOM 435 - Virology	3 Credits
BIOM 490 - Adv Undergrad Research	1 To 10 Credits
BIOO 433 - Plant Physiology	3 Credits
BIOO 434 - Plant Physiology Lab	1 Credits
Minimum Required Grade: C-	7 or 9 Total Credits Required

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Mathematics - Statistics

Rule: The following course is required

Course	Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Chemistry

Rule: Complete either one year of chemistry (CHMY 121N, 123N/124N) or two years of chemistry (CHMY 141N, 143N, 221/222, 223/224)

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits
CHMY 123N - Intro to Organic & Biochem	3 Credits
CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
CHMY 221 - Organic Chem I	3 Credits
CHMY 222 - Org Chm I Lab	2 Credits
CHMY 223 - Organic Chm II	3 Credits
CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-	8 or 20 Total Credits Required

Physics

Rule: The following courses are required.

Note: PHSX 205N/206N & 207N/208N are algebra- and trigonometry-based physics courses. The calculus-based physics sequence, PHSX 215N/216N & 217N/218N (which require M 171 and M 172), may be substituted for PHSX 205N/206N and 207N/208N.

Course	Credits
PHSX 205N - College Physics I	4 Credits

PHSX 206N - College Physics I Laboratory	1 Credits
Minimum Required Grade: C-	5 Total Credits Required

Additional Science Requirement

Rule: Complete at least 6 credits from the following list of courses

Course	Credits
CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
ENSC 245N - Soils	3 Credits
GEO 420 - Hydrogeology	4 Credits
GEO 482 - Global Change	3 Credits
M 172 - Calculus II	4 Credits
M 273 - Multivariable Calculus	4 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
STAT 451 - Statistical Methods I	3 Credits
STAT 452 - Statistical Methods II	3 Credits
STAT 457 - Computer Data Analysis I	1 Credits
STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-	6 Total Credits Required

Upper Division Writing Expectation for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course)

Note: To meet the Upper Division Writing Expectation for the Major, Microbiology students take at least 2 partial writing courses. The Microbiology degree requires one 2/3 writing course (BIOM 410). The UD Writing Expectation for the Major is completed with one more course, chosen from either list.

Minimum Required Grade: C-

1/3 UD Writing Courses

—	Course	Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
	BIOB 410 - Immunology	3 Credits
	BIOB 425 - Adv Cell & Molecular Biology	3 Credits
	BIOE 403 - Vert Design & Evolution	5 Credits
	BIOE 406 - Behavior & Evolution	4 Credits
	BIOE 428 - Freshwater Ecology	5 Credits
	BIOL 483 - Phylogenetics & Evolution	3 Credits
	BIOL 484 - Plant Evolution	3 Credits
	BIOM 402 - Medical Bacteriology& Mycology	3 Credits
	BIOO 320 - General Botany	5 Credits
	BIOO 434 - Plant Physiology Lab	1 Credits
	BIOO 470 - Ornithology	4 Credits
	BIOO 475 - Mammalogy	4 Credits
	Minimum Required Grade: C-	

2/3 UD Writing Courses

—	Course	Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
	BCH 499 - Senior Thesis/Capstone	3 To 6 Credits
	BIOB 411 - Immunology Laboratory	2 Credits
	BIOB 499 - Undergraduate Thesis	3 To 6 Credits
	BIOE 371 - Gen Ecology Lab (equiv to 271)	2 Credits

	BIOH 462 - Principles Medical Physiology	3 Credits
	BIOL 342 - Field Ecology	5 Credits
	BIOM 410 - Microbial Genetics	3 Credits
	BIOM 499 - Undergraduate Thesis	3 To 6 Credits
Minimum Required Grade: C-		

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	

Biology Minor

Minor - Biology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division BIO_ courses.

AP Biology may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Biology Requirement for the Minor

Rule: Complete 8 credits of Upper Division in Biology (BIOB, BIOE, BIOH, BIOL, or BIOC)

Note: These eight credits may not include BIOC, BCH, or BIOM courses.

Minimum Required Grade: C-

8 Total Credits Required

Teaching Biology Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Minor - Biology; Track: Teaching Biology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.75

Note: In order to be licensed to teach secondary biology, students must be admitted to the Teacher Education Program through the Phyllis J. Washington College of Education and Human Sciences.

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N or BIOB 170N/171N.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOB 260 - Cellular and Molecular Biology	4 Credits
BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Upper Division Core Courses Required by the Biology Teaching Minor

Rule: All of the following courses are required.

Course	Credits
BIOM 360 - Gen Microbiology (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiolgy Lb (equiv 261)	2 Credits
Minimum Required Grade: C-	5 Total Credits Required

Required Content Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits

Minimum Required Grade: C-	4 Total Credits Required
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Mathematics - Statistics

Rule: The following course is required

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Chemistry

Rule: All of the following courses are required

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		7 Total Credits Required

Environmental Geosciences

Rule: Complete one of the following courses

—	Course	Credits
	GEO 105N - Oceanography	3 Credits
	GEO 108N - Climate Change	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Education

Rule: The following course is required

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" is required for the Teaching Biology minor.

—	Course	Credits
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EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Secondary Teaching Licensure

Note: For endorsement to teach biology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education & Human Sciences)

Microbiology Minor

Minor - Microbiology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 19

Required Cumulative GPA: 2.0

Microbiology Core Courses

Rule: All of the following courses are required.

Course	Credits
BIOM 360 - Gen Microbiolgy (equiv to 260)	3 Credits
BIOM 361 - Gen Microbiolgy Lb (equiv 261)	2 Credits
BIOM 410 - Microbial Genetics	3 Credits
BIOM 411 - Exprmntl Microbial Genetcs Lab	1 Credits
BIOM 415 - Microbial Dvrsty Eclgy & Evltn	3 Credits
BIOM 450 - Microbial Physiology	3 Credits
BIOM 451 - Microbial Physiology Lab	1 Credits
Minimum Required Grade: C-	16 Total Credits Required

Additional Upper Division Microbiology Requirement

Rule: Complete 3 additional upper division credits in BIOM

Minimum Required Grade: C-

3 Total Credits Required

Central and Southwest Asian Studies

Dr. Ardi Kia, Advisor

The University of Montana has emerged as a national and international leader in recognizing the significance of Central and Southwest Asia, and translating that awareness into a major academic program. The program builds on significant faculty experience and expertise in the region, and includes scholars from a variety of academic disciplines. The program has also organized intensive summer language training programs at UM, as well as summer study tours for K-12 teachers to Central Asia, and also hosts an annual conference that brings leading scholars, diplomats, analysts, and journalists to the UM campus.

The University of Montana offers an undergraduate major as well as a Minor in Central and Southwest Asian Studies. Arabic, Chinese, Persian, Russian and Turkish language instruction are also offered. Faculty exchanges have been organized with universities in China, Egypt, Georgia, Kazakhstan, Kyrgyzstan, Morocco, Russia and Tajikistan.

Central and Southwest Asian Studies Minor

The Central and Southwest Asian Studies Minor is available to all students. It consists of eighteen credits. Students selecting the minor are required to successfully complete HSTR 146 (HIST106)/ANTH 106H/AS 106H and six credits in foundational Central and Southwest Asian Studies courses (200-level courses). Students must then complete nine credits of additional course work at the 300- or 400- level. No language courses are required; however, students pursuing the minor are strongly encouraged to meet the University-wide general education foreign language competency requirement by completing at least the second semester of one of the following languages (100 level or higher): Chinese, Persian, Arabic, Turkish or Russian. Participation in a study-abroad program is strongly recommended.

Minor - Central & Southwest Asian Stds

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Note: The Central and Southwest Asian Studies minor is available to all students. No language courses are required. Participation in a study-abroad program is strongly recommended.

Lower Division Core Courses

Rule: Complete the following subcategories of courses

9 Total Credits Required

Introductory Course

Rule: Must complete the following course

—	Course	Credits
	ANTY 141H - The Silk Road	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Foundational Courses

Rule: Must complete 2 of the following courses

Note: null

—	Course	Credits
	CSWA 262H - Islamic Civil: Classical Age	3 Credits
	CSWA 264 - Islamic Civ: Modrn Era	3 Credits
	HSTR 241H - Central Asian Cult & Civ	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Core Courses

Rule: Must complete 3 courses

Note: If an independent study course is selected it must be taken for 3 credits.

—	Course	Credits
	ANTY 347 - Central Asia and Its Neighbors	3 Credits
	ANTY 442 - Cities/Landscapes Central Asia	3 Credits
	ANTY 492 - Independent Study	1 To 6 Credits
	CSWA 441 - Seminar: Central Asia	3 Credits
	CSWA 457 - Artistic Trad Cent & SW Asia	3 Credits

	HSTR 368 - Iran Betw Two Revol	3 Credits
	HSTR 386 - Nationalism in Mod Middle East	3 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C		9 Total Credits Required

Central and Southwest Asian Studies B.A.

Bachelor of Arts - Central & Southwest Asian Stds

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: Students are required to complete 12 credits of Lower-Division core courses, 9 credits of Upper-Division core courses, in addition to completing the Capstone requirement. Students also must complete the second year sequence (8-10 credits) of either Arabic OR Chinese OR Russian, for a combined total of 42-44 credits. Students are strongly recommended to take a third or fourth year of language study.

Lower Division Core Courses

Rule: Must complete all of the following courses

—	Course	Credits
	ANTY 141H - The Silk Road	3 Credits
	ANTY 241H - Central Asian Culture and Civ	3 Credits
	CSWA 262H - Islamic Civil: Classical Age	3 Credits
	CSWA 264 - Islamic Civ: Modrn Era	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Upper-Division Core Courses

Rule: Must complete 3 of the following courses

—	Course	Credits
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	ANTY 347 - Central Asia and Its Neighbors	3 Credits
	ANTY 444 - Artistic Tradtns Central Asia	3 Credits
	HSTR 368 - Iran Betw Two Revol	3 Credits
	HSTR 386 - Nationalism in Mod Middle East	3 Credits
	HSTR 442 - Cities/Landscps Central Asia	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Language Electives

Rule: Must complete 1 of the following subcategories

18-20 Total Credits Required

Arabic

Rule: May choose to complete the following courses

	Course	Credits
	ARAB 101 - Elementary Modern Arabic I	5 Credits
	ARAB 102 - Elementary Modern Arabic II	5 Credits
	ARAB 201 - Intermediate Modern Arabic I	4 Credits
	ARAB 202 - Intermediate Modern Arabic II	4 Credits
Minimum Required Grade: C-		18 Total Credits Required

Chinese

Rule: May choose to complete the following courses

	Course	Credits
	CHIN 101 - Elementary Chinese I	5 Credits
	CHIN 102 - Elementary Chinese II	5 Credits
	CHIN 201 - Intermediate Chinese I	5 Credits
	CHIN 202 - Intermediate Chinese II	5 Credits

Minimum Required Grade: C-

20 Total Credits Required

Russian

Rule: May choose to complete the following courses

Course	Credits
RUSS 101 - Elementary Russian I	5 Credits
RUSS 102 - Elementary Russian II	5 Credits
RUSS 201 - Intermediate Russian I	4 Credits
RUSS 202 - Intermediate Russian II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Capstone Requirement

Rule: Must complete 1 of the following courses

Note: If taking HSTR 496, student is required to take the course for 3 credits and complete a 25 page research paper. Either course fulfills the Upper-Division Writing Requirement for the Major.

Course	Credits
ANTY 494 - Seminar: Central Asia	3 Credits
HSTR 496 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

Chemistry and Biochemistry Department

Christopher P. Palmer, Chair

Chemistry is the central science that involves the study of molecules, their structures, their combinations, their interactions, and the energy changes accompanying chemical processes.

The Department offers the following degrees: B.S., B.A., M.S., M.A., and Ph.D.

Prospective students desiring further information on any program of the Department of Chemistry and Biochemistry should visit the [Department of Chemistry and Biochemistry](#) and [Biochemistry Program](#) websites.

High School Preparation: In addition to the general University admission requirements, it is strongly recommended that a student take four years of mathematics, four (or more) years of science (earth and space science, biology, chemistry, and physics), four years of a foreign language, and four years of English.

Refer to graduation requirements listed previously in the catalog. See index.

Department Faculty

Professor

Bruce Bowler, Professor and Director, Biochemistry Program
Mark Cracolice, Professor
Michael DeGrandpre, Professor of Chemistry and Biochemistry
Daniel Dwyer, Dr.
Christopher Palmer, Professor/Chair
Nigel Priestley, Professor of Chemistry
Edward Rosenberg, Professor
J.B. Alexander (Sandy) Ross, Dean of the Graduate School and Professor of Chemistry and Biochemistry
Kent Sugden, Professor of Chemistry and Biochemistry

Associate Professors

Orion Berryman, Assistant Professor
Klara Briknarova, Associate Professor
Xi Chu, Associate Professor
Aaron Thomas, Associate Professor, Director of Native American Research Laboratory

Adjunct Instructor

Gerald Olbu

Lecturer

Earle Adams, assistant research professor
Holly Thompson, Lecturer

Emeritus Professor

Richard Field, Professor Emeritus
Donald Kiely
Garon Smith, Professor of Chemistry
Edward Waali, Professor Emeritus

Course Descriptions

Chemistry

- **CHMY 101N - Chemistry for the Consumer**
Credits: 3. Offered intermittently. An introduction to chemistry that emphasizes the influence of chemistry on one's everyday life. Common household products, such as soap, aspirin, toothpaste, face cream and fertilizers are prepared in the lab. **Course Attributes:**
Natural Science Lab Course Natural Science Course
- **CHMY 104 - Preparation for Chemistry**
Credits: 3. Offered autumn. Prereq. ALEKS Level 3 or M 090 Introductory Algebra w/ C- or better. An introduction to chemistry for those who believe they have an inadequate background to enroll in CHMY 121N or 141N. Not appropriate toward chemistry requirement in any major.

- **CHMY 121N - Introduction to General Chemistry**
 Credits: 3. Offered autumn and spring. First semester of an introduction to general, inorganic, organic and biological chemistry. **Course Attributes:** Natural Science Course
 Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt
- **CHMY 122 - Introduction to General Chemistry Lab**
 Credits: 1. Offered autumn and spring. Prereq., Enrolled in the College of Technology ASRN program. Prereq. or coreq., CHMY 121N or equivalent. A laboratory course emphasizing inorganic chemistry, quantitative relations and synthesis of inorganic and organic compounds. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt
- **CHMY 123 - Introduction to Organic and Biochemistry**
 Credits: 3. Offered autumn and spring. Prereq., "C-" or equiv. in CHMY 121N or consent of instr. Second semester of an introduction to general, inorganic, organic and biological chemistry.
- **CHMY 124 - Introduction to Organic and Biochemistry Lab**
 Credits: 2. Offered autumn and spring. Prereq. or coreq., CHMY 123. Laboratory to accompany CHMY 123.
- **CHMY 141N - College Chemistry I**
 Credits: 5. Offered autumn and spring. Prereq., ALEKS Placement Level 4 or M 095 Intermediate Algebra w/ C- or better. For science majors and other students intending to take more than one year of chemistry. Properties of elements, inorganic compounds, liquid solutions, chemical equilibria and chemical kinetics. Includes laboratory. **Course Attributes:**
 Natural Science Lab Course
- **CHMY 143N - College Chemistry II**
 Credits: 5. Offered spring and summer. Prereq., "C-" or better in CHMY 141N or consent of instr. A continuation of CHMY 141N. Includes Laboratory. **Course Attributes:**
 Natural Science Lab Course Natural Science Course
- **CHMY 191 - Special Topics/Expmntl Crse**
 Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **CHMY 221 - Organic Chemistry I**
 Credits: 3. Offered autumn. Prereq., CHMY 123N or 143N. The chemical and physical properties of organic compounds.
- **CHMY 222 - Organic Chemistry I Lab**
 Credits: 2. Offered autumn. Coreq., CHMY 221; prereq., one semester of 100-level laboratory. Microscale techniques are emphasized.
- **CHMY 223 - Organic Chemistry II**
 Credits: 3. Offered spring. Prereq., CHMY 221. Continuation of 221.
- **CHMY 224 - Organic Chemistry II Lab**
 Credits: 2. Offered spring. Prereq., CHMY 222; prereq. or coreq., CHMY 223.
- **CHMY 290 - Undergraduate Research**
 Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
 Research & Creative Schlrshp
- **CHMY 291 - Special Topics/Expmntl Crse**
 Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CHMY 292 - Independent Study**
 Credits: 1 TO 10. (R-10) Offered autumn and spring. Prereq., one semester of chemistry and consent of instr. Laboratory investigations and research in the laboratory of a faculty member.
- **CHMY 294 - Seminar/Workshop**
 Credits: 1 TO 3. (R-6) Offered intermittently. Topic varies.
- **CHMY 302E - Chemistry Literature and Science Writing**
 Credits: 3. Offered autumn and spring. Prereq., CHMY 223 and chemistry or biochemistry majors. Presentation and discussion of current literature in chemistry. Use of library and search tools. Workshop for developing and improving skills in scientific writing and evaluation. Use of on-line data bases and the interface of these with PC-based word processing and scientific graphics programs. **Course Attributes:** Ethical & Human Values Course
 Writing Course-Upper-Division Writing Course-Advanced
- **CHMY 311 - Analytical Chem-Quant Analysis**
 Credits: 4. Offered autumn. Prereq., one year of college chemistry, including laboratory. Classroom and laboratory work in gravimetric, volumetric, colorimetric and electrochemical methods of analysis; theory of errors; ionic equilibria in aqueous solutions.
- **CHMY 360 - Applied Physical Chemistry**
 Credits: 3. Offered spring. Prereq., CHMY 123 OR 143 AND M 162. Basic thermodynamics and chemical kinetics with applications in the biological and environmental sciences. Credit not allowed for both 360 and 373.
- **CHMY 371 - Phys Chem-Qntm Chm & Spctrscopy**
 Credits: 4. Offered spring. Prereq., CHMY 373. Systematic treatment of the laws and theories relating to chemical phenomena.
- **CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs**
 Credits: 4. Offered autumn. Prereq., CHMY 143, M 273, PHYS 122 or 222. Systematic treatment of the laws and theories relating to chemical phenomena. Credit not allowed for both CHMY 360 and 373.
- **CHMY 390 - Undergraduate Research**
 Credits: 1. Offered every term. Prereq., CHEM 161N-162N with B or better and consent of instr. Methods of peer-led team learning as applied to general chemistry instruction. Review of concepts from general chemistry. Student leaders mentor a team of general chemistry students in working toward constructing chemistry knowledge and developing problem-solving skills. **Course Attributes:** Research & Creative Schlrshp
- **CHMY 391 - Special Topics/Expmntl Crse**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **CHMY 392 - Independent Study**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **CHMY 397 - Teaching Chemistry**
 Credits: 1. Offered every term. Prereq., CHMY 141N-143N with B or better and consent of instr. Methods of peer-led team learning as applied to general chemistry instruction. Review of concepts from general chemistry. Student leaders mentor a team of general chemistry students in working toward constructing chemistry knowledge and developing problem-solving skills.
- **CHMY 398 - Internship/Cooperative Educ**
 Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off

campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Course Attributes: Internships/Practicums Internship graduation limit 6

- **CHMY 401 - Advanced Inorganic Chemistry**
Credits: 3. Offered autumn. Prereq., CHMY 223 AND 360 OR 373 or consent of instr. Theory and principles of inorganic chemistry and a systematic coverage of descriptive inorganic chemistry in the context of the periodic table.
- **CHMY 402 - Advanced Inorganic Chem Lab**
Credits: 2. Offered spring. Prereq., CHMY 224 AND 360 or 373 and consent of instr. Preparation of inorganic and coordination compounds. Isolation and characterization by ion exchange, column chromatography, IR, UV-VIS, derivatives, MP, and BP.
- **CHMY 403 - Descriptive Inorganic Chem**
Credits: 3. Offered spring. Prereq., CHMY 221-222, 360 or 373-371, and 401. A survey of the chemistry of the elements including transition metal reaction mechanisms, redox chemistry, organometallic chemistry, bioinorganic chemistry.
- **CHMY 421 - Advanced Instrument Analysis**
Credits: 4. Offered spring. Prereq., CHMY 311. Theory and use of instrumental methods in the study of analytical and physical chemistry.
- **CHMY 442 - Aquatic Chemistry**
Credits: 3. Offered autumn odd-numbered years. Prereq., CHMY 311 or consent of instr. Application of chemical equilibria theory for understanding and modeling chemical processes in natural waters with an emphasis on spreadsheet computations. In depth examination of concepts such as pH, alkalinity, buffering, and solubility as they apply to natural waters.
- **CHMY 445 - Indstrl Chm & Its Impct on Soc**
Credits: 3. Offered every other autumn semester. Prereq., CHMY 143 or 123. A course based on local Montana chemical industries involving field trips to chemical plants, visits by company personnel and an overall evaluation of the company's economic and environmental impact on the community.
- **CHMY 465 - Organic Spectroscopy**
Credits: 3. Offered intermittently. Prereq., CHMY 360 or 373 and one year of organic chemistry or consent of instr. Theory and interpretation of the NMR, IR, UV, and mass spectra of organic compounds with the goal of structure identification.
- **CHMY 466 - FT-NMR Optn for Undrgrd Rsrch**
Credits: 1. Offered intermittently. Prereq., CHMY 221-222; research project using NMR; consent of instr. Operation of the FT-NMR spectrometer and brief background of NMR spectroscopy.
- **CHMY 485 - Laboratory Safety**
Credits: 1. Offered autumn. Prereq., one year of college chemistry. Awareness of and methods of control of hazards encountered in laboratory work. Awareness of legal constraints on work with chemicals. Sources of information regarding chemical hazards.
- **CHMY 488 - Forensic Research**
Credits: 3. Offered autumn, spring and summer. Prereq., consent of instr. Laboratory investigations and research on forensic chemistry topics under the direction of a faculty member.
- **CHMY 489 - Forensic Research Seminar**
Credits: 1. Offered autumn. Prereq., CHMY 421 and ANTH 286N. Seminar speakers on forensic science topics in the areas of ethics, law, anthropology and criminology; tours of the Montana State Crime Laboratory.

- **CHMY 490 - Undergraduate Research**
 Credits: 1 TO 9. Undergraduate Research Variable cr (R-9). Offered autumn, spring, and summer. Prereq., consent of instr. Laboratory investigations and research in the laboratory of a faculty member. **Course Attributes:** Research & Creative Schlrshp
- **CHMY 491 - Special Topics/Expmntl Crse**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics.
- **CHMY 492 - Independent Study**
 Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Laboratory investigations and research in the laboratory of a faculty member.
- **CHMY 494 - Seminar/Workshop**
 Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Laboratory investigations and research in the laboratory of a faculty member.
- **CHMY 498 - Internship/Cooperative Educ**
 Credits: 1 TO 6. Prereq., consent of department. Extended non-classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6
- **CHMY 499 - Senior Thesis/capstone**
 Credits: 3. Offered autumn and spring. Prereq., CHMY 490 or consent of instr. and senior standing. Students complete and report on undergraduate research initiated as CHEM 490 or equivalent research experience. Reports are both oral and written.
- **CHMY 501 - Teaching University Chemistry**
 Credits: 1. Offered autumn. Preparation for teaching chemistry at the college level. A survey of teaching fundamentals and educational psychology as applied to chemistry instruction. Level: Graduate
- **CHMY 541 - Environmental Chemistry**
 Credits: 3. Offered intermittently. Prereq., CHMY 360 OR 373. Chemical principles and reactions in natural systems: Fate of chemical contaminants in the environment; partitioning of contaminants between phases (air/water/soil); chemistry of atmospheric pollutants; computer modeling of equilibrium and kinetic processes; degradation and transformation of organic contaminants. Level: Graduate
- **CHMY 542 - Separation Science**
 Credits: 3. Offered autumn odd-numbered years. Prereq., CHMY 421, CHMY 360 or 373. Theory, method development, and application of analytical separations; solvent extraction; solid phase extraction; various forms of chromatography; electrophoresis. Level: Graduate
- **CHMY 544 - Applied Spectroscopy**
 Credits: 3. Offered intermittently. Prereq., CHMY 421 or consent of instr. The function and application of optical (ultraviolet to infrared) chemical instrumentation. Specific topics include optics, light sources, detectors and a wide variety of spectrochemical methods with an emphasis on methods not typically covered in undergraduate instrumental analysis courses. Level: Graduate
- **CHMY 553 - Inor Chem and Curr Lit**
 Credits: 4. Offered spring. Prereq., CHMY 401. A survey of the elements including transition metal reaction mechanisms, redox chemistry, organometallic chemistry, bioinorganic chemistry. Oral and written presentations on primary literature. Level: Graduate
- **CHMY 562 - Org Structure and Mech**

Credits: 3. Offered intermittently. Prereq., one year of organic chemistry. Topics may include: stereochemistry, conformational analysis, aromaticity, transition state theory, isotope effects, solvent effects, substitution and elimination reactions, and mechanisms that involve carbocations, carbanions, radicals and carbenes as reactive intermediates. Level: Graduate

- **CHMY 563 - Organic Synthesis**

Credits: 3. Offered intermittently. Prereq., CHMY 221-223. Theoretical treatise of the common methods used in organic synthesis including: oxidation, reduction, organometallics, C-C bond forming reactions, synthetic strategies and total synthesis. Level: Graduate

- **CHMY 566 - FT-NMR for Graduates**

Credits: 1. Offered intermittently. Prereq., CHMY 221-222; research project using NMR; consent of instr. Operation of the FT-NMR spectrometer and brief background of NMR spectroscopy. Level: Graduate

- **CHMY 568 - Organometallic Chemistry**

Credits: 3. Offered intermittently in autumn. Prereq., CHMY 221, 223, 401, 403. Survey of the reactivity and structure of main group and transition metal organometallic compounds with an emphasis on applications to organic synthesis and catalysis. Level: Graduate

- **CHMY 573 - Advanced Physical Chem**

Credits: 3. Offered intermittently. Prereq., CHMY 371-373. Fundamental principles of physical chemistry and special applications. Level: Graduate

- **CHMY 580 - Adv Graduate Res Seminars**

Credits: 1. (R-10) Offered every term. Prereq., consent of instr. Formal oral and written presentations of research results and selected literature topics in a designated area. Level: Graduate

- **CHMY 593 - Professional Project**

Credits: 3. Offered autumn and spring. Prereq., consent of instr. Preparation of a professional project appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Faculty-Led Study Abroad

- **CHMY 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **CHMY 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **CHMY 597 - Research**

Credits: 1 TO 10. Offered autumn and spring. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate

- **CHMY 598 - Internship**

Credits: 1 TO 8. (R-8) Offered autumn and spring. Prereq., consent of department. Extended non-classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

- **CHMY 599 - Thesis**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

- **CHMY 630 - Seminar**
Credits: 1. (R-14) Offered autumn and spring. Prereq., graduate standing in chemistry or biochemistry, or consent of instr. Level: Graduate
- **CHMY 640 - Intro Grad Seminar**
Credits: 1. (R-20) Offered autumn. Prereq., graduate standing in chemistry or biochemistry or consent of instr. Seminar to acquaint new graduate students with departmental research. Level: Graduate
- **CHMY 650 - Graduate Chemistry Seminar**
Credits: 1. (R-2) Offered spring. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate
- **CHMY 652 - Original Research Proposal**
Credits: 1. Offered autumn. Prereq., CHMY 640 and CHMY 650. Preparation and presentation of original research proposals for third year graduate students. Level: Graduate
- **CHMY 697 - Research**
Credits: 1 TO 10. (R-60) Offered autumn and spring. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **CHMY 699 - Dissertation**
Credits: 1 TO 10. (R-10) Offered autumn and spring. Preparation of extensive thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Forensic Chemistry

Bachelor of Science - Chemistry; Forensic Chemistry Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 100

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: All courses in all subcategories listed are required

General Chemistry

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Organic Chemistry

—	Course	Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		10 Total Credits Required

Biology

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 260 - Cellular and Molecular Biology	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Physics

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits

	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Mathematics

	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Forensic Science and Criminal Justice

	Course	Credits
	CJUS 125N - Fund of Forensic Science	3 Credits
	SOCI 221 - Criminal Justice System	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Core Courses

Rule: All subcategories must be completed

Analytical Chemistry

Rule: Complete all of the following courses

	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 421 - Advanced Instrument Analysis	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Physical Chemistry

Rule: Choose 1 of the listed courses

—	Course	Credits
	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Inorganic Chemistry

Rule: Complete the following course

—	Course	Credits
	CHMY 401 - Advanced Inorganic Chemistry	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Biochemistry

Rule: Complete the following courses

—	Course	Credits
	BCH 480 - Advanced Biochemistry I	3 Credits
	BCH 482 - Advanced Biochemistry II	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Experiential Learning

Rule: Choose 1 of the listed courses for 3 credits

—	Course	Credits
	CHMY 488 - Forensic Research	3 Credits
	CHMY 498 - Internship/Cooperative Educ	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Seminar

Rule: Complete the following course

—	Course	Credits
	CHMY 489 - Forensic Research Seminar	1 Credits
Minimum Required Grade: C-		1 Total Credits Required

Statistics

Rule: Complete the following courses

—	Course	Credits
	STAT 451 - Statistical Methods I	3 Credits
	STAT 457 - Computer Data Analysis I	1 Credits
Minimum Required Grade: C-		4 Total Credits Required

Advanced Electives

Rule: Choose 11 credits from the listed courses. 8 of the credits must be numbered 300 or above

—	Course	Credits
	BIOB 440 - Biological Electron Microscopy	2 Credits
	CHMY 465 - Organic Spectroscopy	3 Credits
	CHMY 466 - FT-NMR Optn for Undrgrd Rsrch	1 Credits
	CHMY 542 - Separation Science	3 Credits
	CJUS 488 - Foren Sci: Beyond Crime Lab	3 Credits
	PHAR 110N - Use & Abuse of Drugs	3 Credits
Minimum Required Grade: C-		11 Total Credits Required

Expressive Art - Public Speaking

Rule: Complete the following course

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits

Minimum Required Grade: C-	3 Total Credits Required
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Social Science - Criminology

Rule: Complete the following course

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Complete the following course

—	Course	Credits
	CHMY 302E - Chem Lit and Science Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry B.S.

(American Chemical Society Certified)

The courses required for the B.S. degree provide a solid education in chemistry for the professional chemist and in preparation for graduate work in most areas of chemistry. These requirements meet the latest certification standards of the American Chemical Society.

Bachelor of Science - Chemistry

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 94

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: All courses in all subcategories listed are required

General Chemistry

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Organic Chemistry

—	Course	Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Mathematics

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
Minimum Required Grade: C-		12 Total Credits Required

Computer Science

—	Course	Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
		3 Total Credits Required

Upper Division Core Courses

Rule: All courses in all subcategories listed are required

33 Total Credits Required

Analytical Chemistry

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 421 - Advanced Instrument Analysis	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Physical Chemistry

—	Course	Credits
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	CHMY 371 - Phys Chem-Qntm Chm & Spctrscopy	4 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Inorganic Chemistry

—	Course	Credits
	CHMY 401 - Advanced Inorganic Chemistry	3 Credits
	CHMY 402 - Advanced Inorganic Chem Lab	2 Credits
	CHMY 403 - Descriptive Inorganic Chem	3 Credits
Minimum Required Grade: C-		8 Total Credits Required

Biochemistry

—	Course	Credits
	BCH 480 - Advanced Biochemistry I	3 Credits
	BCH 486 - Biochemistry Research Lab	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Mathematics

—	Course	Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Advanced Electives

Rule: Choose 3 to 9 credits from the listed courses.

Note: 3 credits maximum of CHMY 492 or CHMY 499 may be applied toward degree requirements. Other classes in chemistry, physics, geology, biochemistry, or mathematics may be used to meet the Advanced Electives requirement with approval of the Chemistry Adviser.
2 additional Advanced Electives of at least 3 credits each may be substituted for the Modern Language requirement with approval of the Chemistry Adviser.

Course	Credits
CHMY 391 - Special Topics/Expmntl Crse	1 To 9 Credits
CHMY 442 - Aquatic Chemistry	3 Credits
CHMY 445 - Indstrl Chm & Its Impct on Soc	3 Credits
CHMY 465 - Organic Spectroscopy	3 Credits
CHMY 491 - Special Topics/Expmntl Crse	1 To 9 Credits
CHMY 492 - Independent Study	1 To 9 Credits
CHMY 499 - Senior Thesis/capstone	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Modern Foreign Language

Rule: Complete 2 semesters (10 credits) of a modern language or 2 addiional advanced elective courses

Note: 2 Advanced Elective courses worth at least 3 credits each may be substituted for the Modern Foreign Language requirement with approval from the Chemistry Adviser.

Minimum Required Grade: Pass

10 Total Credits Required

Ethics

Rule: Complete the following course

Course	Credits
CHMY 302E - Chem Lit and Science Writing	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Environmental Chemistry

Pharmacology

Bachelor of Science - Chemistry; Pharmacology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 88

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: All subcategories must be completed

General Chemistry

Rule: Complete both courses

Course	Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-	10 Total Credits Required

Organic Chemistry

Rule: Complete all courses listed

Course	Credits
CHMY 221 - Organic Chem I	3 Credits
CHMY 222 - Org Chm I Lab	2 Credits
CHMY 223 - Organic Chm II	3 Credits
CHMY 224 - Org Chm II Lab	2 Credits

Minimum Required Grade: C-

10 Total Credits Required

Biochemistry and Biology

Rule: Complete both courses

—	Course	Credits
	BCH 110 - Intro Biology for Biochemists	3 Credits
	BCH 111 - Intro Biol for Biochemists Lab	1 Credits
	BIOB 260 - Cellular and Molecular Biology	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Physics

Rule: Complete either PHSX 205N-206N and 207N-208N or PHSX 215N-216N and 217N-218N

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Mathematics

Rule: Complete either M162 and M274 or M171 and M172

—	Course	Credits

	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 274 - Intro to Differential Equation	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Upper Core Courses

Rule: All subcategories must be completed

Analytical Chemistry

Rule: Complete all of the following courses

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 421 - Advanced Instrument Analysis	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Physical Chemistry

Rule: Choose 1 of the listed courses

—	Course	Credits
	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Inorganic Chemistry

Rule: Complete the following course

—	Course	Credits

CHMY 401 - Advanced Inorganic Chemistry	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Biochemistry

Rule: Complete the following courses

Course	Credits
BCH 480 - Advanced Biochemistry I	3 Credits
BCH 482 - Advanced Biochemistry II	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Pharmacology

Rule: Complete the following courses

Course	Credits
PHAR 341 - Physiological Systems I	4 Credits
PHAR 342 - Physiological Systems II	4 Credits
PHAR 421 - Medicinal Chem I	3 Credits
PHAR 422 - Medicinal Chem II	3 Credits
PHAR 443 - Pharmacol & Toxicol I	4 Credits
PHAR 444 - Pharmacology & Toxicol II	4 Credits
Minimum Required Grade: C-	14 Total Credits Required

Biology

Rule: Complete the following course

Course	Credits
BIOM 400 - Medical Microbiology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Advanced Electives

Rule: Choose 3 credits from the listed courses

Note: 3 credits maximum of CHMY 492 may be applied toward degree requirements.

3 credits maximum of BIOB 490 may be applied toward degree requirements.

—	Course	Credits
	BIOB 490 - Adv Undergrad Research	1 To 10 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
	CHMY 402 - Advanced Inorganic Chem Lab	2 Credits
	CHMY 403 - Descriptive Inorganic Chem	3 Credits
	CHMY 442 - Aquatic Chemistry	3 Credits
	CHMY 445 - Indstrl Chm & Its Impct on Soc	3 Credits
	CHMY 465 - Organic Spectroscopy	3 Credits
	CHMY 466 - FT-NMR Optn for Undrgrd Rsrch	1 Credits
	CHMY 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ethics

Rule: Complete the following course

—	Course	Credits
	CHMY 302E - Chem Lit and Science Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry B.A.

The courses required for the B.A. degree provide a less extensive training in chemistry than do the courses required for the American Chemical Society certified B.S. degree. This is to allow the student to supplement his or her program with courses that meet his or her specific needs. Thus this degree provides the core of traditional preparation in chemistry together with latitude for combination with an interdisciplinary field or the Teacher Preparation program. It is strongly advised that students using this degree obtain faculty advice in planning their program.

Teaching Chemistry

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - Chemistry; Track: Teaching Chemistry

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 85

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: All subcategories must be completed

49 Total Credits Required

General Chemistry

Rule: Complete both courses

Course	Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-	10 Total Credits Required

Organic Chemistry

Rule: Complete all courses

—	Course	Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
	CHMY 224 - Org Chm II Lab	2 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics

Rule: Complete either PHSX 205N-206N and 207N-208N or PHSX 215N-216N and 217N-218N

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Mathematics

Rule: Complete all courses

—	Course	Credits
	M 171 - Calculus I	4 Credits

	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		16 Total Credits Required

Computer Science

Rule: Complete the following course

—	Course	Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Core Courses

Rule: All subcategories must be completed

33 Total Credits Required

Analytical Chemistry

Rule: Complete all of the following courses

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 421 - Advanced Instrument Analysis	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Physical Chemistry

Rule: Complete all of the following courses

—	Course	Credits
	CHMY 371 - Phys Chem-Qntm Chm & Spctrscopy	4 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits

Minimum Required Grade: C-

8 Total Credits Required

Inorganic Chemistry

Rule: Complete all of the following courses

—	Course	Credits
	CHMY 401 - Advanced Inorganic Chemistry	3 Credits
	CHMY 403 - Descriptive Inorganic Chem	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Laboratory Safety

Rule: Complete the following course

—	Course	Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		1 Total Credits Required

Teaching Preparation Requirements

Rule: Complete both of the following

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
	ENST 472 - Gen Sci: Conserv Ed	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Biochemistry

Rule: Complete the following course

—	Course	Credits
	BCH 380 - Biochemistry	4 Credits

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Modern Foreign Language

Rule: Complete 10 credits of modern foreign language

Note: The foreign language requirement may be waived for a student who completes the B.A. degree in preparation for secondary teaching and who meets the requirements for teaching licensure, including the student teaching requirement. These students still must meet the foreign language/symbolic systems competency requirement (likely via M 171 and 172) for General Education as described in the Academic Policies and Procedures section of this catalog.

Minimum Required Grade: Pass

10 Total Credits Required

Ethics

Rule: Complete the following course

Course	Credits
CHMY 302E - Chem Lit and Science Writing	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Chemistry Minor

Minor - Chemistry (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 31

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: Must complete all of the following:

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
Minimum Required Grade: C-		18 Total Credits Required

Upper Core Courses

Rule: Must complete the following:

—	Course	Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Physical Chemistry Requirement

Rule: Must complete one of the following:

—	Course	Credits
	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Electives

Rule: Must complete two of the following:

Note: If the student's major requires biochemistry, BCH 380 or BCH 480 and BCH 482 may not be used to satisfy this requirement.

—	Course	Credits
	BCH 380 - Biochemistry	4 Credits

BCH 480 - Advanced Biochemistry I	3 Credits
BCH 482 - Advanced Biochemistry II	3 Credits
CHMY 371 - Phys Chem-Qntm Chm & Spctrscopy	4 Credits
CHMY 401 - Advanced Inorganic Chemistry	3 Credits
CHMY 403 - Descriptive Inorganic Chem	3 Credits
CHMY 442 - Aquatic Chemistry	3 Credits
CHMY 445 - Indstrl Chm & Its Impct on Soc	3 Credits
CHMY 465 - Organic Spectroscopy	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Teaching Chemistry Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Chemistry (Minor); Track: Teaching Chemistry

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: All subcategories must be completed

*Chemistry***Rule:** Must complete all of the following:

—	Course	Credits
	CHMY 101N - Chemistry for the Consumer	3 Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 221 - Organic Chem I	3 Credits
	CHMY 222 - Org Chm I Lab	2 Credits
	CHMY 223 - Organic Chm II	3 Credits
Minimum Required Grade: C-		21 Total Credits Required

*Mathematics***Rule:** Must complete all of the following:

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

*Physics***Rule:** Must complete all of the following:

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits

	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Computer Science

Rule: Must complete one of the following:

—	Course	Credits
	CSCI 100 - Intro to Programming	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Core Courses

Rule: Must complete the following:

—	Course	Credits
	BCH 380 - Biochemistry	4 Credits
	CHMY 311 - Analytical Chem-Quant Analysis	4 Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		9 Total Credits Required

Physical Chemistry Requirement

Rule: Must complete one of the following:

—	Course	Credits
	CHMY 360 - Applied Physical Chemistry	3 Credits
	CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching. Individuals completing a teaching minor must also complete a teaching major in another content area.

Teaching Preparation Requirements

Rule: Must complete all of the following:

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
ENST 472 - Gen Sci: Conserv Ed	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Communication Studies Department

Steve Schwarze, Chair

Communication Studies engages in both social-scientific and humanistic approaches to the analysis, understanding and improvement of human communication. The discipline traces its roots to ancient Greek and Roman studies of the functions of public discourse in society, but in the twentieth century communication came to embrace the studies of interpersonal and small group interaction, human relations in organizations, media and society, and intercultural interaction. Although interdisciplinary in spirit, the discipline has a core of knowledge, theory, and concepts concentrating on such things as symbols, messages, interactions, networks, audiences, and persuasive campaigns. Uniting the field is the belief that the role of communication in human experience is basic to comprehending complex situations and problems in the modern world. The discipline has roles in both the broad traditions of liberal arts education and in the development and refinement of practical skills.

The Department of Communication Studies at the University of Montana-Missoula focuses on three broad areas of study: interpersonal interaction and human relationships, organizational communication, and rhetoric and public discourse. The knowledge and skills the student may acquire in each of these areas are important to functioning effectively in one's personal life, at work, and as a citizen of the larger society in a rapidly changing world.

The program in Communication Studies helps to prepare students for such diverse professions as: public relations officer, marketing analyst, human resources or personnel manager, community mediator, political speech writer, health communication trainer, social services director, or student services coordinator. Also, undergraduate and graduate study can assist the student in pursuing advanced studies for law, the ministry, and higher education.

Department Faculty

Professor

Betsy Wackernagel Bach, Professor
Sara Hayden, Professor
Gregory Larson, Professor
Steve Schwarze, Professor & Department Chair
Alan Sillars, Professor
Stephen Yoshimura, Professor

Associate Professors

Joel Iverson, Associate Professor
Christina Yoshimura, M.A., Counselor

Adjunct Instructor

Lucy Beighle, Adjunct instructor
Phyllis Ngai, Adjunct Associate Professor

Lecturer

David Airne, Director of Debate

Course Descriptions

Communication

- **COMX 111A - Intro to Public Speaking**
Credits: 3. Offered every term. Preparation, presentation, and criticism of speeches. Emphasis on the development of public speaking techniques through constructive criticism. Credit not allowed for both COMM 111A and COM 160A. **Course Attributes:** Expressive Arts Course
- **COMX 115S - Introduction to Interpersonal Communications**
Credits: 3. Offered autumn and spring. An overview of the process of human communication with special emphasis on analyzing communication patterns and improving interpersonal communication skills. Credit not allowed for both COMM 110S and COM 150S. **Course Attributes:** Social Sciences Course
- **COMX 191S - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums Social Sciences Course
- **COMX 202S - Nonverbal Communication**
Credits: 3. Offered yearly. Nonverbal code systems and how they function in human communication including gestures, facial expressions, personal space, and others. **Course Attributes:** Social Sciences Course
- **COMX 204X - International & Dvlpmnt Comm**
Credits: 3. Offered yearly. International Communication is concerned with information exchange across national borders while Development Communication focuses on the historical, current, and prospective role of communication technologies in social change, improving living conditions, and enhancing life prospects-mainly in developing countries. **Course Attributes:** Indigenous and Global
- **COMX 210 - Communication in Small Groups**
Credits: 3. Offered autumn and spring. Theory and research related to communication roles, collaboration, cohesion, leadership, and decision-making. Experiences provided in task oriented groups and field analyses of group processes.
- **COMX 220S - Intro to Organizational Comm**
Credits: 3. Offered yearly. Theory and research on communication in organizations. Focus on topics such as productivity, power, culture, socialization, technology and globalization covering a wide

range of organizations including corporations, government, educational institutions, non-profit agencies and media organizations. **Course Attributes:** Social Sciences Course

- **COMX 222 - Professional Communication**

Credits: 3. Offered intermittently. Explores communication skills needed in business and professional contexts. Focus on developing a working knowledge of theory and skills for interpersonal communication, group communication, and business writing. Concepts include communication processes, diversity in the workplace, nonverbal communication, technical communication, communication with customers, and employment communication.

- **COMX 240H - Intro to Rhetorical Theory**

Credits: 3. Offered yearly. An overview of rhetorical theory including an exploration of classical rhetoric, British and Continental rhetorical theory, and contemporary theories of language and persuasion. **Course Attributes:** Historical & Cultural Course

- **COMX 241 - Persuasive Communication**

Credits: 3. Offered yearly. The use of communication in attitude and behavior change as experienced in personal, organizational, and public contexts.

- **COMX 242 - Argumentation**

Credits: 3. Offered autumn and spring on the Mountain campus, offered intermittently on the Missoula College campus. Development of argumentation skills and critical judgment in decision-making and debate. Includes criticism, construction, presentation, and refutation of spoken and written arguments.

- **COMX 311 - Family Communication**

Credits: 3. Offered yearly. Not open to PCOM. Prereq., COMX 115 or consent of instructor. An examination of communication in husband-wife, parent-child, and extended family relationships. Topics include intimacy, power, decision-making, problem solving, identity formation, and interpersonal perception.

- **COMX 312 - Forensics/Honors**

Credits: 1 TO 3. (R-12) Offered every term. Preparation and participation in competitive speech and debate, including Lincoln/Douglas and Parliamentary debate. The team travels to regional competitions and hosts on-campus and intramural debates and speaking events. Up to 6 credits may apply toward a major or minor in communication studies.

- **COMX 343 - Persuasive Speaking and Critic**

Credits: 3. Offered yearly. Prereq., COMM 111A or consent of instructor. Not open to PCOM. The persuasive process through the criticism and creation of speeches and other rhetorical artifacts emphasizing the role persuasion plays in creating and shaping our culture.

- **COMX 347 - Rhetoric Nature & Environmtlsm**

Credits: 3. Offered every other year. Same as ENST 377. Not open to PCOM. Survey of rhetorical texts that shape public understanding of nature and environmental issues. Analysis of a range of historical and contemporary environmental texts using theoretical concepts from the rhetorical tradition. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **COMX 349 - Comm Consump & Climate**

Credits: 3. Offered every other year. Same as CCS 349. Not open to PCOM majors. Analyzes consumption as a communication practice, investigates discourses that promote consumption, and illuminates environmental impacts on consumption.

- **COMX 351 - Principles of Public Relations**

Credits: 3. Offered yearly. Not open to PCOM. The many uses of communication in the endeavor of public relations. Communication theories and models including interpersonal communication, organizational communication, and mass communication are applied to explore the internal and external communication behavior associated with public relations.

- **COMX 352 - Public Relations Portfolio**

Credits: 3. Offered yearly. Not open to PCOM. Writing documents such as press releases, fact sheets, brochures and speeches to create relationships between organizations and their publics.

- **COMX 380 - Gender and Communication**

Credits: 3. Offered yearly. Not open to PCOM. The meaning of gender in our culture. Examines how gender is displayed and perpetuated through social institutions such as the media and through our private and public verbal and nonverbal interactions.

- **COMX 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Not open to PCOM. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **COMX 398 - Internship**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Not open to PCOM. Prerequisite, consent of instructor. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (398, 498) may count toward graduation. Offered C/NCR only. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **COMX 412 - Communication and Conflict**

Credits: 3. Offered autumn and spring. Not open to PCOM. Conceptual and practical discussions of communication and conflict in interpersonal relationships, organizational settings and overall cultural milieu. Topics include culture, power, styles, negotiation and bargaining, mediation, dissent, dispute systems, and crisis communication. Credit is not allowed for both COMM 413 and COMM 412.

- **COMX 413 - Comm & Conflict-Writing**

Credits: 3. Offered yearly. Not open to PCOM. Conceptual and practical discussions of communication and conflict in interpersonal relationships, organizational settings and overall cultural milieu. Fulfills Upper-Division Writing requirement for Communication Studies majors. Credit is not allowed for both COMX 413 and COMX 412. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **COMX 414 - Comm in Personal Relationships**

Credits: 3. Offered yearly. Prerequisite, COMX 115S or consent of instructor. Not open to PCOM. An examination of the functions, types, and historical context of close personal relationships with an in-depth study of the role of communication in friendships and romantic relationships. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **COMX 415 - Intercultural Communication**

Credits: 3. Offered autumn and spring. Not open to PCOM. Communication principles and processes in cross-cultural environments. Non-Western cultures are emphasized by contrasting them to Western communication norms.

- **COMX 421 - Comm in Non-Profit Organizatns**

Credits: 3. Offered yearly. Not open to PCOM. Focuses on issues in nonprofit organizational communication at macro and micro levels. Topics include: organizational identity, change processes, public relations, fund-raising, advocacy, socialization, stress and burnout, board management and professionalization. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **COMX 422 - Communication and Technology**

Credits: 3. Offered every other year. Not open to PCOM. This course takes a critical look at the influence of communication technologies on organizational communication. Students will examine how the world of work is changing due to new technologies and explore the social and ethical implications of technical innovation, adoption and use. **Course Attributes:**

- **COMX 423 - Org Comm Consult & Train**

Credits: 3. Offered every year. Prerequisite, COMX 220S or consent of instructor. Not open to PCOM. Emphasis on the theoretical and practical issues involved in communication training and consultation. Overview of theoretical models followed by the "nuts and bolts" of communication training, development, and assessment. Students will carry out a training or consultation project (e.g., planning, execution, and evaluation) to sharpen the issues explored.

- **COMX 424 - Risk Crisis & Comm**

Credits: 3. Offered every other year. Not open to PCOM. This course explores the communicative dynamics that both prevent and cause organizational crisis. Through case studies, the class examines how people plan, communicate and make good decisions in high-risk situations, as well as how to manage crisis public relations effectively. **Course Attributes:**

Writing Course-Upper-Division Writing Course-Advanced

- **COMX 425 - Comm in Health Organizations**

Credits: 3. Offered every other year. Not open to PCOM. This course explores the key issues at the intersection of health communication and organizational communication by considering communication processes that occur in a number of distinct contexts of health organizations. Through case studies and health campaigns students explore contemporary concerns and theory in the area of health communication.

- **COMX 445 - Rhetorical Criticism and Theor**

Credits: 3. Offered yearly. Not open to PCOM. Introduction to study of rhetorical criticism and theory. Current theoretical and methodological issues and approaches including traditional criticism, experiential criticism, dramatism, narrative criticism, feminist criticism, postmodern criticism. **Course Attributes:**

Writing Course-Upper-Division Writing Course-Advanced

- **COMX 447 - Rhetorical Constrctn of Woman**

Credits: 3. Offered every other year. Not open to PCOM. Explores the rhetoric surrounding contemporary women's social "activism" in the U.S. Topics include women's rights, women's liberation, consciousness raising as a rhetorical form, reproductive rights, sexuality, and intersections between gender, race, and class. **Course Attributes:**

Writing Course-Upper-Division Writing Course-Advanced

- **COMX 449 - Rhetoric of Women's Activism**

Credits: 3. Offered every other year. Not open to PCOM. Explores the rhetoric surrounding contemporary women's social "activism" in the U.S. Topics include women's rights, women's liberation, consciousness raising as a rhetorical form, reproductive rights, sexuality, and intersections between gender, race, and class. **Course Attributes:**

Writing Course-Advanced

- **COMX 460 - Research Methods**

Credits: 3. Offered autumn and spring. Open only to majors in COMM. Prereq. grade of C- or better in EDU 421 or EDLD 486 or PSYX 222 or SOCI 202 or STAT 216. Introduction to the major types of communication research and the foundations of quantitative research methods.

- **COMX 461 - Communication Research Seminar**

Credits: 1 TO 3. (R-9) Offered autumn and spring. coreq., COMX 460. Application of quantitative and qualitative research methods to specialized contexts. Emphasis on direct student involvement in research activities.

- **COMX 485 - Communication and Health**

Credits: 3. Offered yearly. Not open to PCOM. Theory and research on the health correlates of human interaction.

- **COMX 491 - Special Topics**

Credits: 1 TO 3. (R-9) Offered intermittently. Not open to PCOM. Experimental offerings of visiting

professors, experimental offerings of new courses, or one-time offerings of current topics.

- **COMX 492 - Independent Study**
Credits: 1 TO 9. (R-9) Offered every term. Prerequisite, consent of instructor. Offered C/NCR only.
- **COMX 510 - Sem Personal Relationships**
Credits: 3. (R-6) Offered yearly. Examines theory and research on the process and functions of communication in personal relationship contexts. Interdisciplinary readings illuminates the dynamics of communication in the development, maintenance, and deterioration of romantic relationships, friendships, and family relationships. Discussion and assignments center around theoretical, methodological, and practical issues in research on communicative activities and events in personal relationships. Level: Graduate
- **COMX 511 - Survey Interpersonal Comm**
Credits: 3. Offered every other year. Survey of theories and research in interpersonal communication including definitions of interpersonal communication, its place in the field of communication, and methodological issues. Overall emphasis on foundational readings and recent research developments. Level: Graduate
- **COMX 512 - Sem Comm Conflict**
Credits: 3. (R-6) Offered intermittently. A review and discussion of current research regarding conflict in different levels and contexts of communication. Level: Graduate
- **COMX 514 - Alt Dispute Resolution**
Credits: 3. Offered yearly. Same as LAW 614. A study of the varieties of dispute resolution vehicles outside the court process. Focus on a 40-hour component of practical skills training for the mediation practitioner. Topics include the mediation model, interest-based negotiation and effective communication. Level: Graduate
- **COMX 515 - Enviro Negotiation Mediation**
Credits: 3. Same as NRSM 515 and ENST 515. This course prepares students to effectively engage in multiparty negotiation on natural resource and environmental issues. It is grounded in theory and provides an opportunity to develop practical skills in both negotiation and facilitation/mediation. Guest speakers, case studies, and simulations allow students to develop, test, and refine best practices. The course is face-paced, highly interactive, and serves as the second of three required courses in the Natural Resources Conflict Resolution Program. Level: Graduate
- **COMX 520 - Sem in Organiz Communication**
Credits: 3. (R-6) Offered every other year. Introduction to theories and research in organizational communication. Topics include culture, networks, structure, technology, identity, power, resistance, gender, and globalization. Overall emphasis on foundational readings and recent research developments. Level: Graduate
- **COMX 540 - Sem Instructional Comm**
Credits: 3. Offered every other year. Instruction in the theories, concepts, principles, and skills employed university level classroom communication and instruction. Level: Graduate
- **COMX 541 - Tchg the Basic Course**
Credits: 2. (R-8) Offered autumn and spring. Prereq., consent of instr. Restricted to Communication majors only. Offered C/NCR only. Level: Graduate
- **COMX 555 - Sem Rhet Crit & Theory**
Credits: 3. Offered annually. Introduction to contemporary issues in rhetorical criticism and theory. Methods reviewed include classical criticism, dramatism, close textual analysis, ideographic criticism, narrative criticism, feminist criticism, and postmodern criticism. Level: Graduate
- **COMX 561 - Qual Research Methods**
Credits: 3. Offered every year. An emphasis on the philosophy and practice of qualitative inquiry,

the development and use of descriptive frameworks, and gathering and testing qualitative data to develop human communication theory. Level: Graduate

- **COMX 572 - Family Law Mediation**

Credits: 3. Offered autumn. Same as LAW 672. Interdisciplinary course on advanced mediation skills with a focus on family mediation including divorce and other types of family problems. Psychological issues for both children and parents, power balancing, gender issues and interest-based negotiation model. Level: Graduate

- **COMX 575 - Sem:Rhet&Env'l Controversy**

Credits: 3. Offered every other year. Same as ENST 575. The study of how advocates use symbols to influence meaning and action in environmental controversies. Rhetorical theory is used to identify, analyze, and evaluate persuasive strategies and tactics. Level: Graduate

- **COMX 585 - Comm Across Sciences**

Credits: 3. Offered yearly. Focus on communication practices that facilitate interdisciplinary interactions across the sciences and result in more competent communication. Offered only to graduate student trainees enrolled in the M-EID program. Level: Graduate

- **COMX 593 - Professional Paper**

Credits: 1 TO 3. (R-6) Offered every term. Prereq., consent of instr. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Faculty-Led Study Abroad

- **COMX 594 - Topical Seminar**

Credits: 1 TO 2. (R-6) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

- **COMX 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **COMX 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **COMX 599 - Thesis**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Communication and Human Relationships

Bachelor of Arts - Communication Studies; Comm & Human Relationships Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 48

Required Cumulative GPA: 2.0

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX (COMM) credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved statistics course. For the Human Relationships option, students must complete an additional 12 credits in Allied courses to reach 48 total degree credits. A maximum of 6 credits in COMX 312 (COMM 360) and a maximum of 6 credits in COMX 398 (COMM 398) may count toward a major in communication studies.

Lower Division Core Courses

Rule: Must complete all of the following courses:

Note: Must complete COMX 111A, 2 other lower division COMX courses, and 16 university credits to move from Pre-Comm to Comm. Pre-comm majors are not eligible to take upper division courses.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	COMX 115S - Intro to Interpersonal Communc	3 Credits
	COMX 220S - Intro to Organizational Comm	3 Credits
	COMX 240H - Intro to Rhetorical Theory	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

6 Total Credits Required

Research

Rule: Must complete the following course

Note: Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461, Communication Research Seminar. Those taking COMX 460 in summer are exempt from this requirement.

—	Course	Credits
	COMX 460 - Research Methods	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: One of these courses is required to complete the upper division writing requirement in the major. This counts toward the total credits need for the major.

Course	Credits
COMX 347 - Rhetoric Nature & Environmtlsm	3 Credits
COMX 413 - Comm & Conflict-Writing	3 Credits
COMX 414 - Comm in Personal Relationships	3 Credits
COMX 421 - Comm in Non-Profit Organizatns	3 Credits
COMX 422 - Communication and Technology	3 Credits
COMX 424 - Risk Crisis & Comm	3 Credits
COMX 445 - Rhetorical Criticism and Theor	3 Credits
COMX 447 - Rhetorical Constrctn of Woman	3 Credits
COMX 449 - Rhetoric of Women's Activism	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Comm & Human Relationships Option

Rule: Must complete the following subcategories

30 Total Credits Required

Major Courses

Rule: Must complete at least 5 of the following courses

Course	Credits
COMX 202S - Nonverbal Communication	3 Credits
COMX 311 - Family Communication	3 Credits
COMX 380 - Gender and Communication	3 Credits
COMX 412 - Communication and Conflict	3 Credits
COMX 413 - Comm & Conflict-Writing	3 Credits
COMX 414 - Comm in Personal Relationships	3 Credits
COMX 415 - Intercultural Communication	3 Credits

COMX 485 - Communication and Health	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Allied Courses

Rule: Must complete at least 4 of the following courses

Course	Credits
ANTY 227 - Human Sexuality	3 Credits
ANTY 427 - Anthropology of Gender	3 Credits
COUN 242 - Intimate Relationships	3 Credits
COUN 475 - Forgiveness & Reconcilia	3 Credits
COUN 485 - Counseling Theories	3 Credits
EDEC 310 - Child in the Family	3 Credits
PSYX 230 - Developmental Psychology	3 Credits
PSYX 233 - Fund of Psychology of Aging	3 Credits
PSYX 345 - Child & Adolescent Psych Dis	3 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
PSYX 360 - Social Psychology	3 Credits
PSYX 385 - Psychology of Personality	3 Credits
S W 420 - Child Abuse/Child Welfare	3 Credits
S W 455 - Social Gerontology	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 275S - Gender and Society	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 350 - The Community	3 Credits

	SOCI 382 - Soc Psych and Social Structure	3 Credits
	WILD 460 - Internat Wildlife Cons Issues	2 Credits
Minimum Required Grade: C-		12 Total Credits Required

Additional Major Electives

Rule: May take additional COMX courses to achieve 36 degree credits

Statistics

Rule: Must complete 1 of the following courses

—	Course	Credits
	EDU 421 - Statistical Procedures in Educ	3 Credits
	PSYX 222 - Psychological Statistics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Organizational Communication

Bachelor of Arts - Communication Studies; Organizational Communication Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX (COMM) credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved statistics course. In the Organizational Communication option, students must complete an additional 9 credits in Allied courses to reach 45 degree credits. A maximum of 6 credits in COMX 312 (COMM 360) and a maximum of 6 credits in COMX 398 (COMM 398) may count toward a major in communication studies.

Lower Division Core Courses

Rule: Must complete all of the following courses:

Note: Must complete COMX 111A, 2 other lower division COMX courses, and 16 university credits to move from Pre-Comm to Comm. Pre-comm majors are not eligible to take upper division courses.

Course	Credits
COMX 111A - Intro to Public Speaking	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
COMX 220S - Intro to Organizational Comm	3 Credits
COMX 240H - Intro to Rhetorical Theory	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

6 Total Credits Required

Research

Rule: Must complete the following course

Note: Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461, Communication Research Seminar. Those taking COMX 460 in summer are exempt from this requirement.

Course	Credits
COMX 460 - Research Methods	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: One of these courses is required to complete the upper division writing requirement in the major. This counts toward the total credits need for the major.

Course	Credits
COMX 347 - Rhetoric Nature & Environmtlsm	3 Credits
COMX 413 - Comm & Conflict-Writing	3 Credits
COMX 414 - Comm in Personal Relationships	3 Credits

COMX 421 - Comm in Non-Profit Organizatns	3 Credits
COMX 422 - Communication and Technology	3 Credits
COMX 424 - Risk Crisis & Comm	3 Credits
COMX 445 - Rhetorical Criticism and Theor	3 Credits
COMX 447 - Rhetorical Constrctn of Woman	3 Credits
COMX 449 - Rhetoric of Women's Activism	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Organizational Communication Option

Rule: Must complete the following subcategories

27 Total Credits Required

Major Courses

Rule: Must complete at least 5 of the following courses

Course	Credits
COMX 210 - Communication in Small Groups	3 Credits
COMX 351 - Principles of Public Relations	3 Credits
COMX 352 - Public Relations Portfolio	3 Credits
COMX 412 - Communication and Conflict	3 Credits
COMX 413 - Comm & Conflict-Writing	3 Credits
COMX 415 - Intercultural Communication	3 Credits
COMX 421 - Comm in Non-Profit Organizatns	3 Credits
COMX 422 - Communication and Technology	3 Credits
COMX 423 - Org Comm Consult	3 Credits
COMX 424 - Risk Crisis & Comm	3 Credits
COMX 425 - Comm in Health Organizations	3 Credits

Minimum Required Grade: C-

15 Total Credits Required

Allied Courses

Rule: Must complete at least 3 of the following courses

	Course	Credits
	BMGT 340 - Mgmt & Organization Behavior	3 Credits
	BMGT 444 - Management Communications	3 Credits
	BMGT 480 - Cross-Cultural Mgmt	3 Credits
	BMKT 325 - Principles of Marketing	3 Credits
	BMKT 343 - Integrated Marketing Comm	3 Credits
	BMKT 412 - Non Profit Marketing	3 Credits
	CHTH 355 - Theory Pract Comm Hlth Ed	3 Credits
	CHTH 445 - Prgrm Plan in Comm Health	3 Credits
	HTH 465 - Leading Hlth, Hmn Perform Orgs	3 Credits
	PSCI 361 - Public Administration	3 Credits
	PSCI 462 - Human Resource Management	3 Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
	PSCI 467 - Adv Nonprofit Adm	3 Credits
	SOCI 306 - Sociology of Work	3 Credits
	SOCI 345 - Sociology of Organizations	3 Credits
	SOCI 371 - Gender and Global Development	3 Credits
	Minimum Required Grade: C-	9 Total Credits Required

Additional Major Electives

Rule: May take any COMX courses to achieve 36 degree credits

Rule: Must complete 1 of the following courses

Course	Credits
EDU 421 - Statistical Procedures in Educ	3 Credits
PSYX 222 - Psychological Statistics	3 Credits
SOCI 202 - Social Statistics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Rhetoric and Public Discourse

Bachelor of Arts - Communication Studies; Rhetoric and Public Discourse Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 48

Required Cumulative GPA: 2.0

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX (COMM) credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved statistics course. For the Rhetoric option, students must complete an additional 12 credits of Allied courses to reach 48 total degree credits. A maximum of 6 credits in COMX 312 (COMM 360) and a maximum of 6 credits in COMX 398 (COMM 398) may count toward a major in communication studies.

Lower Division Core Courses

Rule: Must complete all of the following courses:

Note: Must complete COMX 111A, 2 other lower division COMX courses, and 16 university credits to move from Pre-Comm to Comm. Pre-comm majors are not eligible to take upper division courses.

Course	Credits
COMX 111A - Intro to Public Speaking	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
COMX 220S - Intro to Organizational Comm	3 Credits
COMX 240H - Intro to Rhetorical Theory	3 Credits

Minimum Required Grade: C-

12 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

6 Total Credits Required

Research

Rule: Must complete the following course

Note: Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461, Communication Research Seminar. Those taking COMX 460 in summer are exempt from this requirement.

—	Course	Credits
	COMX 460 - Research Methods	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: One of these courses is required to complete the upper division writing requirement in the major. This counts towards the total credits needed for the major.

—	Course	Credits
	COMX 347 - Rhetoric Nature & Environmtlsm	3 Credits
	COMX 413 - Comm & Conflict-Writing	3 Credits
	COMX 414 - Comm in Personal Relationships	3 Credits
	COMX 421 - Comm in Non-Profit Organizatns	3 Credits
	COMX 422 - Communication and Technology	3 Credits
	COMX 424 - Risk Crisis & Comm	3 Credits
	COMX 445 - Rhetorical Criticism and Theor	3 Credits
	COMX 447 - Rhetorical Constrctn of Woman	3 Credits
	COMX 449 - Rhetoric of Women's Activism	3 Credits

Rhetoric Option

Rule: Must complete the following subcategories

27 Total Credits Required

Major Courses

Rule: Must complete at least 4 of the following courses

Course	Credits
COMX 241 - Persuasive Communication	3 Credits
COMX 242 - Argumentation	3 Credits
COMX 343 - Persuasive Speaking and Critic	3 Credits
COMX 347 - Rhetoric Nature & Environmtlsm	3 Credits
COMX 349 - Comm Consump & Climate	3 Credits
COMX 380 - Gender and Communication	3 Credits
COMX 445 - Rhetorical Criticism and Theor	3 Credits
COMX 447 - Rhetorical Constrctn of Woman	3 Credits
COMX 449 - Rhetoric of Women's Activism	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Allied Courses

Rule: Must complete at least 4 of the following courses

Course	Credits
ANTY 122S - Race and Minorities	3 Credits
CCS 103X - Intro Climate Change:Sci & Soc	3 Credits
COUN 242 - Intimate Relationships	3 Credits
COUN 475 - Forgiveness & Reconcilia	3 Credits

ECNS 433 - Economics of the Environment	3 Credits
ECNS 445 - Int Env Econ & Clim Change	3 Credits
ENST 230H - Nature and Society	3 Credits
ENST 367 - Envr Politics & Policies	3 Credits
ENST 420 - US Environmental Movement	3 Credits
FILM 103L - Introduction to Film	3 Credits
HSTA 102H - American History II	4 Credits
HSTA 262 - Abolitionism	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
HSTR 302 - Ancient Greece	3 Credits
HSTR 364 - Environmental History	3 Credits
HSTR 384 - Hist Internat Human Rights	3 Credits
LIT 110L - Intro to Lit	3 Credits
MAR 101L - Intro to Media Arts	3 Credits
NASX 405H - Gndr Iss in Native Amer Stdies	3 Credits
NRSM 449E - Climate Change Ethics/Policy	3 Credits
PHL 112E - Intro Ethics and Environment	3 Credits
PHL 235 - Intro to Logic: Induction	3 Credits
PHL 422 - Environmental Philosophy	3 Credits
PSCI 250E - Intro to Political Theory	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 355 - Theories of Civil Violence	3 Credits

	PSCI 444 - Am Political Participation	3 Credits
	PSCI 471 - American Constitutional Law	3 Credits
	PSCI 474 - Civil Rights Seminar	3 Credits
	S W 323 - Women & Soc Action Amer	3 Credits
	S W 324 - Gender and Welfare	3 Credits
	S W 455 - Social Gerontology	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 325 - Social Stratification	3 Credits
	SOCI 350 - The Community	3 Credits
	SOCI 470 - Environmental Sociology	3 Credits
	SOCI 485 - Political Sociology	3 Credits
	WGSS 163L - Hist/Lit Persp Women	3 Credits
	WGSS 263S - Women's and Gender Studies	3 Credits
	Minimum Required Grade: C-	12 Total Credits Required

Additional Major Electives

Rule: May take additional COMX courses to achieve 36 COMX degree credits.

Statistics

Rule: Must complete 1 of the following courses

	Course	Credits
	EDU 421 - Statistical Procedures in Educ	3 Credits
	PSYX 222 - Psychological Statistics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Communication Studies B.A.

Communication Studies Minor

Minor - Communication Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Note: Once admitted to earn a minor, the student must complete a minimum of 20 credits in COMX courses, with at least 9 credits in courses numbered 300 and above.

Lower Division Core Courses

Rule: Must complete all of the following:

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Electives

Rule: Must complete 17 credits from the following:

Note: A maximum of 6 credits in COMX 312 may count toward a minor in communication studies.

—	Course	Credits
	COMX 115S - Intro to Interpersonal Communc	3 Credits
	COMX 140L - Intro to Visual Rhetoric	3 Credits
	COMX 191 - Special Topics	1 To 9 Credits
	COMX 192 - Independent Study	1 To 6 Credits

COMX 202S - Nonverbal Communication	3 Credits
COMX 204X - International & Dvlpmnt Comm	3 Credits
COMX 210 - Communication in Small Groups	3 Credits
COMX 212X - Intro to Intercultural Com	3 Credits
COMX 217A - Oral Interpretation of Lit	3 Credits
COMX 219S - Survey of Children's Comm	3 Credits
COMX 220S - Intro to Organizational Comm	3 Credits
COMX 222 - Professional Communication	3 Credits
COMX 240H - Intro to Rhetorical Theory	3 Credits
COMX 241 - Persuasive Communication	3 Credits
COMX 242 - Argumentation	3 Credits
COMX 250 - Intro to Public Relations	3 Credits
COMX 291 - Special Topics	1 To 6 Credits
COMX 292 - Independent Study	1 To 6 Credits
COMX 311 - Family Communication	3 Credits
COMX 312 - Forensics/Honors	1 To 3 Credits
COMX 343 - Persuasive Speaking and Critic	3 Credits
COMX 347 - Rhetoric Nature & Environmtlsm	3 Credits
COMX 349 - Comm Consump & Climate	3 Credits
COMX 351 - Principles of Public Relations	3 Credits
COMX 352 - Public Relations Portfolio	3 Credits
COMX 380 - Gender and Communication	3 Credits
COMX 391 - Special Topics	1 To 9 Credits
COMX 398 - Internship	1 To 6 Credits
COMX 412 - Communication and Conflict	3 Credits

	COMX 413 - Comm & Conflict-Writing	3 Credits
	COMX 414 - Comm in Personal Relationships	3 Credits
	COMX 415 - Intercultural Communication	3 Credits
	COMX 421 - Comm in Non-Profit Organizatns	3 Credits
	COMX 422 - Communication and Technology	3 Credits
	COMX 423 - Org Comm Consult	3 Credits
	COMX 424 - Risk Crisis & Comm	3 Credits
	COMX 425 - Comm in Health Organizations	3 Credits
	COMX 445 - Rhetorical Criticism and Theor	3 Credits
	COMX 447 - Rhetorical Constrctn of Woman	3 Credits
	COMX 449 - Rhetoric of Women's Activism	3 Credits
	COMX 460 - Research Methods	3 Credits
	COMX 461 - Communication Research Seminar	1 To 3 Credits
	COMX 485 - Communication and Health	3 Credits
	COMX 491 - Special Topics	1 To 3 Credits
	COMX 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-		17 Total Credits Required

Computer Science Department

Yolanda Reimer, Chair

The growing utility of computers in research and education, as well as the increased impact of computers on our modern society, strongly implies that knowledge of computers and their capabilities should be a part of the basic education of all students. The courses listed below are designed to provide the student with this knowledge and to prepare the student for a career in a field in which there is a growing need for trained personnel. The objective of the undergraduate curriculum in computer science is to develop professionally competent, broadly educated computer scientists who wish to pursue professional careers or graduate studies.

The B.S. program is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org>). For more information, access our homepage <http://www.cs.umt.edu> or email the chair at yolanda.reimer@umontana.edu.

High School Preparation: In addition to general University admission requirements, pre-college preparation should include as many computer science courses as possible, and four years of high school mathematics, to include algebra, trigonometry and pre-calculus. Also recommended are physics, chemistry and biology.

»Admission Requirements

Admission to computer science courses varies according to course level and other departmental standards. However, students must have completed all prerequisite courses with a grade of at least a "C-".

Lower-Division Courses

Most 100- and 200-level courses are open on a first-come, first-served basis to all students who have the prerequisites.

Upper-Division Courses

Admission to 300-level or above courses requires successful completion of the prerequisites.

Major-Minor Status

Completed change of major forms along with college transcripts must be turned in to the department when declaring computer science as a major or minor.

Department Faculty

Professor

Ray Ford, Professor
Joel Henry, Professor
Jesse Johnson, Professor
Yolanda Reimer, Professor

Associate Professor

Douglas Raiford, Computer Science Department Chair, Bioinformatics, Modeling, Machine Learning, Pattern Recognition, Data Science

Assistant Professor

Rob Smith, Assistant Professor
Travis Wheeler, Assistant Professor

Lecturer

Michael Cassens, Lecturer
Mike O'Conner, Lecturer, Undergraduate Advisor

Emeritus

Alden Wright, Emeritus Professor

Course Descriptions

Computer Applications

- **CAPP 171 - Communicating via Computers**

Credits: 3. Offered every term. Prereq., previous computer experience or consent of instr. The use of the computer for information presentation and communication; emphasis placed on the use of electronic resources for the access, management, and presentation of information. Students taking CS classes with computer programming components should expect to use additional computer lab time outside of class.

Computer Science/Programming

- **CSCI 100 - Intro to Programming**

Credits: 3. Offered autumn and spring. This course covers basic programming concepts such as variables, data types, iteration, flow of control, input/output, functions, and objects. The course will also cover programming ideas such as data structures, algorithms, modularity, and debugging. Students will learn about the role computation can play in solving problems by writing interesting programs to solve useful goals. No prior programming experience is expected. (Two hours independent lab per week.) Credit not allowed for both CSCI 100 and CSCI 110.

- **CSCI 104 - Programming with Alice**

Credits: 1. Offered frequently. Classes are held for 2 hours/week in the first half of the semester. Introduction to object-oriented programming using a visual programming environment. Students create programs using drag-and-drop and these programs control animated on-screen characters and objects. Course is designed as a supplement to CSCI 135-136 which teaches object-oriented programming in a more traditional manner.

- **CSCI 105 - Computer Fluency**

Credits: 3. Offered autumn and spring. Introduces the skills and concepts of information technology, both from practical and a more theoretical point of view. During lectures and interactive computer labs, students will explore a wide range of digital and information technologies, including common PC applications, networking, databases, privacy, and security. Credit not allowed for both CSCI 105 and CRT 111 and CS 111.

- **CSCI 106 - Careers in Computer Science**

Credits: 1. Offered autumn. Exploration of various careers available in the general area of Computer Science. Includes discussion of strategies for success in the major. Computer Science faculty members also will discuss possible undergraduate research opportunities and motivation for graduate education.

- **CSCI 135 - Fund of Computer Science I**

Credits: 3. Offered autumn and spring. Prereq., computer programming experience in a language such as BASIC, Pascal, C, etc.; CSCI 104 highly recommended as prereq. or coreq. Fundamental computer science concepts using the high level structured programming language, Java.

- **CSCI 136 - Fund of Computer Science II**

Credits: 3. Offered autumn and spring. Prereq., CSCI 135; coreq., M 115 or M 151 or consent of instr. Continuation of CSCI 135. Survey of computer science topics including recursion, algorithms, basic data structures, operating systems, artificial intelligence, graphics, user interfaces, and social and ethical implications of computing.

- **CSCI 172 - Intro to Computer Modeling**

Credits: 3. Offered autumn and spring. Problem solving and data modeling using computer productivity software. Emphasis using spreadsheets and database for data analysis. Credit not allowed for CSCI 172, CRT 172, and CS 172.

- **CSCI 181 - Web Design and Programming**

Credits: 3. Electronic Publishing on the World Wide Web

- **CSCI 191 - Special Topics**

Credits: 0 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Students taking CS classes with computer programming components should expect to use additional computer lab time outside of class.

- **CSCI 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Students taking CS classes with computer programming components should expect to use additional computer lab time outside of class.

- **CSCI 198 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements on and off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **CSCI 205 - Programming Languages w/ C/C++**

Credits: 4. Offered spring. Prereq., CSCI 232 and M 225. Concepts and principles of programming languages with an emphasis on C, C++, and object-oriented programming. Syntax and semantics of object-oriented languages. Principles and implementation of late binding, memory allocation and de-allocation, type-checking, scope, polymorphism, inheritance.

- **CSCI 216E - Technology, Ethics & Society**

Credits: 3. An examination of ethical issues related to new technologies in the context of ethical theory in the western secular tradition. Focus will be on applying central concepts, principles, and problems of ethical theory to particular areas of technology, such as artificial intelligence and robotics, social networks, nanotechnology, genetic engineering, and privacy in a digital age. **Course Attributes:** Ethical & Human Values Course Writing Course-Approved Writing Course-Intermediate

- **CSCI 232 - Data Structures and Algorithms**

Credits: 4. Offered autumn. Prereq., CSCI 136; prereq. or coreq., M 225 or consent of instr. Abstract data types, recursion, linked lists, trees, hashing, graphs, and applications of data structures in algorithm development. Emphasis on object oriented programming techniques.

- **CSCI 250 - Computer Mdlng/Science Majors**

Credits: 3. Offered autumn. Prereq., basic computer and spreadsheet literacy; coreq., M 162 or 171. An introduction to computer modeling in the sciences using spreadsheets and a programming language. Integrates principles of math, computer science and science. A student can take at most one of CSCI 172, CSCI 250, CRT 280, and CRT 281 for credit.

- **CSCI 291 - Special Topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Writing Course-Lower-Division

- **CSCI 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **CSCI 298 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements on and off campus. Prior approval must be obtained from the faculty supervisor and the Internship

Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **CSCI 315E - Computers, Ethics, and Society**

Credits: 3. Offered autumn. Prereq., WRIT 222 or university approved lower-division writing course and successful completion of the Upper-Division Writing Proficiency Assessment, or consent of instr. Ethical problems that computer scientists face. The codes of ethics of professional computing societies. The social implications of computers, computing, and other digital technologies. **Course Attributes:** Ethical & Human Values Course
Writing Course-Upper-Division Writing Course-Advanced

- **CSCI 323 - Software Science**

Credits: 3. Offered autumn. Prereq., CSCI 136. Study, implementation, and assessment of software processes, techniques, methods, and CASE tools. Project management and cost estimation techniques will be examined. A group project may be required.

- **CSCI 332 - Design/Analysis of Algorithms**

Credits: 3. Offered spring. Prereq., CSCI 232 and M 225 or consent of instr. Algorithm design, analysis, and correctness. Commonly used algorithms including searching and sorting, string search, dynamic programming, branch and bound, graph algorithms, and parallel algorithms. Introduction to NP-complete problems.

- **CSCI 340 - Database Design**

Credits: 3. Offered spring. Prereq., CSCI 232 or consent of instr. Fundamentals of data modeling, the relational mode, normal forms, file organization, index structures and SQL. Major project involving the design and implementation of a relational database.

- **CSCI 361 - Computer Architecture**

Credits: 3. Offered spring. Prereq., CSCI 136 or consent of instr. Functional view of computer system components, BCPU, ALU, memory, bus, cache, I/O module. Instruction set design: formats, addressing modes. Basic circuit design. Pipelining and assembly language. Interrupt handling. Implementation of ALU and control unit. Detailed design of an RISC-like instruction set. Datapath and performance comparisons. Basic multiprocessor design.

- **CSCI 390 - Research**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. **Course Attributes:**
Research & Creative Schlrshp

- **CSCI 391 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CSCI 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **CSCI 394 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Guidance in special work.

- **CSCI 398 - Internship**

Credits: 1 TO 3. (R-3) Offered intermittently. Prereq., consent of department. Business or government internship. Prior approval must be obtained from faculty supervisor and the Internship Services office. Only three credits applicable to computer science major or minor. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **CSCI 411 - Advanced Web Programming**

Credits: 3. Offered intermittently. Prereq., CSCI 136. Programming and software development techniques for developing web-based applications. Scripting and other programming languages that are used for web-based development.

- **CSCI 412 - Game and Mobile App**

Credits: 3. Offered intermittently. Prereq., CSCI 232 and 323. Programming and software development techniques for developing gaming and mobile applications. Multiple gaming environments and mobile programming languages are introduced and examined to build modern applications.

- **CSCI 426 - Adv Prgrmnng Theory/Practice I**

Credits: 3. Offered autumn. Prereq., CSCI 205, 232, 323 and M 225, or consent of instr. Examination and implementation of modern best practices in the areas of software design, coding, testing and maintenance. Focus on design patterns and design pattern languages used to build modern software systems in a variety of areas.

- **CSCI 427 - Adv Prgrmnng Theory/Practice II**

Credits: 3. Offered spring. Prereq., CSCI 426. Design and implementation of a major software project in a group setting, with required documentation, presentation, installation, and approval by the instructor.

- **CSCI 438 - Theory of Computation**

Credits: 3. Offered intermittently. Prereq., M 225 or M 307. This course focuses on understanding the limitations & capabilities of abstract models of computation, through rigorous mathematical analysis. Topics will include finite & pushdown automata, nondeterministic computation, regular expressions, generative grammars, Turing machines, undecidability, and computational complexity.

- **CSCI 441 - Computer Graphics Programming**

Credits: 3. Offered intermittently. Prereq., CSCI 232 and M 221 or consent of instr. Hardware and software elements of graphics systems. Basic computer graphics algorithms for transformations, clipping, windowing and polygon filling. Straight line, circle generation. Parametrical representations of curves and surfaces. Three-D viewing. Hidden line and surface removal, shading and color models.

- **CSCI 443 - User Interface Design**

Credits: 3. Offered intermittently. Prereq., CSCI 232 or consent of instr. Introduction to usability and key concepts of human behavior. Focus on the process of user-centered design, including requirements specification, prototyping, and methods of evaluation. Incorporation of regular design critiques of classmates' work, and emphasis on both oral and written communication skills. Credit not allowed for CSCI 543 and this course. **Course Attributes:** Co-Convened Course

- **CSCI 444 - Data Visualization**

Credits: 3. Offered intermittently. Prereq., M 171; programming experience; and junior, senior, or graduate status; or consent of instr. Visualization fundamentals and applications using special visualization software; formulation of 3-D empirical models; translation of 3-D models into graphical displays; time sequences and pseudo-animation; interactive versus presentation techniques; special techniques for video, CD and other media.

- **CSCI 446 - Artificial Intelligence**

Credits: 3. Offered intermittently. Prereq., M 225 or M 307, and CSCI 232, or consent of instr. Using computers and software to solve problems that require intelligence. Specific topics may include knowledge representation, logical and probabilistic reasoning, machine learning, planning, game playing, information retrieval, computer vision, and robotics.

- **CSCI 447 - Machine Learning**

Credits: 3. Offered intermittently. Prereq., CSCI 232 or consent of instr. Introduction to the framework of learning from examples, various learning algorithms such as neural networks, and generic learning principles such as inductive bias, Occam's Razor, and data mining. Credit not allowed for both CSCI 447 and CSCI 547. **Course Attributes:** Co-Convened Course

- **CSCI 448 - Pattern Recognition**

Credits: 3. Offered intermittently. Prereq., Junior or Senior status. Introduction to the framework of unsupervised learning techniques such as clustering (agglomerative, fuzzy, graph theory based, etc.), multivariate analysis approaches (PCA, MDS, LDA, etc.), image analysis (edge detection, etc.), as well as feature selection and generation. Emphasis will be on the underlying algorithms and their implementation. Credit not allowed for both CSCI 448 and CSCI 548. **Course Attributes:**
Co-Convened Course

- **CSCI 451 - Computational Biology**

Credits: 3. Offered Autumn. Designed for attendance by both computer scientists and biologists. The course will explore the importance of interdisciplinary partnerships between these two fields. Students will learn to use various existing computational tools for investigating genomic and other biological data. This will include tools for performing sequence alignments and searches, building phylogenetic trees, predicting RNA secondary structure, and predicting protein tertiary structure. The underlying algorithmic approaches taken by these tools will be discussed, and in some cases, actually implemented by the class participants. The course will examine the data repositories where genomic and other biological data are stored. There will be some light programming required using PERL as the language of choice. It is assumed that the class participants have no experience programming in PERL and will learn this skill as part of the course. Credit not allowed for CSCI 558 and this course. **Course Attributes:** Co-Convened Course

- **CSCI 460 - Operating Systems**

Credits: 3. Offered autumn. Prereq., CSCI 232, or consent of instr. Operating system design principles. Processes, threads, synchronization, deadlock, memory management, file management and file systems, protection, and security, comparison of commonly used existing operating systems, writing programs that make use of operating system services. It is recommended, but not required, that the student also attend Programming Languages (in order to be prepared to write C programs) and Architecture (in order to understand interactions between the operating system and processor hardware) prior to attending this course.

- **CSCI 464 - Applications of Mining Big Data**

Credits: 3. Offered intermittently. Prereq., upper division or consent of instr. Co-convenes with CSCI 564. Introduction to existing data mining software systems and their use, with focus on practical exercises. Topics include data acquisition, data cleansing, feature selection, and data analysis. Credit not allowed for both CSCI 464 and CSCI 564. **Course Attributes:** Co-Convened Course

- **CSCI 466 - Networks**

Credits: 3. Offered spring. Prereq., CSCI 232. Concepts and practice of computer networking, network protocol layers, switching, routing, flow, and congestion control. Network programming.

- **CSCI 473 - Cryptography**

Credits: 3. Prereq., CSCI 332 and either M 225 or M 307; or consent of instr. Theory and practice in modern cryptography. Statistical analysis of classical ciphers. Design practice of modern block ciphers and hash functions, and their theoretical justifications. Linear and differential cryptanalysis. Public-key cryptography based on number-theoretic problems. Zero-knowledge proofs and secure multi-party computation protocols. Credit not allowed for both CSCI 473 and CSCI 573.

- **CSCI 477 - Simulation**

Credits: 3. Co-convene with CSCI 577. Prereq., M 172, CSCI 135, or consent of instr. Matrix languages. ODE solving; Euler-Richardson, Runge-Kutta, PDE solving; finite differences, finite elements, multi-grid techniques. Discrete methods for solution, renormalization group method, critical phenomena. Emphasis on presentation of results and interactive programs. Credit not allowed for CSCI 577 and this course. **Course Attributes:** Co-Convened Course

- **CSCI 478 - Multimedia Data Processing**

Credits: 3. Offered intermittently. Prereq. CSCI 232 or consent of instr. Introduction to fundamental concepts of multimedia data. Focus on principles and techniques of multimedia data (image, audio, and video) processing and retrieval. Implementation of multimedia applications. Credit not

allowed for CS 578 and this course. **Course Attributes:** Co-Convened Course

- **CSCI 480 - Applied Parallel Computing Techniques**

Credits: 3. Prereq., CSCI 205 and 232, or instructor consent. This course is an introduction to parallelism and parallel programming. Topics include the various forms of parallelism on modern computer hardware (e.g. SIMD vector instructions, GPUs, multiple cores, and networked clusters), with coverage of locality and latency, shared vs non-shared memory, and synchronization mechanisms (locking, atomicity, etc). We will introduce patterns that appear in essentially all programs that need to run fast. We will discuss how to recognize these patterns in a variety of practical problems, discuss efficient algorithms for implementing them, and how to compose these patterns into larger applications. We will address computer architecture at a high level, sufficient to understand the relative costs of operations like arithmetic and data transfer. We also introduce useful tools for debugging correctness and performance of parallel programs. Assignments will include significant parallel programming projects. Co-convenes with CSCI 580. Credit not allowed for both CSCI 480 and CSCI 580. **Course Attributes:** Co-Convened Course

- **CSCI 490 - Research**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. **Course Attributes:** Research & Creative Schlrshp

- **CSCI 491 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CSCI 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **CSCI 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Guidance in special work.

- **CSCI 498 - Internship**

Credits: 1 TO 3. (R-3) Offered Intermittently. Prereq., consent of department. Business or government internship. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Only three credits of CSCI 398 and/or CSCI 498 applicable to computer science major or minor. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **CSCI 499 - Senior Thesis/Capstone**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of thesis/project director and chair of the Computer Science Department. Senior thesis for computer science majors and/or Watkins scholars. **Course Attributes:** Writing Course-Upper-Division

- **CSCI 521 - IT Infrastructure**

Credits: 3. Offered infrequently. Prereq., CSCI 446 or IS 372 or consent of instr. Identification and classification of background environment, hardware, software, and service components in an enterprise IT environment; management and security concerns for each component; consideration of how the components fit together to form an enterprise information technology environment. Level: Graduate

- **CSCI 531 - Desgn & Anal Algorithms**

Credits: 3. Offered intermittently. Prereq., CSCI 332. Algorithm design, analysis, and correctness, with an emphasis on more advanced techniques than covered in CS 332. Design of algorithms by induction. Recurrences and their solutions. Parallel algorithms. Complexity theory: NP-hard and NP-complete problems. Approximation algorithms for intractable problems. Level: Graduate

- **CSCI 543 - Human-Computer Interaction**

Credits: 3. Offered intermittently. Prereq., CSCI 232 or consent of instr. Principles of good design for interactive systems and web-based applications. User-centered design methodology including requirements specification, low and high-fidelity prototyping, heuristic evaluation, cognitive walkthrough, predictive modeling, and usability testing. Advanced HCI research project. Credit not allowed for both CSCI 443 and CSCI 543. Level: Graduate **Course Attributes:**
Co-Convended Course

- **CSCI 547 - Machine Learning**

Credits: 3. Offered intermittently. Prereq., CSCI 232 or consent of instr. Fundamentals of machine learning including neural networks, decision trees, Bayesian learning, instance-based learning, and genetic algorithms; inductive bias, Occam's razor, and learning theory; data mining; software agents. Credit not allowed for CSCI 447 and CSCI 547. Level: Graduate **Course Attributes:**
Co-Convended Course

- **CSCI 548 - Pattern Recognition**

Credits: 3. Offered intermittently. Introduction to the framework of unsupervised learning techniques such as clustering (agglomerative, fuzzy, graph theory based, etc.), multivariate analysis approaches (PCA, MDS, LDA, etc.), image analysis (edge detection, etc.), as well as feature selection and generation. Techniques in exploratory data analysis when faced with large, multivariate datasets. Opportunities at implementation of some algorithmic approaches as well as use of preexisting tools such as the R-project statistics package. Emphasis will be on the underlying algorithms and their implementation. Credit not allowed for both CSCI 448 and CSCI 548. Level: Graduate **Course Attributes:** Co-Convended Course

- **CSCI 555 - Topics Artificial Intelligence**

Credits: 3. Offered intermittently. Prereq., M 225 or M 307, and CSCI 232, or consent of instr. The study and design of artificial intelligent agents. Specific topics may include knowledge representation, logical and probabilistic reasoning, machine learning, planning, game playing, information retrieval, computer vision, and robotics. Level: Graduate

- **CSCI 558 - Intro to Bioinformatics**

Credits: 3. Offered autumn. Prereq., consent of instr. Introduction and use of biological data sources available in the post human genome project era. Topics include basic algorithms for alignment of genome sequences and prediction of protein structures, as well as more advanced representational and algorithmic issues in protein structure, genome sequence computation, and systems biology. Discussion of state of the art bioinformatics projects that are being developed between the Department of Computer Science and the School of Pharmacy. Level: Graduate **Course Attributes:** Co-Convended Course

- **CSCI 564 - Applications of Mining Big Data**

Credits: 3. Offered intermittently. Co-convenes with CSCI 464. Introduction to existing data mining software systems and their use, with focus on practical exercises. Topics include data acquisition, data cleansing, feature selection, and data analysis. Credit not allowed for both CSCI 464 and CSCI 564. Level: Graduate **Course Attributes:** Co-Convended Course

- **CSCI 565 - Database Systems**

Credits: 3. Offered intermittently. Prereq., CSCI 205 and 340, or consent of instr. Relational database theory, data models, query languages, transaction processing, security, and concurrency. Level: Graduate

- **CSCI 573 - Cryptography**

Credits: 3. Prereq., CSCI 332 and either M 225 or M 307; or consent of instr. Theory and practice in modern cryptography. Statistical analysis of classical ciphers. Design practice of modern block ciphers and hash functions, and their theoretical justifications. Linear and differential cryptanalysis. Public-key cryptography based on number-theoretic problems. Zero-knowledge proofs and secure multi-party computation protocols. Credit not allowed for both CSCI 473 and CSCI 573. Level: Graduate

- **CSCI 577 - Simulation Modeling**

Credits: 3. Co-convene with CSCI 477. Prereq., M 172, CSCI 135, or consent of instr. Matrix languages. ODE solving; Euler-Richardson, Runge-Kutta, PDE solving; finite differences, finite elements, multi-grid techniques. Discrete methods for solution, renormalization group method, critical phenomena. Emphasis on presentation of results and interactive programs. Conduct, document, and present graduate level research involving computer simulation methods. Credit not allowed for CSCI 477 and this course. Level: Graduate **Course Attributes:**
Co-Convened Course

- **CSCI 578 - Multimedia Systems**

Credits: 3. Offered intermittently. Prereq. CSCI 232 or consent of instr. Introduction to fundamental concepts of multimedia data. Focus on principles and techniques of multimedia data (image, audio, and video) processing and retrieval. Implementation of multimedia applications. Credit not allowed for CSCI 478 and this course. Level: Graduate **Course Attributes:**
Co-Convened Course

- **CSCI 580 - Applied Parallel Computing Techniques**

Credits: 3. Offered intermittently. Prereq., CSCI 232, 205. Parallel processing architectures and programming languages. Co-convenes with CSCI 580. Credit not allowed for both CSCI 480 and CSCI 580. Level: Graduate **Course Attributes:** Co-Convened Course

- **CSCI 594 - Graduate Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Seminar on current research topics in computer science. Level: Graduate

- **CSCI 595 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offering of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **CSCI 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:**
Service Learning/Volunteer

- **CSCI 597 - Research**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

- **CSCI 598 - Internship**

Credits: 1 TO 9. (R-3) Offered intermittently. Prereq., consent of department. Business or government internship. Prior approval must be obtained from faculty supervisor and the Internship Services office. Only three credits applicable to computer science major or minor. Level: Graduate **Course Attributes:** Internships/Practicums

- **CSCI 599 - Thesis/Project**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Research for and preparation of the master thesis or professional paper. Level: Graduate

Computer Science Professional B.S.

Bachelor of Science - Computer Science; Track: Professional

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 87

Required Cumulative GPA: 2.0

Computer Science Core Courses

Rule: Must complete all of the following:courses

Note: .

Note: 100-level CSCI courses other than CSCI 106, CSCI 135-136, and 200-level CSCI courses other than CSCI 205 and CSCI 232 do not count toward the degree or track requirements. However, they do count in the 60 credit limit in the major.

CSCI 315E will fulfill the upper division writing requirement.

Course	Credits
CSCI 106 - Careers in Computer Science	1 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 205 - Programming Languages w/ C/C++	4 Credits
CSCI 232 - Data Structures and Algorithms	4 Credits
CSCI 315E - Computers, Ethics, and Society	3 Credits
CSCI 323 - Software Science	3 Credits
CSCI 332 - Design/Analysis of Algorithms	3 Credits
CSCI 361 - Computer Architecture	3 Credits
CSCI 426 - Adv Prgrmng Theory/Practice I	3 Credits
CSCI 427 - Adv Prgrmng Theory/Practice II	3 Credits
Minimum Required Grade: C-	33 Total Credits Required

Degree Electives

Rule: Must complete 18 credits from the following courses

Note: A total of at most 3 of the 18 credits of CS electives may be in CSCI 398 or 498.

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Course	Credits
CSCI 340 - Database Design	3 Credits
CSCI 390 - Research	1 To 6 Credits
CSCI 391 - Special Topics	1 To 6 Credits
CSCI 392 - Independent Study	1 To 6 Credits
CSCI 394 - Seminar	1 To 6 Credits
CSCI 398 - Internship	1 To 3 Credits
CSCI 411 - Advanced Web Programming	3 Credits
CSCI 412 - Game and Mobile App	3 Credits
CSCI 438 - Theory of Computation	3 Credits
CSCI 441 - Computer Graphics Programming	3 Credits
CSCI 443 - User Interface Design	3 Credits
CSCI 444 - Data Visualization	3 Credits
CSCI 446 - Artificial Intelligence	3 Credits
CSCI 447 - Machine Learning	3 Credits
CSCI 448 - Pattern Recognition	3 Credits
CSCI 451 - Computational Biology	3 Credits
CSCI 460 - Operating Systems	3 Credits
CSCI 466 - Networks	3 Credits
CSCI 473 - Cryptography	3 Credits
CSCI 477 - Simulation	3 Credits
CSCI 478 - Multimedia Data Processing	3 Credits
CSCI 490 - Research	1 To 6 Credits
CSCI 491 - Special Topics	1 To 6 Credits
CSCI 492 - Independent Study	1 To 6 Credits

	CSCI 494 - Seminar	1 To 6 Credits
	CSCI 498 - Internship	1 To 3 Credits
	CSCI 499 - Senior Thesis/Capstone	1 To 6 Credits
Minimum Required Grade: C-		18 Total Credits Required

Communication

Rule: Must complete 1 of the following courses

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	COMX 242 - Argumentation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Mathematics

Rule: Take the following:

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 221 - Introduction to Linear Algebra	4 Credits
	M 225 - Intro to Discrete Mathematics	3 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-		18 Total Credits Required

Science Core

Rule: Must complete 1 of the following subcategories of science sequences

9-10 Total Credits Required

Biology

Rule: May complete the following sequence

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
Minimum Required Grade: C-		9 Total Credits Required

Chemistry

Rule: May complete the following sequence

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics

Rule: May complete the following sequence

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Science Electives

Rule: Must complete 2 of the following courses

Note: The Biology, Chemistry, or Physics sequence chosen to fulfill the science core may not count toward the science electives requirement.

Laboratory courses must be taken in conjunction with their associated lecture course.

—	Course	Credits
	ASTR 131N - Elementary Astronomy I	3 Credits

	ASTR 132N - Elementary Astronomy II	3 Credits
	ASTR 134N - Elementary Astronomy Lab I	1 Credits
	ASTR 135N - Elementary Astronomy Lab II	1 Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
	BIOM 250N - Microbiology for Hlth Sciences	3 Credits
	BIOM 251 - Microbiology Hlth Sciences Lab	1 Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	FORS 201 - Forest Biometrics	3 Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
	GEO 225 - Earth Materials	4 Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
	PHSX 343 - Modern Physics	3 Credits
	PHSX 444 - Advanced Physics Lab	3 Credits
Minimum Required Grade: C-		6-10 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track. After completion of this track the student will be awarded a Bachelor of Science in Computer Science.

Computer Science Interdisciplinary

Bachelor of Science - Computer Science; Track: Interdisciplinary

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 87

Required Cumulative GPA: 2.0

Computer Science Core Courses

Rule: Must complete all of the following:courses

Note: .

Note: 100-level CSCI courses other than CSCI 106, CSCI 135-136, and 200-level CSCI courses other than CSCI 205 and CSCI 232 do not count toward the degree or track requirements. However, they do count in the 60 credit limit in the major.

CSCI 315E will fulfill the upper division writing requirement.

Course	Credits
CSCI 106 - Careers in Computer Science	1 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 205 - Programming Languages w/ C/C++	4 Credits
CSCI 232 - Data Structures and Algorithms	4 Credits
CSCI 315E - Computers, Ethics, and Society	3 Credits
CSCI 323 - Software Science	3 Credits
CSCI 332 - Design/Analysis of Algorithms	3 Credits
CSCI 361 - Computer Architecture	3 Credits
CSCI 426 - Adv Prgrmg Theory/Practice I	3 Credits
CSCI 427 - Adv Prgrmg Theory/Practice II	3 Credits
Minimum Required Grade: C-	33 Total Credits Required

Degree Electives

Rule: Must complete 6 credits from the following courses

Note: A total of at most 3 of the 6 credits of CS electives may be in CSCI 398 or 498.

Course	Credits
CSCI 340 - Database Design	3 Credits
CSCI 390 - Research	1 To 6 Credits
CSCI 391 - Special Topics	1 To 6 Credits
CSCI 392 - Independent Study	1 To 6 Credits
CSCI 394 - Seminar	1 To 6 Credits
CSCI 398 - Internship	1 To 3 Credits
CSCI 411 - Advanced Web Programming	3 Credits
CSCI 412 - Game and Mobile App	3 Credits
CSCI 438 - Theory of Computation	3 Credits
CSCI 441 - Computer Graphics Programming	3 Credits
CSCI 443 - User Interface Design	3 Credits
CSCI 444 - Data Visualization	3 Credits
CSCI 446 - Artificial Intelligence	3 Credits
CSCI 447 - Machine Learning	3 Credits
CSCI 448 - Pattern Recognition	3 Credits
CSCI 451 - Computational Biology	3 Credits
CSCI 460 - Operating Systems	3 Credits
CSCI 466 - Networks	3 Credits
CSCI 473 - Cryptography	3 Credits
CSCI 477 - Simulation	3 Credits
CSCI 478 - Multimedia Data Processing	3 Credits
CSCI 490 - Research	1 To 6 Credits

	CSCI 491 - Special Topics	1 To 6 Credits
	CSCI 492 - Independent Study	1 To 6 Credits
	CSCI 494 - Seminar	1 To 6 Credits
	CSCI 498 - Internship	1 To 3 Credits
	CSCI 499 - Senior Thesis/Capstone	1 To 6 Credits
Minimum Required Grade: C-		6 Total Credits Required

Interdisciplinary Electives

Rule: Must complete 12 credits numbered 200 or above in a field other than Computer Science

Note: Student must complete all the requirements for a minor or additional major in any field other than Computer Science.

Minimum Required Grade: C-

12 Total Credits Required

Communication

Rule: Must complete 1 of the following courses

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	COMX 242 - Argumentation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Mathematics

Rule: Take the following:

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 221 - Introduction to Linear Algebra	4 Credits
	M 225 - Intro to Discrete Mathematics	3 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits

Science Core

Rule: Must complete 1 of the following subcategories of science sequences

9-10 Total Credits Required

Biology

Rule: May complete the following sequence

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
Minimum Required Grade: C-		9 Total Credits Required

Chemistry

Rule: May complete the following sequence

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics

Rule: May complete the following sequence

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits

PHSX 218N - Physics Laboratory II w/Calc

1 Credits

Minimum Required Grade: C-

10 Total Credits Required

Science Electives

Rule: Must complete 2 of the following courses

Note: The Biology, Chemistry, or Physics sequence chosen to fulfill the science core may not count toward the science electives requirement.

Laboratory courses must be taken in conjunction with their associated lecture course.

A total of 17-18 credits of science is required from the science core plus the science electives.

Course	Credits
ASTR 131N - Elementary Astronomy I	3 Credits
ASTR 132N - Elementary Astronomy II	3 Credits
ASTR 134N - Elementary Astronomy Lab I	1 Credits
ASTR 135N - Elementary Astronomy Lab II	1 Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
BIOM 251 - Microbiology Hlth Sciences Lab	1 Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
FORS 201 - Forest Biometrics	3 Credits
GEO 101N - Intro to Physical Geology	3 Credits
GEO 102N - Intro to Physical Geology Lab	1 Credits
GEO 225 - Earth Materials	4 Credits
PHSX 215N - Fund of Physics w/Calc I	4 Credits
PHSX 216N - Physics Laboratory I w/Calc	1 Credits
PHSX 217N - Fund of Physics w/Calc II	4 Credits

	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
	PHSX 343 - Modern Physics	3 Credits
Minimum Required Grade: C-		6-10 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track. After completion of this track the student will be awarded a Bachelor of Science in Computer Science.

Computer Science-Mathematical Sciences (Combined Major)

The purpose of the combined program is to provide a thorough background in both allied disciplines and to inculcate a deeper understanding of their goals and methods. A student must complete 60 credits in the two disciplines: 30 of these credits in Computer Science courses and 30 of these credits in Mathematical Sciences courses. Each student plans a program in consultation with a Computer Science and a Mathematical Sciences advisor. Students planning to attend graduate school in computer science or the mathematical sciences should consult with their respective advisors.

Bachelor of Science - Computer Sci-Mathematical Sci

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Mathematical Sciences

Rule: Complete the following subcategories.

31 Total Credits Required

Mathematical Sciences Core

Rule: Complete all of the following courses.

Note: The following substitutions are allowed: M 181 for M 171, M 182 for M 172, and M 225 for M 307.

	Course	Credits
	M 171 - Calculus I	4 Credits

M 172 - Calculus II	4 Credits
M 221 - Introduction to Linear Algebra	4 Credits
M 273 - Multivariable Calculus	4 Credits
M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-	19 Total Credits Required

Mathematical Sciences Electives

Rule: Complete 12 credits from the following courses.

Note: The combined nine credits of Computer Science Electives and twelve credits of Mathematical Sciences Electives must include at least three 3- or 4-credit courses numbered 400 or above, with at least one chosen from each department (not including M 429 and STAT 451, 452).

Course	Credits
-	
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 361 - Discrete Optimization	3 Credits
M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 429 - History of Mathematics	3 Credits
M 431 - Abstract Algebra I	4 Credits
M 432 - Abstract Algebra II	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits

M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits
M 485 - Graph Theory	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 451 - Statistical Methods I	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Computer Science

Rule: Complete the following subcategories.

30 Total Credits Required

Computer Science Core

Rule: Complete all of the following courses.

Course	Credits
CSCI 106 - Careers in Computer Science	1 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 205 - Programming Languages w/ C/C++	4 Credits
CSCI 232 - Data Structures and Algorithms	4 Credits
CSCI 332 - Design/Analysis of Algorithms	3 Credits
CSCI 361 - Computer Architecture	3 Credits
Minimum Required Grade: C-	21 Total Credits Required

Computer Science Electives

Rule: Complete 9 credits from the following courses.

Note: (1) A total of at most three of the nine credits of Computer Science Electives may be in CSCI 398 or 498.

(2) The combined nine credits of Computer Science Electives and twelve credits of Mathematical Sciences Electives must include at least three 3- or 4-credit courses numbered 400 or above, with at least one chosen from each department (not including M 429 and STAT 451, 452).

Course	Credits
CSCI 315E - Computers, Ethics, and Society	3 Credits
CSCI 323 - Software Science	3 Credits
CSCI 340 - Database Design	3 Credits
CSCI 390 - Research	1 To 6 Credits
CSCI 391 - Special Topics	1 To 6 Credits
CSCI 392 - Independent Study	1 To 6 Credits
CSCI 394 - Seminar	1 To 6 Credits
CSCI 398 - Internship	1 To 3 Credits
CSCI 411 - Advanced Web Programming	3 Credits
CSCI 412 - Game and Mobile App	3 Credits
CSCI 426 - Adv Prgrmg Theory/Practice I	3 Credits
CSCI 427 - Adv Prgrmg Theory/Practice II	3 Credits
CSCI 438 - Theory of Computation	3 Credits
CSCI 441 - Computer Graphics Programming	3 Credits
CSCI 443 - User Interface Design	3 Credits
CSCI 444 - Data Visualization	3 Credits
CSCI 446 - Artificial Intelligence	3 Credits
CSCI 447 - Machine Learning	3 Credits
CSCI 448 - Pattern Recognition	3 Credits
CSCI 451 - Computational Biology	3 Credits

CSCI 460 - Operating Systems	3 Credits
CSCI 466 - Networks	3 Credits
CSCI 473 - Cryptography	3 Credits
CSCI 477 - Simulation	3 Credits
CSCI 478 - Multimedia Data Processing	3 Credits
CSCI 490 - Research	1 To 6 Credits
CSCI 491 - Special Topics	1 To 6 Credits
CSCI 492 - Independent Study	1 To 6 Credits
CSCI 494 - Seminar	1 To 6 Credits
CSCI 498 - Internship	1 To 3 Credits
CSCI 499 - Senior Thesis/Capstone	1 To 6 Credits
Minimum Required Grade: C-	9 Total Credits Required

Science Requirement

Rule: Complete the course work from 1 of the following subcategories.

9-10 Total Credits Required

Biology

Rule: If you choose biology, complete all of the following courses.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits
Minimum Required Grade: C-	9 Total Credits Required

Chemistry

Rule: If you choose chemistry, complete all of the following courses.

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics

Rule: If you choose physics, complete all of the following courses.

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Public Speaking Requirement

Rule: Complete 1 of the following courses.

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	COMX 242 - Argumentation	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper-Division Writing Requirement

Rule: Complete 1 of the following courses.

Note: Any other approved General Education upper-division writing course will also fulfill this requirement.

—	Course	Credits
	CSCI 315E - Computers, Ethics, and Society	3 Credits
	CSCI 499 - Senior Thesis/Capstone	1 To 6 Credits
	M 429 - History of Mathematics	3 Credits

M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

Suggested Curricula

Note: Students are encouraged to choose their Computer Science and Mathematical Sciences Electives according to one of the following curricula; these tracks are suggestions only and, as such, optional.

Applied Math–Scientific Programming: M 311, 412, 414, and one course chosen from M 381, 440, 472, 473 and STAT 341. Three courses chosen from CSCI 441, 444, 460, 477.

Combinatorics and Optimization–Artificial Intelligence: M 361, 362, and two courses chosen from M 325, 414, 485 and STAT 341; and CSCI 446, 447, and 460.

Statistics–Machine Learning: STAT 341, 421, and two courses chosen from M 325, 362, 485 and STAT 422. Three courses chosen from CSCI 340, 444, 446, 447, and 451.

Algebra–Analysis: M 381, 431, and two courses chosen from M 326, 432, 472, 473; CSCI 426, 460, and one other course.

Computer Science Minor

Minor - Computer Science (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Note: The traditional minor in computer science emphasizes computer programming and related skills.

Computer Science Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

18 Total Credits Required

Fundamentals

Rule: Must complete all of the following courses

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Course	Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
	6 Total Credits Required

Minor Electives

Rule: Must complete 12 credits of electives

Note: In addition to the six credits of Fundamentals, students must select 12 credits of electives chosen from CS 181, CSCI 100, 250, 232, 205, 361 and courses numbered 300 and above with the restrictions: both CSCI 100 and 250 cannot be counted, and at least 6 credits of electives must be at the 300 level or above.

Mathematics

Rule: Must complete 3 credits of the following courses

Note: If M 121 is selected, it must be taken in conjunction with M 122 for a total of 6 credits.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 151 - Precalculus	4 Credits
Minimum Required Grade: C-	3-6 Total Credits Required

Computer Applications Minor

Minor - Computer Applications (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Note: The minor in computer applications emphasizes use of applications such as programming languages, word processors, spreadsheets, and data bases in the management and manipulation of electronic information.

Computer Science Fundamentals

Rule: Take 1 or both of the following courses

—	Course	Credits
	CSCI 100 - Intro to Programming	3 Credits
	CSCI 135 - Fund of Computer Science I	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Computer Science Electives

Rule: Complete at least 1 and no more than 3 of the following courses

—	Course	Credits
	CAPP 171 - Communicating via Computers	3 Credits
	CSCI 105 - Computer Fluency	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
	CSCI 181 - Web Design and Programming	3 Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-		3-9 Total Credits Required

Degree Electives

Rule: May complete remaining degree credits from the following courses for a total of 21 degree credits

Note: Selection of CSCI 191, 291, 391, or 491 must be pre-approved by the advisor.

CSCI 135 may not be counted toward 2 categories of requirements.

6 credits may be taken outside of the Computer Science department but must be pre-approved by the advisor.

—	Course	Credits
	CSCI 135 - Fund of Computer Science I	3 Credits
	CSCI 136 - Fund of Computer Science II	3 Credits
	CSCI 191 - Special Topics	0 To 6 Credits
	CSCI 205 - Programming Languages w/ C/C++	4 Credits

	CSCI 232 - Data Structures and Algorithms	4 Credits
	CSCI 291 - Special Topics	1 To 6 Credits
	CSCI 391 - Special Topics	1 To 6 Credits
	CSCI 444 - Data Visualization	3 Credits
	CSCI 491 - Special Topics	1 To 6 Credits
Minimum Required Grade: C-		6-15 Total Credits Required

East Asian Studies

East Asian Studies B.A.

Bachelor of Arts - East Asian Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Lower Division Core Courses

Rule: Complete the following subcategories

6 Total Credits Required

Fundamentals

Rule: Must complete the following course

Note: On occasion the Modern and Classical Languages department offers an alternative Introduction to East Asian Studies course which could fulfill this requirement. Check with the advisor.

	Course	Credits
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	HSTR 240 - East Asian Civilizations	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Culture and Civilization

Rule: Must complete 1 of the following courses

	Course	Credits
	CHIN 211H - Chinese Culture and Civiliz	3 Credits
	JPNS 150H - Japanese Cult & Civiliz	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

18 Total Credits Required

Chinese Studies

Rule: Must complete 2 courses of Chinese Studies

Japanese Studies

Rule: Must complete 2 courses of Japanese Studies

East Asian Studies

Rule: Must complete 2 courses of Japanese, Chinese, Viet Nam, pan-East Asia, or Buddhism

Note: Student may select from courses as they are available.

Language

Rule: Must complete one of the following subcategories

20 Total Credits Required

Chinese Language

Rule: May select the following language sequence

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Course	Credits
CHIN 101 - Elementary Chinese I	5 Credits
CHIN 102 - Elementary Chinese II	5 Credits
CHIN 201 - Intermediate Chinese I	5 Credits
CHIN 202 - Intermediate Chinese II	5 Credits
Minimum Required Grade: C-	20 Total Credits Required

Japanese Language

Rule: May select the following language sequence

Course	Credits
JPNS 101 - Elementary Japanese I	5 Credits
JPNS 102 - Elementary Japanese II	5 Credits
JPNS 201 - Intermediate Japanese I	5 Credits
JPNS 202 - Intermediate Japanese II	5 Credits
Minimum Required Grade: C-	20 Total Credits Required

Economics Department

Jeff Bookwalter, Chairperson

The department considers its teaching goals to be three-fold: (1) To present students with the basic theoretical tools of economic analysis, relevant facts and institutional material, which will assist them as civic leaders. (2) To introduce students majoring in economics to the various special fields of study within economics. This training, along with extensive work in the other liberal arts and sciences, is intended to instill breadth of intellectual interest, critical habits of thought, a problem-solving attitude and facility of expression. (3) To help meet, through graduate work, the increasing demands for competent professional economists in industry, commerce, government and education.

Courses cover general economic theory, environmental economics, monetary theory, international economics, public finance, labor economics, economic development, comparative economic systems, econometrics, and industrial organization.

Students major in economics leading to a Bachelor of Arts degree. Graduate work leads to a Master of Arts degree in economics (see Graduate School catalog).

Department Faculty

Professor

Douglas Dalenberg, Professor

Associate Professor

Jeff Bookwalter, Associate Professor, Chair
Amanda Dawsey, Associate Professor, Graduate Advisor
Derek Kellenberg, Associate Professor
Helen Naughton, Associate Professor

Assistant Professor

Katrina Mullan, Assistant Professor
Ranjan Shrestha, Assistant Professor
Matthew Taylor, Assistant Professor

Affiliates

Richard Erb, Faculty Affiliate
Joanna Shelton, Faculty Affiliate

Emeritus

Thomas M. Power, Research Professor
Kay Unger, Emeritus

Course Descriptions

Economics

- **ECNS 101S - Economic Way of Thinking**
Credits: 3. Offered autumn and spring. A critical examination of the market mechanism as a social decision-making device to guide the use of a nation's resources. The limitations of these processes in light of current economic problems such as the rise of the large corporation, monopoly, environmental degradation, economic discrimination and the increasing role of the government. **Course Attributes:** Social Sciences Course
- **ECNS 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ECNS 201S - Principles of Microeconomics**
Credits: 3. Offered every term. The nature of a market economy, economic decisions of the household and firm, competition and monopoly, value and price determination, distribution of income and applied microeconomic topics. **Course Attributes:** Social Sciences Course
- **ECNS 202S - Principles of Macroeconomics**
Credits: 3. Offered every term. Prereq., ECNS 201S. The determination of the level of national economic activity, inflation, economic instability, the role of money and financial institutions, and selected topics in public economic policy. **Course Attributes:** Social Sciences Course
- **ECNS 217X - Issues in Economic Development**

Credits: 3. Offered intermittently. Prereq., ECNS 201S. Study of the processes of economic growth and development in the less developed world. **Course Attributes:** Indigenous and Global

- **ECNS 301 - Intermediate Micro with Calc**

Credits: 3. Offered spring and autumn. Prereq., ECNS 201S and M 162 or equiv. Analysis of consumer behavior, production, factor pricing, externalities and public goods.

- **ECNS 302 - Intermediate Macroeconomics**

Credits: 3. Offered autumn and spring. Prereq., ECNS 202S. Analysis of national income determination, unemployment, and inflation with emphasis on the role of fiscal and monetary policy.

- **ECNS 310 - Intro Health Economics**

Credits: 3. Offered intermittently. Prereq., economics course. Survey of market forces that govern the production and consumption of medical care in the U.S. market; uncertainty, asymmetric information, and concentrations of market power resulting in inefficient outcomes. Topics include cost escalations, role of medical insurance, and problems of an aging population.

- **ECNS 312 - Labor Economics**

Credits: 3. Offered intermittently. Prereq., ECNS 201S. Economic analysis of labor markets. Theories of wage determination, discrimination and poverty with implications for manpower policy.

- **ECNS 313 - Money and Banking**

Credits: 3. Offered intermittently. Prereq., ECNS 202S. Definition and role of money; banks and other financial institutions as suppliers of money; the federal reserve system as a regulator of money; monetary theories, history, and policy.

- **ECNS 320 - Public Finance**

Credits: 3. Offered intermittently. Prereq., ECNS 201S. Rationale for governmental expenditure; public goods; public choice. Analysis of expenditure policy. Intergovernmental relations.

- **ECNS 374 - Comparative Economics**

Credits: 3. Offered intermittently. Prereq., ECNS 201S. Comparative analysis of alternative ideal types of economic organization stressing the assumptions and values used in their critique and defense. Capitalism, Socialism, Communism, Fascism.

- **ECNS 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ECNS 392 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., six credits in economics and consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **ECNS 398 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Extended classroom experience that provides practical application of classroom learning during placements within the business community. The student must complete a learning agreement with a faculty member, relating the placement opportunity to his or her field of study. The department will determine the number of credits to be earned for the experience based upon the activities outlined in the learning agreement. Prior approval must be obtained from the faculty supervisor and the Internship Services office. The department has determined that credit for this course cannot count in the 36 credit minimum requirement for the major. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **ECNS 403 - Introduction to Econometrics**

Credits: 4. Offered autumn. Prereq., an introductory statistics course. Quantitative methods in economics with emphasis on regression analysis.

- **ECNS 405 - Game Theory**

Credits: 3. Offered every other autumn. Prereq., ECNS 201S. An introduction to the tools of game theory and how they are applied. In many real-world economic situations, outcomes are jointly determined where one agent's choices will affect another's welfare, and vice versa. Game theory provides a method of analyzing these economic situations where decisions are interrelated, and each agent recognizes this fact and thus makes decisions strategically.

- **ECNS 406 - Industrial Organization**

Credits: 3. Offered intermittently. Prereq., ECNS 201S. The theoretical basis for public policy solutions to market power. Emphasis on case studies in matters of antitrust, regulation of public utilities, and public ownership of business enterprises.

- **ECNS 431 - International Trade**

Credits: 3. Offered intermittently. Prereq., ECNS 301 or consent of instr. International trade: theory, policy, institutions, and issues. Analysis of comparative advantage and trade restrictions, negotiations, and agreements.

- **ECNS 433 - Economics of the Environment**

Credits: 3. Offered intermittently. Prereq., ECNS 201S. Outlines a theoretical framework for the analysis of environmental problems, including concepts of market failure and externalities, materials balance and property rights. The policy implications of this analytical model are explored for a range of topics including pollution and the preservation of natural environments and species. Formally cross-listed with EVST 440. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Intermediate

- **ECNS 445 - Int Env Econ & Clim Change**

Credits: 3. Offered autumn every other year. Same as CCS 445. Prereq., ECNS 201S. An introduction to the economics of various policy approaches towards climate change and other international environmental issues such as trans-boundary pollution problems, international trade and the environment and pollution haven hypothesis.

- **ECNS 450 - Adv. Topics in Economic Dev.**

Credits: 3. Offered intermittently. Prereq., ECNS 201S and ECNS 202S, or consent of instructor. Advanced treatment of the processes of economic growth and development in the less developed world.

- **ECNS 451 - Behavioral and Experimental Economics**

Credits: 3. Prereq., ECNS 201. An overview of experimental economics and behavioral economics. Outlines methods and instruments frequently used in economics experiments. Experimental design and assessment. Risk aversion, prospect theory, preference stability, and altruism.

- **ECNS 486 - Economic Research Seminar**

Credits: 1 TO 15. (R-15) Offered intermittently. Prereq., consent of instr.

- **ECNS 488 - Res Meth & Thesis Design**

Credits: 2. Offered autumn. Prereq., senior standing, economics major. Development of senior thesis proposal; presentation of research topics and methods by economics faculty and seminar participants. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **ECNS 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ECNS 492 - Independent Study**

Credits: 1 TO 15. (R-15) Offered intermittently. Prereq., 12 credits in economics and consent of instr.

- **ECNS 494 - Senior Seminar**

Credits: 2. Offered spring. Prereq., senior standing, economics major. Capstone course for economics majors. Advanced topics in economic methodology, theory and/or public affairs.

- **ECNS 499 - Senior Thesis/Capstone**

Credits: 2. Offered spring. Prereq., senior standing, economics major. Completion of senior thesis; presentation of results by seminar participants.

- **ECNS 501 - Graduate Research**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

- **ECNS 511 - Microeconomic Theory**

Credits: 3. Offered autumn. Prereq., ECNS 301. Advanced theoretical treatment of consumer and producer behavior. Level: Graduate

- **ECNS 513 - Macroeconomic Theory**

Credits: 3. Offered spring. Prereq., ECNS 302. Advanced theoretical treatment of national income determination, unemployment and inflation. Level: Graduate

- **ECNS 560 - Advanced Econometrics**

Credits: 4. Offered spring. Prereq., ECNS 403. Advanced quantitative methods in econometrics. Coverage of probit-logit regression models, simultaneous equation system, and other specialized techniques. Level: Graduate

- **ECNS 569 - Empirical Research Design**

Credits: 1 TO 3. (R-6) Offered every term. Role and scope of empirical research. Planning and conduct of a research project. Level: Graduate

- **ECNS 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums

- **ECNS 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
Course Attributes: Service Learning/Volunteer

- **ECNS 598 - Internship**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate
Course Attributes: Internships/Practicums

- **ECNS 599 - Thesis**

Credits: 1 TO 12. (R-9) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Economics B.A.

Bachelor of Arts - Economics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: Refer to graduation requirements listed previously in the catalog. See index.

Economics - Lower-division Core

Rule: All courses are required.

Note: Within the 36 credits the student must include ECNS 201S, 202S. Three credits of ECNS 101S may be counted toward the additional fourteen credits of upper-division economics courses if taken before attaining junior status.

Course	Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Economics - Upper-division Core

Rule: All courses are required.

Note: Within the 36 credits the student must include ECNS 301, 302, 403, 488, 494, 499 and fourteen economics elective credits numbered 300 or above. ECNS 398 credits do not count toward the 36-credit requirement. The Upper-division Writing Expectation must be met by successfully completing the Senior Economics Thesis, ECNS 488 and 499.

Course	Credits
ECNS 301 - Intermediate Micro with Calc	3 Credits
ECNS 302 - Intermediate Macroeconomics	3 Credits
ECNS 403 - Introduction to Econometrics	4 Credits
ECNS 488 - Res Meth & Thesis Design	2 Credits
ECNS 494 - Senior Seminar	2 Credits
ECNS 499 - Senior Thesis/Capstone	2 Credits
Minimum Required Grade: C-	16 Total Credits Required

Upper-division Electives

Rule: A minimum of fourteen credits of upper-division Economics electives is required; more credits may be taken.

Note: A minimum of fourteen credits of upper-division Economics electives is needed to satisfy the economics degree. ECNS 101S may be counted toward these additional 14 credits if taken before attaining junior status (60+ credits). ECNS 398 does NOT count toward the 36-credit requirement; however, the following may count as upper-division economics electives: GPHY 323S, PSCI 365, FORS 320 and NRSM 425.

Course	Credits
ECNS 310 - Intro Health Economics	3 Credits
ECNS 312 - Labor Economics	3 Credits
ECNS 313 - Money and Banking	3 Credits
ECNS 320 - Public Finance	3 Credits
ECNS 391 - Special Topics	1 To 9 Credits
ECNS 405 - Game Theory	3 Credits
ECNS 406 - Industrial Organization	3 Credits
ECNS 431 - International Trade	3 Credits
ECNS 433 - Economics of the Environment	3 Credits
ECNS 445 - Int Env Econ & Clim Change	3 Credits
ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
ECNS 491 - Special Topics	1 To 9 Credits
FORS 320 - Forest Environmental Economics	3 Credits
GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
NRSM 425 - Nat Res & Envir Economics	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
Minimum Required Grade: C-	14 Total Credits Required

Non-economics Required Courses

Rule: All courses are required.

Note: Non-economics courses required for the undergraduate degree are: M 115, M 162 and STAT 216 or equivalent. M 162 must be taken before ECNS 301. STAT 216 must be taken before ECNS 403. Students may prefer to take the two-course sequence M 171 and M 172 instead of M 162. Students planning graduate study in economics should take M 171 and M 172 and consider M 221, M 307 and ECNS 511, 513 and 560.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 162 - Applied Calculus	4 Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	11 Total Credits Required

Teaching Economics

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Teacher Preparation in Economics

Students who want to be licensed to teach economics at the high-school level must complete the BA degree requirements in economics. They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a teaching minor in economics. See the Department of Curriculum & Instruction for information about admission to the Teacher Education Program and completion of these licensure programs.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Economics; Track: Teaching Economics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of

Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Economics - Lower-division Core

Rule: All courses are required.

Note: Within the 36 credits the student must include ECNS 201S, 202S. Three credits of ECNS 101S may be counted toward the additional fourteen credits of upper-division economics courses if taken before attaining junior status.

Course	Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Economics - Upper-division Core

Rule: All courses are required.

Note: Within the 36 credits the student must include ECNS 301, 302, 403, 488, 494, 499 and fourteen economics elective credits numbered 300 or above. ECNS 398 credits do not count toward the 36-credit requirement. The Upper-division Writing Expectation must be met by successfully completing the Senior Economics Thesis, ECNS 488 and 499.

Course	Credits
ECNS 301 - Intermediate Micro with Calc	3 Credits
ECNS 302 - Intermediate Macroeconomics	3 Credits
ECNS 403 - Introduction to Econometrics	4 Credits
ECNS 488 - Res Meth & Thesis Design	2 Credits
ECNS 494 - Senior Seminar	2 Credits
ECNS 499 - Senior Thesis/Capstone	2 Credits
Minimum Required Grade: C-	16 Total Credits Required

Upper-division Electives

Rule: Fourteen additional credits from the following upper-division courses are required.

Note: A minimum of fourteen credits of upper-division Economics electives are needed to satisfy the economics degree. ECNS 101S may be counted toward these additional 14 credits if taken before attaining junior status (60+ credits). ECNS 398 does NOT toward the 36-credit requirement; however, the following may count as upper-division economics electives: GPHY 323S, PSCI 365, FORS 320 and NRSM 425.

Course	Credits
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	ECNS 310 - Intro Health Economics	3 Credits
	ECNS 312 - Labor Economics	3 Credits
	ECNS 313 - Money and Banking	3 Credits
	ECNS 320 - Public Finance	3 Credits
	ECNS 391 - Special Topics	1 To 9 Credits
	ECNS 405 - Game Theory	3 Credits
	ECNS 406 - Industrial Organization	3 Credits
	ECNS 431 - International Trade	3 Credits
	ECNS 433 - Economics of the Environment	3 Credits
	ECNS 445 - Int Env Econ & Clim Change	3 Credits
	ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
	ECNS 491 - Special Topics	1 To 9 Credits
	FORS 320 - Forest Environmental Economics	3 Credits
	GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
	NRSM 425 - Nat Res & Envir Economics	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
Minimum Required Grade: C-		14 Total Credits Required

Non-economics Required Courses

Rule: All courses are required.

Note: Non-economics courses required for the undergraduate degree are: M 115, M 162 and STAT 216 or equivalent. M 162 must be taken before ECNS 301. Stat 216 must be taken before ECNS 403. Students may prefer to take the two-sequence M 171 and M 172 instead of M 162. Students planning graduate study in economics should take M 171 and 172 and consider M 221, M 307 and ECNS 511, 513 and 560.

Languages: Students graduating in Economics may substitute STAT 216 and either M 162 or M 171 or M 172 in place of the Modern and Classical Language requirement.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 162 - Applied Calculus	4 Credits

	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		11 Total Credits Required

Teaching Track

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Teaching Economics Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Economics (Minor); Track: Teaching Economics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Economics - Lower-division Core

Rule: All courses are required.

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—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Economics - Upper-division Core

Rule: All courses are required.

Note: M 115 and M 162 should be taken before enrolling in ECNS 301.

—	Course	Credits
	ECNS 301 - Intermediate Micro with Calc	3 Credits
	ECNS 302 - Intermediate Macroeconomics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Economics - Upper-division Electives

Rule: Six additional credits of economics classes numbered 300 or above

Note: Students are required to complete STAT 216, Intro to Statistics (or equivalent) with a C- or better before enrolling in ECNS 403, Introduction to Econometrics.

—	Course	Credits
	ECNS 310 - Intro Health Economics	3 Credits
	ECNS 312 - Labor Economics	3 Credits
	ECNS 313 - Money and Banking	3 Credits
	ECNS 320 - Public Finance	3 Credits
	ECNS 391 - Special Topics	1 To 9 Credits
	ECNS 403 - Introduction to Econometrics	4 Credits
	ECNS 405 - Game Theory	3 Credits
	ECNS 406 - Industrial Organization	3 Credits
	ECNS 431 - International Trade	3 Credits
	ECNS 433 - Economics of the Environment	3 Credits
	ECNS 445 - Int Env Econ & Clim Change	3 Credits

	ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
	ECNS 491 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Non-economics Required Courses

Rule: All courses are required.

Note: M 115 (or equivalent) and M 162 should be taken before enrolling in ECNS 301.

	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		7 Total Credits Required

Teaching Methods Course

Rule: Complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Economics Minor

Minor - Economics (Minor)

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Economics - Lower-division Core

Rule: All courses are required.

—	Course	Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Economics - Upper-division Core

Rule: All courses are required.

Note: M 115 and M 162 should be taken before enrolling in ECNS 301.

—	Course	Credits
	ECNS 301 - Intermediate Micro with Calc	3 Credits
	ECNS 302 - Intermediate Macroeconomics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Economics - Upper-division Electives

Rule: Six additional credits of economics classes numbered 300 or above

Note: Students are required to complete STAT 216, Intro to Statistics (or equivalent) with a C- or better before enrolling in ECNS 403, Introduction to Econometrics.

—	Course	Credits
	ECNS 310 - Intro Health Economics	3 Credits
	ECNS 312 - Labor Economics	3 Credits
	ECNS 313 - Money and Banking	3 Credits
	ECNS 320 - Public Finance	3 Credits

	ECNS 391 - Special Topics	1 To 9 Credits
	ECNS 403 - Introduction to Econometrics	4 Credits
	ECNS 405 - Game Theory	3 Credits
	ECNS 406 - Industrial Organization	3 Credits
	ECNS 431 - International Trade	3 Credits
	ECNS 433 - Economics of the Environment	3 Credits
	ECNS 445 - Int Env Econ & Clim Change	3 Credits
	ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
	ECNS 491 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-		6 Total Credits Required

Non-economics Required Courses

Rule: All courses are required.

Note: M 115 (or equivalent) and M 162 should be taken before enrolling in ECNS 301.

	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-		7 Total Credits Required

English Department

Beverly Chin, Chair

The Department of English is among the oldest and most prestigious units at the University. As one of the campus's original departments, it offered some of the University's inaugural courses, including literature classes taught by UM's first president, Oscar J. Craig. In 1919, Rhodes Scholar H.G. Merriam inaugurated one of the first creative writing programs in the country. Now, more than a century old, this department offers a B.A. with options in Literature, Creative Writing, Teaching, Film Studies, and Linguistics, and graduate degrees in Creative Writing (M.F.A.), Literature (M.A.), and Teaching (M.A.). Our Composition program serves the entire University by offering the first-year composition requirement, as well as courses in advanced composition and graduate seminars in the teaching of writing. We have a relatively new minor in Irish Studies.

»Admission Requirements

To be admitted to any option of the undergraduate English major, a student must satisfy the following requirements:

1. Completion of 24 credits overall with a minimum cumulative GPA of 2.5 or a GPA of 2.5 in the previous two terms.
2. Completion of at least nine credits in English, excluding WRIT (composition) courses, with a minimum GPA of 2.5 and no grade lower than a C (2.00) in those courses.

Students who intend to major in English but who have not yet met the above requirements are admitted to the program as pre-English majors. Pre-English majors will be assigned to the English department Academic Advisor. Before a student can graduate with a major in English, she or he must meet the requirements to become an English major and declare a specific option within the program.

Department Faculty

Professor

Robert Baker, Professor
Jill Bergman, Professor
Judy Blunt, Professor
Kevin Canty, Professor
Casey Charles, Professor
Beverly Chin, Professor and English Chair
Nancy Cook, Professor
Debra Earling, Professor
John Glendening, Professor
Brady Harrison, Professor
John Hunt, Professor
Ashby Kinch, Professor / Director of Graduate Studies
Joanna Klink, Professor
Christopher J. Knight, Professor
Deirdre McNamer, Professor
David L. Moore, Professor
Greg Pape, Professor
Amy Ratto Parks, Assistant Director of Composition
Prageeta Sharma, Professor
Karen Volkman, Professor

Associate Professor

Louise Economides, Associate Professor
David Gates, Associate Professor
Quan Manh Ha, Associate Professor
Kathleen Kane, Associate Professor
Eric Reimer, Associate Professor

Assistant Professor

Erin Wecker, Assistant Professor, Director of Composition

Adjunct

Tobin Addington, Adjunct Assistant Professor - Media Arts; Film Studies
Anna Baldwin, Adjunct Assistant Professor, English Teaching
Rob Browning, Visiting Assistant Professor
Brian Buckbee, Instructor
Heather Cahoon, Adjunct Lecturer
Leanne Deschamps, Adjunct, English Teaching

David Gilcrest, Lecturer
Sarah Naseem, Adjunct, English Teaching
Caroline Patterson, Adjunct Associate Professor
Natalie Peeterse, Adjunct, Composition
Kenneth White, Adjunct Professor
Virginia Zech, Adjunct

Lecturer

Sean O'Brien
Traolach O'Riordain, Lecturer
Erin Saldin, Lecturer
Robert Stubblefield, Lecturer

Affiliates

Udo Fluck, Director, Global Gateway Global Competence Research, Course/Seminar Development and Training
Michael Murphy
Michel Valentin, Professor

Emeritus

Phil Fandozzi, Visiting Professor

Course Descriptions

Creative Writing

- **CRWR 115L - Montana Writers Live**
Credits: 3. (R-6) Offered autumn. Open to all majors. An introduction to Montana's practicing creative writers and their work through reading, live performances and discussion. Regional poets and prose writers will read from their work and lead class discussion. Students prepare questions developed from readings and criticism. **Course Attributes:** English Course
Literary & Artistic Stds Crse
- **CRWR 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course
- **CRWR 212A - Intro Nonfiction Workshop**
Credits: 3. A study of the art of nonfiction through reading and responding to contemporary nonfiction and the writing of original nonfiction works. Focus is on creative expression, writing technique and nonfiction forms. Students begin with writing exercises and brief essays, advancing to longer forms as the semester progresses. **Course Attributes:** Expressive Arts Course
- **CRWR 234 - The Oval: Literary Mag**
Credits: 3. This course is open to undergraduates who have completed at least one semester of creative writing. Students focus on the editing, design, layout and marketing of The Oval, University of Montana's undergraduate literary magazine. Students will read, discuss and develop responses to to recongnized literary works, as well as developing criteria for each volume's content and design. The class will include the evaluation and selection of fiction, nonfiction, poetry and visual art submissions to The Oval. Students are required to keep a reading journal, and compile a portfolio of writing exercises, responses to texts and critiques of published works.

- **CRWR 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CRWR 310 - Intermediate Fiction Workshop**

Credits: 3. (R-9) Offered autumn and spring. Prereq., completion of CRWR 210A with a "B" average or better. An intermediate fiction writing workshop. Students will be expected to finish 3 or 4 substantial stories for the course. Although some outside material will be considered, the primary emphasis will be analysis and discussion of student work. **Course Attributes:**
English Course

- **CRWR 311 - Intermediate Poetry Workshop**

Credits: 3. (R-9) Offered autumn and spring. Prereq., Completion of CRWR 211A with a "B" average or better. An intermediate workshop involving critical analysis of students' work-in-progress as well as reading and discussion of poems in an anthology. Numerous directed writing assignments, experiments, exercises focused on technical considerations like diction, rhythm, rhyme, and imagery. **Course Attributes:** English Course

- **CRWR 312A - Intern Nonfiction Workshop**

Credits: 3. (R-9) Prereq., completion of CRWR 212A or CRWR 210A with a "B" average or better. An intermediate nonfiction workshop. Students read and respond to model essays, in addition to creating and revising original essays for workshop review. Assignments and exercises focus on writing craft and research techniques. **Course Attributes:** English Course
Expressive Arts Course

- **CRWR 320 - The Art and Craft of Revision**

Credits: 3. (R-6) Offered spring. Prereq., CRWR 210A or consent of instr. An intermediate writing course focused on revision of prose works-in-progress and study of narrative, plot, and editing at the language level. Materials include craft manuals, contemporary and classic examples, and student manuscripts.

- **CRWR 322 - Techniques of Modern Essay**

Credits: 3. Offered intermittently. Prereq., consent of instr. Study of various forms of nonfiction essay, such as memoir, personal essay, travel and nature writing, profile and literary journalism. Assignments and exercises focus on writing craft and research techniques.

- **CRWR 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
English Course

- **CRWR 398 - Internship**

Credits: 1 TO 3. (R-9) Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services Office. **Course Attributes:** Internships/Practicums
English Course

- **CRWR 410 - Advanced Fiction Workshop**

Credits: 2 TO 3. (R-6) Offered autumn and spring. Prereq., consent of instr. An advanced writing workshop in which student manuscripts are read and critiqued. Rewriting of work already begun (in CRWR 310 classes) will be encouraged. **Course Attributes:** English Course

- **CRWR 411 - Advanced Poetry Workshop**

Credits: 2 TO 3. (R-6) Offered autumn and spring. Prereq., consent of instr. An advanced writing workshop involving critical analysis of students' work-in-progress, as well as reading and discussion of poems by established poets. Discussions will focus on structure and stylistic refinement, with emphasis on revision. Different techniques, schools and poetic voices will be encouraged. Frequent individual conferences. **Course Attributes:** English Course

- **CRWR 412 - Advanced Nonfiction Workshop**
 Credits: 3. (R-6) Offered autumn and spring. Prereq., consent of instr. An advanced creative writing workshop focused primarily on reading and writing nonfiction; some classes may focus on personal essay, narrative nonfiction or short forms. Students complete two substantial essays.
Course Attributes: English Course
- **CRWR 425 - Storytelling**
 Credits: 3. This course is open to both undergraduate and graduate students, and is not limited to English majors. In-class exercises and out-of-class assignments are designed to help students identify, develop, and demonstrate effective narrative practices in their chosen fields. Students learn to recognize and identify unifying themes, motifs, and ideas in literature and oral stories. Students will read, write, edit and present stories to the class, as well as providing a critique of their peers' work.
- **CRWR 491 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered Intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course
- **CRWR 492 - Independent Study**
 Credits: 1 TO 3. (R-9) Offered every term. Prereq., consent of instr. and department chair, and junior or senior standing. Special projects in creative writing. Only one 492 may be taken per semester. **Course Attributes:** English Course
- **CRWR 496 - Service Learning**
 Credits: 1 TO 3. (R-9) Offered every term. Prereq., consent of instr. and department chair, and junior or senior standing. Special projects in creative writing. Only one 496 may be taken per semester. **Course Attributes:** Service Learning/Volunteer English Course
- **CRWR 510 - Fiction Workshop**
 Credits: 1 TO 15. (R-15) Offered autumn and spring. Prereq., consent of instr. Level: Graduate
Course Attributes: English Course
- **CRWR 511 - Poetry Workshop**
 Credits: 1 TO 15. (R-15) Offered autumn and spring. Prereq., consent of instr. Level: Graduate
Course Attributes: English Course
- **CRWR 512 - Nonfiction Workshop**
 Credits: 1 TO 15. (R-15) Offered autumn and spring. Prereq., consent of instr. A creative writing workshop focused primarily on personal essay and narrative nonfiction. Attention given to writing and publishing professional magazine essays. Students complete two substantial essays. Level: Graduate
Course Attributes: English Course
- **CRWR 513 - Techniques of Nonfiction**
 Credits: 1 TO 6. (R-6) Offered once every 2 years. Prereq., consent of instr. Study of form, technique and style in contemporary nonfiction. Level: Graduate
- **CRWR 514 - Techniques Modern Fiction**
 Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Intensive reading of contemporary prose writers. Level: Graduate **Course Attributes:** English Course
- **CRWR 515 - Traditional Prosody**
 Credits: 3. Offered intermittently. Prereq., consent of instr. Intensive practice and readings in prosodic and other poetic techniques. Level: Graduate **Course Attributes:** English Course
- **CRWR 516 - Topics in Creative Writing**
 Credits: 3. (R-9) Offered intermittently. Creative Writing faculty explore readings in their genres of

specialty. Each professor chooses the focus, reading list, and assignments for the course. Level: Graduate **Course Attributes:** English Course

- **CRWR 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums English Course

- **CRWR 596 - Graduate Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. and Associate Chair. Special projects in creative writing. Only one 596 permitted per semester. Level: Graduate **Course Attributes:** Service Learning/Volunteer English Course

- **CRWR 599 - Thesis**

Credits: 1 TO 12. (R-12) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate **Course Attributes:** English Course

English - Linguistics

- **ENLI 465 - Structure of Eng for Tchrs**

Credits: 3. Offered intermittently. Same as LING 465. The development of the English language from a historical perspective contrasted with the phonological and grammatical structure of English from a modern linguistic point of view, specifically designed for teachers. **Course Attributes:** English Course

English as a Second Language

- **ENSL 195 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

English - English Teaching

- **ENT 296 - Independent Study**

Credits: 1 TO 3. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ENT 395 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **ENT 398 - Internship**

Credits: 1 TO 3. Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** English Course Internship graduation limit 6

- **ENT 439 - Studies in Young Adult Lit**

Credits: 3. Offered autumn. Reading of representative texts covering the history, genres, authors, and themes of literature for students in middle school and high school. **Course Attributes:** English Course

- **ENT 440 - Teaching Writing**

Credits: 3. Offered autumn and spring. Prereq./co-req., EDU 220 and admission to Teacher Education Program. Emphasis on teaching writing in grades 5-12. Research about development and maturity of writers, overview of schools of writing/history of writing instruction, strategies for teaching writing as a process, elements of writing craft, criteria for assessing and responding to writing, peer-coaching methods, writing/reading workshops, the role of grammar in improving writing, writing/reading connections, assignment characteristics, and grading practices. Required of students pursuing secondary English major and minor teaching certificates. **Course Attributes:** English Course

- **ENT 441 - Tchg Rdng & Literature**

Credits: 3. Offered autumn and spring. Prereq./Coreq., ENT 439, EDU 395, admission to Teacher Education Program, and consent of instr. Emphasis on various approaches to teaching reading and literature in grades 5-12. Research about the development and maturity of readers, strategies for teaching reading comprehension and vocabulary, strategies for diagnosing reading abilities and criteria for reading assessment, reading workshops/literature circles. Emphasis on various approaches to teaching literature: genre, inquiry, thematic, chronological and interdisciplinary. Includes techniques for developing responses to fiction, nonfiction, prose, poetry, film and other media. Focus on the design of lesson plans and curriculum using traditional/classic, contemporary, young adult, and multicultural literature in grades 5-12. Required of students pursuing secondary English major and minor teaching certificates. **Course Attributes:** English Course

- **ENT 442 - Tchg Oral Lang & Media Lit**

Credits: 3. Offered autumn and spring. Prereq./co-req., LING 465, EDU 395, admission to Teacher Education Program, and consent of instr. Emphasis on preparation, implementation, and evaluation of teaching strategies and materials in grades 5-12. Includes learning objectives, teaching styles, unit plans, print and non-print media, and creative drama. Explores student-centered curriculum, with emphasis on developmental abilities in speaking, listening and viewing, and multigenre/multimodal communication. Teaching majors and minors in areas other than English should enroll in ENT 440. **Course Attributes:** English Course

- **ENT 495 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **ENT 496 - Independent Study**

Credits: 1 TO 3. (R-9) Offered every term. Prereq., consent of instr. and department chair, and junior or senior standing. Special projects in English teaching. Only one 496 may be taken per semester. **Course Attributes:** English Course

- **ENT 542 - Theor/Pedagog of Rhet/Comp**

Credits: 3. Offered intermittently. Exploration of contemporary theories and practical strategies for teaching rhetoric and composition grades 5-16. Level: Graduate **Course Attributes:** English Course

- **ENT 543 - Adv Tchg Strat Yng Adv Lit**

Credits: 3. Offered intermittently. Prereq., teaching experience or senior standing (3.0 GPA and petition) with consent of instr. Selecting, reading, teaching, and evaluating young adult literature. Design of thematic units with emphasis on students' responses to literature. Presentation of multicultural literature, gender inquiry, social justice, censorship, and media issues. Level: Graduate **Course Attributes:** English Course

- **ENT 544 - Creat Drama English Class**

Credits: 3. Offered intermittently. Prereq., teaching experience, or senior standing (3.0 GPA and petition) with consent of instr. Designing, teaching and evaluating creative drama in the English language arts classroom. Emphasis on using creative drama as a learning strategy to teach literature and all the language arts. Level: Graduate **Course Attributes:** English Course

- **ENT 545 - Theor/Pedagog of Literacy**
 Credits: 3. Offered intermittently. Exploration of contemporary theories and practical strategies for teaching literacy grades 5-16. Level: Graduate **Course Attributes:** English Course
- **ENT 546 - Literary Crit for Teachers**
 Credits: 3. Offered intermittently. Prereq., teaching experience or senior standing (3.0 GPA and petition) with consent of instr. Emphasis on a variety of theories which focus on reader responses. Application of theories to prose and poetry genres. Level: Graduate **Course Attributes:** English Course
- **ENT 547 - Adv Tchg Strat Wrtg & Rdg**
 Credits: 3. Offered intermittently. Prereq., teaching experience, or senior standing (3.0 GPA and petition) with consent of instr. Current research and best practices in teaching writing and reading in all content areas. Emphasis on writing and reading processes, workshops, conferences and portfolios. National and state standards, curriculum, and assessments in writing and reading are addressed. Level: Graduate **Course Attributes:** English Course
- **ENT 548 - Portfolios and Assessment**
 Credits: 3. Offered intermittently. Prereq., teaching experience, or senior standing (3.0 GPA and petition) with consent of instr. Selecting, designing, and evaluating informal and formal assessments in English Language Arts. Exploration of portfolios as assessment strategies that align standards curriculum and instruction. Focus on content and performance standards, evaluation criteria and rubrics, and role of reflection in teaching and learning. Level: Graduate **Course Attributes:** English Course
- **ENT 550 - Montana Writing Project**
 Credits: 9. Offered summer. Prereq., special application and consent of director. Intensive, four-week program designed to increase the effectiveness of the teaching and learning of writing in all levels of education in Montana. For graduate students, K-12 teachers in all content disciplines and university level educators. Level: Graduate **Course Attributes:** English Course
- **ENT 552 - MWP Leadership Training**
 Credits: 7. Offered intermittently Prereq., ENT 440, special application, and consent of director. Intensive leadership training for Montana Writing Project teacher-consultants in responding to peer writing, organizing professional development institutes, honing strategies for curriculum development and institute design to provide professional development statewide that increases the effectiveness of teaching and learning of writing in all levels of education, pre-20. Level: Graduate **Course Attributes:** English Course
- **ENT 553 - Native Voices & Writing**
 Credits: 7. Offered summer at Blackfeet Community College. Focus is on writing across the curriculum in the context of participants' teaching assignments alongside the essential component of Niitsitapi (Blackfeet) culture and ways of knowing. Participants develop a theoretical articulation of what it means to write in their disciplinary area(s) of endorsement and with predominantly Blackfeet students. Participants design and critique writing curriculum and instruction in their disciplines with attention to theory and research on writing in the content areas and Blackfeet ways of knowing. Level: Graduate
- **ENT 556 - IEFA & Writing**
 Credits: 3. Offered intermittently in partnership with Montana Writing Project and local school districts. Consent of instr. This course assumes that writing is an ideal vehicle for moving forward with implementation of Montana law Indian Education for All (IEFA) in K-12 schools. The primary goal of this course is to help teachers of all grade levels and content areas develop the knowledge, resources, and confidence to enable them to integrate IEFA smoothly into their existing literacy curriculum. Level: Graduate
- **ENT 557 - The Holocaust and IEFA**
 Credits: 3. Consent of Instr. This course, intended for K-12 and college/university educators, is a

collaboration between Montana Writing Project and the Holocaust Educators' Memorial Library in New York City to examine curricula and pedagogies for linking Nazi Holocaust Education and Indian Education for All through writing and literacy education. Level: Graduate

- **ENT 593 - Professional Paper**

Credits: 1 TO 4. (R-4) Offered intermittently. Pedagogical paper for the Master of Arts (Teacher Option). Credit not allowed toward any other degree. Level: Graduate **Course Attributes:**
English Course

- **ENT 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., teaching experience or senior standing (3.0 GPA and petition) with consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:**
English Course

- **ENT 596 - Graduate Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. and department chair. Special projects in English teaching. Only one independent study permitted per semester. Level: Graduate **Course Attributes:**
English Course

- **ENT 598 - Internship**

Credits: 1 TO 3. (R-9) Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate **Course Attributes:**
English Course

- **ENT 599 - Thesis**

Credits: 1 TO 6. (R-6) Offered every term. Level: Graduate

Film

- **FILM 103L - Introduction to Film**

Credits: 3. Offered every term. The history and development of the film medium. Emphasis on critical analysis of selected classic or significant films. **Course Attributes:**
Literary & Artistic Stds Crse

- **FILM 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FILM 291 - Special Topics**

Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FILM 300 - History of Film**

Credits: 3. Offered every year. Prereq., FILM 103L, LIT 270L. Survey of film history.

- **FILM 320 - Shakespeare and Film**

Credits: 3. Same as LIT 327. Offered once a year. Prereq., LIT 300 or consent of instr. A survey of selected Shakespeare plays emphasizing close reading of the texts and consideration of their dramatic possibilities in relation to film. **Course Attributes:**
Writing Course-Approved
Writing Course-Intermediate

- **FILM 327 - Film Genres**

Credits: 3. (R-9) Offered every other year. Prereq. FILM 103L. Intensive study of central works within one major film genre.

- **FILM 363 - The French Cinema**

Credits: 3. Offered intermittently. An historical, aesthetic, and critical survey of the French cinema, from its beginnings in 1895 through the contemporary cinema (Muet, classical, Realism, Nouvelle Vogue, etc.) with an introduction to contemporary film criticism. Students taking the course for French credits are required to do research, reading, and writing in the French language.

- **FILM 365 - Latin Amer Civ Thru Lit & Film**

Credits: 3. Offered in autumn odd-numbered years. The development of the traditional society of Latin American civilization through the interaction of European, Indian and African elements.

- **FILM 381 - Studies in the Film**

Credits: 3. (R-9) Offered autumn and spring. Prereq., FILM 103L or consent of instr. Studies in genres, directors, movements, problems, etc.

- **FILM 391 - Special Topics**

Credits: 1 TO 9. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FILM 447 - Film Theory**

Credits: 3. Offered yearly. This course examines key approaches to film theory and criticism, and the theoretical roots of each. Classic and contemporary films will be assessed in the light of the theories covered.

- **FILM 481 - Advanced Studies in Film**

Credits: 3. (R-9) Offered every other year. Studies in film aesthetics, politics of film, international cinema and comparative film analyses.

- **FILM 484 - Film Directors**

Credits: 3. (R-9) Offered every year. Prereq. FILM 103L. Intensive study of the life and work of one major film director.

- **FILM 491 - Special Topics**

Credits: 1 TO 9. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics

- **FILM 492 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Preq., consent of instr. and department chair, and junior or senior standing. Special Projects in film. Only one 492 may be taken per semester.

- **FILM 495 - Practicum**

Credits: 1 TO 6. R-6

- **FILM 596 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. and department chair. Special projects in film. Level: Graduate

Irish

- **IRSH 101 - Elementary Irish/Gaelic**

Credits: 3. Offered autumn or spring. Same as ENIR 101. This course represents an introduction to modern Irish in both its spoken and written forms: basic principles of grammar and sentence structure are covered. Emphasis is placed on the application of these principles in every-day situations. This course is housed in the English Department. The GenEd Foreign Language requirement can be fulfilled by successful completion of 101, 102 and 103. **Course Attributes:**
Foreign Language Requirement

- **IRSH 102 - Elementary Irish II**

Credits: 3. Offered autumn or spring. Same as ENIR 102. The primary objective of this course is to build on the foundations laid in Elementary Irish I. Students will expand their vocabulary with a special focus on verbs; they will also engage new themes that demand a corresponding increase in their store of nouns, adjectives, idioms and expressions. This course is housed in the English Department. The GenEd Foreign Language requirement can be fulfilled by successful completion of 101, 102 and 103. **Course Attributes:** Foreign Language Requirement

- **IRSH 103 - Elementary Irish III**

Credits: 3. Offered autumn or spring. Same as IRSH 103. The primary objective of this course is to build on the foundations laid in Beginning Irish I. Students will expand their vocabulary with a special focus on verbs; they will also engage new themes that demand a corresponding increase in their store of nouns, adjectives, idioms and expressions. The GenEd Foreign Language requirement can be fulfilled by successful completion of 101, 102 and 103. **Course Attributes:** Foreign Language Requirement

- **IRSH 201 - Intermediate Irish I**

Credits: 3. Offered spring semester. Prereq. ENIR 101, 102, and 103 or their equivalent from another university. Students will continue their study of the verbs; engage more complex syntax and grammatical constructions; and consult the prose and poetry of the written and oral literary traditions. For proficiency equal to the 202-level, students must take the five semester sequence (101, 102, 103, 201, & 202) of Irish language study.

- **IRSH 202 - Intermediate Irish II**

Credits: 3. Offered fall semester. Prereq. IRSH 201 or its equivalent from another university. Students will expand their knowledge of Irish language verbs: they will study the five declensions of the nouns; and acquire the vocabulary and language necessary to engage more abstract ideas and topical issues on an intellectual level. For proficiency equal to the 202-level, students must take the five semester sequence (101, 102, 103, 201, & 202) of Irish language study.

- **IRSH 345L - Literature in the Irish Lang**

Credits: 3. Offered intermittently. This course acknowledges Irish as the oldest documented vernacular in Europe and its literature as a voice that is over 1500 years old. Examines the literary response of Gaelic Ireland to invasion, conquest, and colonization as articulated by its literature. **Course Attributes:** Literary & Artistic Stds Crse

- **IRSH 360 - Irish/N Irish Literature**

Credits: 3. Offered intermittently. Examines (in English) selection of fiction, poetry, drama, film, and music from the Irish and/or Northern Irish literary traditions. Students will seek to understand how artists respond to the burdens of history, identity, and political conflict, and how they articulate the possibilities afforded by Ireland's changing position in the world.

- **IRSH 380 - Topics in Irish Studies**

Credits: 3. Offered intermittently. A rotating variety of special topics in Irish Studies, including Irish and Irish-American cinema, major Irish/N. Irish authors, Irish cultural studies, and transatlantic and comparative studies.

- **IRSH 391 - Special topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics;

- **IRSH 492 - Independent Study**

Credits: 1 TO 3. (R-9) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics;

English - Literature

- **LIT 110L - Intro to Lit**

Credits: 3. Offered every term. Study of how readers make meaning of texts and how texts

influence readers. Emphasis on interpreting literary texts: close reading, critical analysis and effective writing. **Course Attributes:** English Course Literary & Artistic Stds Crse Writing Course-Approved American and European Writing Course-Intermediate

- **LIT 120L - Poetry**

Credits: 3. Offered every term. An introduction to the techniques of reading and writing about poetry with emphasis on the lyric and other shorter forms. **Course Attributes:** English Course Literary & Artistic Stds Crse Writing Course-Approved American and European Writing Course-Intermediate

- **LIT 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **LIT 201 - Intro to Literary Studies**

Credits: 3. Offered every term. Introduction to the field of literary studies, to the conventions of literary analysis, and to the literature option for English majors. Reading, writing, and research skills will be stressed, along with interpretative approaches to major genres within the field.

- **LIT 202 - The Environmental Imagination**

Credits: 3. Course is designed to introduce students to the many discourses of nature. In this course we will approach "natural history" as a complex literary genre grounded in personal experience of the "more-than-human" world (in David Abram's now ubiquitous phrase). While the study of natural history writing has historically focused on authors like Gilbert White, Henry David Thoreau, John Muir, and John Burroughs (as prominent practitioners of the personal narrative essay that explores the natural world), a more thorough understanding of the genre requires consideration of the role race, class, and gender play in shaping discourses of nature. Further, consideration of non-Anglo-American traditions (including, for example, a range of Native American and Asian "literary" practices) expands our understanding of those traditions as it allows us to see the Anglo-American tradition in useful perspective.

- **LIT 210L - American Lit I**

Credits: 3. Offered every term. Representative texts from the pre-colonial period through the Civil War. **Course Attributes:** English Course Literary & Artistic Stds Crse Writing Course-Lower-Division Writing Course-Approved Writing Course-Intermediate

- **LIT 211L - American Lit II**

Credits: 3. Offered every term. Representative texts from the Civil War to the present. **Course Attributes:** English Course Literary & Artistic Stds Crse Writing Course-Lower-Division Writing Course-Approved Writing Course-Intermediate

- **LIT 220L - Brit Lit: Med to Renaissance**

Credits: 3. Offered every term. Representative texts from the Anglo-Saxon period through the Renaissance. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Approved Writing Course-Intermediate

- **LIT 221L - Brit Lit: Enlightenment to Rom**

Credits: 3. Offered every term. Representative texts from the seventeenth through the eighteenth century. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Approved Writing Course-Intermediate

- **LIT 222L - Brit Lit: Victorian to Contemp**

Credits: 3. Offered every term. Representative texts from the early nineteenth century to the present. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Approved American and European Writing Course-Intermediate

- **LIT 270L - Film & Lit**

Credits: 3. (R-6) Offered intermittently. Studies of the relationship between film and literature. Topics vary. **Course Attributes:** English Course Literary & Artistic Stds Crse

- **LIT 280L - Ecology of Literature**

Credits: 3. Literary study of nature writing and other genres introducing an ecocritical perspective, with revolving Anglophone texts.

- **LIT 291 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **LIT 300 - Literary Criticism**

Credits: 3. Offered every term. Prereq. or coreq., 12 credits of lower-division English courses. Study of various literary theories and their application to literary texts. **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced

- **LIT 301 - Studies in Literary Forms**

Credits: 3. (R-9) Offered intermittently. Prereq., LIT 300 or consent of instr. Reading of various authors from different literary periods and cultures working in the same mode of composition (courses offered under this rubric may include Literature of Place, Modern Drama, 19th Century Fiction, 20th Century Fiction, Lyric Poetry, Science Fiction, Autobiography; less frequently, Travel Literature, Popular Fiction, Epic, Tragedy, Satire, Romance, Comedy). **Course Attributes:** English Course Writing Course-Upper-Division

- **LIT 304 - U.S. Writers of Color**

Credits: 3. Offered intermittently. Prereq., LIT 300 or consent of instr. Selected readings from African American, Asian American, Chicano/a, Latino/a, and Native American literatures. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **LIT 305 - Lit by & About Native Amer**

Credits: 3. Offered autumn. Prereq., three credits of lower-division LIT courses and NASX 105H or 235X. Same as NASX 340. Selected readings from Native American literature with special emphasis on the literature of writers from the Rocky Mountain west. **Course Attributes:** English Course Writing Course-Upper-Division

- **LIT 314 - The American Novel**

Credits: 3. Offered intermittently. Prereq., LIT 210L or 211L and prereq. or co-req., LIT 300. Examination of a selection of American novels in their historical, cultural, and literary contexts. Exploration of literary movements such as realism, naturalism, modernism, and postmodernism. Discussion of critical theories and application to the texts. **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced

- **LIT 315 - Voices of the Am Renaissance**

Credits: 3. Offered intermittently. Prereq., LIT 210L or 211L and LIT 300 or consent of instr. Perspectives on antebellum Native American, African American, and gender issues. Study of the poetry of Walt Whitman and Emily Dickinson in light of these three perspectives. **Course Attributes:** English Course Writing Course-Upper-Division

- **LIT 316 - Topics in Postcolonial Lit**

Credits: 3. Offered intermittently. Prereq., LIT 210L or 211L and LIT 300. **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced

- **LIT 327 - Shakespeare**

Credits: 3. Offered autumn and spring. Prereq., LIT 300 or consent of instr. A survey of selected Shakespeare plays emphasizing close reading of the texts and consideration of their dramatic possibilities. **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced

- **LIT 331 - Major Author/s**
 Credits: 3. (R-9) Offered intermittently. Prereq., LIT 300 or consent of instr. Intensive study of the life and works of one author writing in English (courses offered under this rubric have included Chaucer, Milton, Faulkner, Joyce, Twain; less frequently, Conrad, Hemingway, Blake, Woolf, D.H. Lawrence, Welty). **Course Attributes:** English Course Writing Course-Upper-Division
- **LIT 332 - Topics in Modernism**
 Credits: 3. Offered intermittently. Prereq., LIT 300 or consent of instr. An introductory study of European and American modernism. Detailed exploration of major modernist novels and/or poems in relation to broader cultural and social contexts. **Course Attributes:** English Course
- **LIT 335 - Women & Lit**
 Credits: 3. Offered intermittently. Prereq., LIT 300 or consent of instr. Same as WGS 336. Study of the work of women writers through a progression of 19th century literary forms: the cautionary seduction novel, the sentimental and domestic novel, realism, naturalism, and utopianism. **Course Attributes:** English Course Writing Course-Upper-Division
- **LIT 342 - Montana Writers**
 Credits: 3. Offered intermittently. Prereq., LIT 210L or 211L. Examination of poems, stories, and novels by or about Montanans and the treatment and representation of race, place, class, gender, sexuality, and identity in Montana. Exploration of the myths and realities of Montana and the American West. **Course Attributes:** Writing Course-Advanced
- **LIT 343 - African American Lit**
 Credits: 3. Offered intermittently. Prereq., LIT 300 or consent of instr. Selected works by African-American authors. Course may define a narrowed focus such as poetry, women writers, etc. **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced
- **LIT 349L - Medieval Lit**
 Credits: 3. Offered alternate years. Prereq., LIT 300 or consent of instr. Exploration of literature from the medieval period, focusing on the major cultural and intellectual influences on the emergence of vernacular writing. Topics will vary, but will regularly include Anglo-Saxon literature and Middle English literature (excluding Chaucer). **Course Attributes:** English Course Literary & Artistic Stds Crse
- **LIT 350L - Chaucer**
 Credits: 3. Offered alternate years. Critical reading of Chaucer's masterpiece, the Canterbury Tales, with attention to Chaucerian irony, the author's place in literary history, and issues in Chaucer studies. **Course Attributes:** English Course Literary & Artistic Stds Crse
- **LIT 351 - Donne & His Followers**
 Credits: 3. Offered alternate years. Prereq., LIT 300 or consent of instr. Close study of John Donne and other early 17th century religious poets within the context of Renaissance intellectual history. **Course Attributes:** English Course
- **LIT 353L - Milton**
 Credits: 3. Offered alternate years. Prereq., LIT 300 or consent of instr. Selected study of poetry and prose of Milton. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Advanced
- **LIT 355 - British Romanticism**
 Credits: 3. Offered alternate years. Prereq. or co-req., LIT 300. Introduction to the major texts, themes, and authors of British literature from 1790-1815, focusing on poets such as Blake, Barbauld, Wordsworth, Coleridge, and P.B. Shelley but attending also to prose writers from Austen to Mary Shelley. **Course Attributes:** English Course Writing Course-Upper-Division
- **LIT 363 - Modern Poetry**

Credits: 3. Offered alternate years. Prereq., LIT 300 or consent of instr. Survey of modern poetry in English beginning with Emily Dickinson and Walt Whitman and moving toward the present, centering on modernist poets. **Course Attributes:** English Course

- **LIT 369 - Short Fiction**

Credits: 3. Offered intermittently. Prereq., LIT 300 or consent of instructor. Study of selected short stories and novellas from mid-19th century to the present.

- **LIT 370 - Science Fiction**

Credits: 3. Offered intermittently. Prereq., LIT 300 or consent of instr. Study of the science fiction genre from its pulp magazine beginnings in the 1920s to the present. **Course Attributes:** English Course

- **LIT 373 - Lit & Environment**

Credits: 3. Offered autumn. Prereq., LIT 210L or 211L (ENLT 224L or 225L) and LIT 300 (ENLT 301) or consent of instr. Study of major texts and issues in American nature writing. **Course Attributes:** English Course Writing Course-Upper-Division

- **LIT 375 - Literary History**

Credits: 3. (R-9) Offered intermittently. Prereq., LIT 300 or consent of instr. Study of influences on and innovations in the works of various authors within a particular literary historical period in England or America (e.g. British Renaissance, 18th century, Victorian, British Modern, American Puritanism, American Realism and Naturalism; 17th century). **Course Attributes:** English Course Writing Course-Upper-Division

- **LIT 376 - Lit & Oth Disciplines**

Credits: 3. (R-9) Offered intermittently. Prereq., nine credits in LIT or LSH or consent of instr. Selected works of literature studied in conjunction with works of art, music, religion, philosophy, or another discipline (e.g. Film and Literature, Modernism, Literature and Science, Bible as Literature, Song). **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced

- **LIT 378L - Gay and Lesbian Studies**

Credits: 3. Offered alternate years. Prereq., LIT 300 or consent of instr. Review of the history of the gay and lesbian movement in the twentieth century as a basis for understanding the political, social, and sexual issues that influenced homoerotic cultural representation in plays, films, and novels. **Course Attributes:** English Course Writing Course-Upper-Division

- **LIT 379L - Gender & Sexuality in Eng. Fic**

Credits: 3. Offered alternate years. Same as LSH 327L. Major 20th century novels and short stories written in English in different parts of the world and how these texts explore changing concepts of gender and sexuality. **Course Attributes:** English Course Literary & Artistic Stds Crse

- **LIT 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **LIT 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums English Course Internship graduation limit 6

- **LIT 402 - Literature in Place**

Credits: 3. This course gives students a set of advanced learning opportunities to engage with Anglophone texts on the general theme of nature and culture, applying an ecocritical lens to

extended literary analysis. Drawing from various periods and from various trans-Atlantic national literatures, the course is designed to focus on the emerging critique of nature and culture that questions foundational structures of epistemology and economy, animate and inanimate, civilization and wilderness.

- **LIT 420 - Critical Theory**

Credits: 3. (R-9) Offered autumn or spring. Prereq., LIT 300 and six credits in literature courses numbered 300 or higher or consent of instr. Study and application of one or more theoretical approaches to interpreting texts (e.g., aesthetic post-structural, new historicist, classical, Renaissance, Romantic, narrative, psychoanalytic, formalist, neo-Marxist, feminist, gender, cultural studies and reader-response theory). **Course Attributes:** English Course

- **LIT 421 - History of Criticism & Theory**

Credits: 3. Offered autumn or spring. Prereq., LIT 300 and six credits in literature courses numbered 300 or higher or consent of instr. Survey of the historical development of critical theories which shaped ways of reading and writing from Plato and Aristotle to the present. **Course Attributes:** English Course

- **LIT 422 - Ecocritical Theory & Practice**

Credits: 3. Prereq., or coreq., LIT 300. This course surveys the developing field of ecocriticism, introducing students to the major issues and methodologies entailed in the study of literature and the environment.

- **LIT 429 - Studies in Native Am Autobio**

Credits: 3. Offered intermittently. Same as NAS 410. Prereq., LIT 300 or LIT 305/NASX 340, or consent of instr. Study of texts that present a first-person story of an American Indian individual's life within historical and cultural contexts, with discussion of theories of autobiography. **Course Attributes:** English Course Literary & Artistic Stds Crse

- **LIT 430 - Studies in Comparative Lit**

Credits: 3. (R-9) Offered intermittently. Prereq., consent of instr. Same as LSH 342. The study of important literary ideas, genres, trends and movements. Credit not allowed for the same topic in more than one course numbered 430, LSH 342. **Course Attributes:** English Course

- **LIT 491 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **LIT 492 - Independent Study**

Credits: 1 TO 3. (R-9) Offered every term. Prereq., consent of instr. and department chair, and junior or senior standing. Special projects in literature. Only one independent study may be taken per semester. Consent must be obtained prior to enrollment. **Course Attributes:** English Course

- **LIT 494 - Seminar: Lit Capstone**

Credits: 3. (R 9) Offered autumn and spring. Prereq., LIT 300 and nine credits in literature courses numbered higher than 300. Required for completing the English literature option, this seminar will allow students to conduct advanced studies in literary figures and topics chosen by faculty to engage a broad range of interests. A long research paper is required. **Course Attributes:** English Course Writing Course-Upper-Division Writing Course-Advanced

- **LIT 499 - Thesis/capstone: Honors**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of chair. Preparation of a thesis or manuscript based on research for presentation and/or publication. **Course Attributes:** English Course

- **LIT 500 - Intro to Graduate Studies**

Credits: 3. Offered autumn. Instruction in advanced literary and cultural theory, library and research skills, and academic genres. Level: Graduate **Course Attributes:** English Course

- **LIT 502 - Topics in Ecocriticism**

Credits: 3. This course is a central requirement for the English Department's graduate option in Ecocriticism. The course will vary by topic, but will link introductions to ecocritical theory with practice as it models how to apply ecocritical theory to the study of literature. Each offering will explore the interconnections between nature and culture, through the cultural artifacts language and literature. Although changing with the topic, in most cases the course considers the role race, class, and gender play in shaping discourses of nature. Further, consideration of non-Anglo-American traditions will be featured for many offerings. Level: Graduate

- **LIT 520 - Sem in British Lit**

Credits: 3. (R-9) Offered every autumn and spring. Prereq., graduate status or consent of instructor. Topics will vary. Level: Graduate **Course Attributes:** English Course

- **LIT 521 - Sem American Lit**

Credits: 3. (R-9) Offered autumn and spring. Prereq., graduate status or consent of instr. Topics will vary. Level: Graduate **Course Attributes:** English Course

- **LIT 522 - Sem Comparative Lit**

Credits: 3. (R-9) Offered intermittently. Same as MCLG 522. Prereq., graduate status or consent of instructor. Topics will vary. Level: Graduate **Course Attributes:** English Course

- **LIT 524 - Nature, Language and Politics**

Credits: 3. Offered intermittently. Investigation of environmental, social and political thought from the perspective of contemporary language theory. Level: Graduate **Course Attributes:** English Course

- **LIT 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums English Course

- **LIT 596 - Graduate Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of instr. and chair. Special projects in literature. Only one 596 permitted per semester. Consent must be obtained prior to enrollment. Level: Graduate **Course Attributes:** Service Learning/Volunteer English Course

- **LIT 598 - Internship**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate **Course Attributes:** Internships/Practicums English Course

- **LIT 599 - Thesis**

Credits: 1 TO 6. (R-6) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate **Course Attributes:** English Course

Writing

- **WRIT 101 - College Writing I**

Credits: 3. UM: Offered every term. Prereq., WRIT 095 or proof of passing score on writing diagnostic examination, referral by WRIT 095 instructor-SAT writing score at or above 440, MUSWA at or above 3.5, SAT/ACT essay score at or above 7, or ACT Combined English/Writing score at or above 18. Expository prose and research paper; emphasis on structure, argument, development of ideas, clarity, style, and diction. Students expected to write without major faults in grammar or

usage. Credit not allowed for both WRIT 101 and COM 101. Grading A-F, or NC (no credit). MC: Offered every term. Prereq., WRIT 095 or proof of appropriate SAT/ACT essay, English/Writing, writing section scores, appropriate MUSWA scores, or proof of passing scores on Writing Placement Exam). Expository prose and research paper; emphasis on structure, argument, development of ideas, clarity, style, and diction. Students expected to write without major faults in grammar or usage. Grading A-F, or NC (no credit). **Course Attributes:** English Course
Writing Course-Introductory

- **WRIT 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **WRIT 198 - Coop Education Experience**

Credits: 1 TO 12. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums English Course

- **WRIT 201 - College Writing II**

Credits: 3. Offered autumn and spring. Prereq., placement or C or better in WRIT 101. MUSWA at or above 5.5, SAT/ACT essay at or above 11, a SAT writing section score at or above 700 or a Combined English/Writing portion of the ACT at or above 32. Designed for first year students with advanced writing ability and students who seek a lower-division writing course. Offers instruction in rhetorical reading and writing, particularly the study and practice of written argumentation in different academic and civic contexts. **Course Attributes:** English Course
Writing Course-Approved Writing Course-Intermediate Writing Course-Introductory

- **WRIT 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **WRIT 398 - Coop Education Experience**

Credits: 1 TO 12. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums English Course

- **WRIT 491 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** English Course

- **WRIT 492 - Independent Study**

Credits: 1 TO 3. (R-9) Offered every term. Prereq., consent of instr. and chair, and junior or senior standing. Special projects in expository writing. Only one 496 may be taken per semester. **Course Attributes:** English Course

- **WRIT 540 - Tchg Coll Levl Composition**

Credits: 3. Offered autumn. Restricted to graduate students teaching expository writing at The University of Montana. Theory and pedagogy of teaching college composition are emphasized. Level: Graduate **Course Attributes:** English Course

- **WRIT 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors,

experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums English Course

- **WRIT 596 - Grad Independent Study**

Credits: 1 TO 3. (R-9) Offered every term. Prereq., consent of instr. and chair. Special projects in expository writing. Only one 596 may be taken per semester. Level: Graduate Course Attributes: Service Learning/Volunteer English Course

Creative Writing

The Creative Writing program is predicated on the model of the workshop, and focuses on three areas of study: poetry, fiction, and nonfiction. Undergraduates who select the creative writing option fulfill some of the same requirements as those in literature, while also participating in a series of small writing workshops, gaining the techniques needed to craft poetry and/or prose that work towards artistic excellence. Graduate students pursuing an M.F.A. degree complete a series of writing workshops and seminars designed to develop their creative work and expand their understanding of literary technique. The Creative Writing faculty is augmented each year by visiting Hugo and Kittredge fellows. The program sponsors the graduate literary magazine, *CutBank*, now in its fourth decade of publishing works of poetry, prose and art. Additionally, undergraduate students have the opportunity to contribute to and edit their own literary magazine, *The Oval*.

Bachelor of Arts - English; Creative Writing Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: Upon successful completion of the Pre-English requirements, students must declare the English major and choose a degree option. English majors with the option in Creative Writing must earn 42-60 of their total credits in Department of English courses.

Pre-English Core Courses

Rule: Complete six courses (18 credits) including an introductory Literature course, an introductory Creative Writing course, and British and American Literature surveys.

Note: Recommended English elective: another 200-level CRWR course, CRWR 115, 295, 320, or 491.

Minimum Required Grade: C

18 Total Credits Required

Introductory Literature course

Rule: Complete one course (3 credits).

	Course	Credits
—		

	LIT 110L - Intro to Lit	3 Credits
	LIT 120L - Poetry	3 Credits
	LIT 201 - Intro to Literary Studies	3 Credits
Minimum Required Grade: C		3 Total Credits Required

British and American Literature surveys

Rule: Complete three courses (9 credits).

	Course	Credits
	LIT 210L - American Lit I	3 Credits
	LIT 211L - American Lit II	3 Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Introductory Creative Writing course

Rule: Complete one course (3 credits).

Note: Students must earn a grade of "B" or higher in CRWR 210, 211, or 212 in order to progress to the corresponding upper-division CRWR workshop (CRWR 310, 311, and 312).

	Course	Credits
	CRWR 210A - Intro Fiction Workshop	3 Credits
	CRWR 211A - Intro Poetry Workshop	3 Credits
	CRWR 212A - Intro Nonfiction Workshop	3 Credits
Minimum Required Grade: C		3 Total Credits Required

English elective course

Rule: Complete one course (3 credits).

Note: Select any course (3 credits) from the course prefixes CRWR, ENIR (aside from 101-202), ENLI, FILM, LING, or LIT.

Upper Division Requirements

Rule: Complete three courses (9 credits).

Note: Please be aware of 300- and 400-level workshop pre-requisites: CRWR 310 - grade of "B" or higher in CRWR 210; CRWR 311 - grade of "B" or higher in CRWR 211; CRWR 312 - grade of "B" or higher in CRWR 210 or 212; CRWR 410, 411, and 412 - completion of 300-level workshop in the same genre and writing submission/consent of instructor. CRWR 310, 311, 312, 410, 411, and 412 each carry a repeatability of 6 credits.

Course	Credits
CRWR 310 - Intermediate Fiction Workshop	3 Credits
CRWR 311 - Intermediate Poetry Workshop	3 Credits
CRWR 312A - Interm Nonfiction Workshop	3 Credits
CRWR 410 - Advanced Fiction Workshop	2 To 3 Credits
CRWR 411 - Advanced Poetry Workshop	2 To 3 Credits
CRWR 412 - Advanced Nonfiction Workshop	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Upper Division English Electives

Rule: Complete three courses (9 credits) of 300- or 400-level English electives.

Note: Please note that most of these courses carry pre-requisites.

Note: Select any three courses (9 credits) from the course prefixes FILM or LIT. All courses must be 300- or 400-level.

Minimum Required Grade: C-

9 Total Credits Required

Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including LIT 327. FILM 320 Shakespeare and Film substitutes for LIT 327 Shakespeare.

Course	Credits
LIT 300 - Literary Criticism	3 Credits
LIT 327 - Shakespeare	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: Pass

4-18 Total Credits Required

Teaching English

The English Teaching program provides content knowledge, pedagogy, and professional experiences required for teaching literacy in a democratic society. Based on current research and best practices, the English Teaching program integrates the study of language, literature, and media, creating learning communities and supporting teachers as critical thinkers, creative problem solvers, and reflective practitioners. Students who successfully complete this option and the requirements from the College of Education receive both a B.A. in English teaching and a secondary teaching license (grades 5-12) in English. At the graduate level, the English Teaching program offers advanced theory and pedagogy courses, culminating in an M.A. in teaching. The English Teaching Program is also the home of the Montana Writing Project, which is dedicated to improving the teaching and learning of writing at all grade levels and offers a special focus on meeting the state-mandated Indian Education for All.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - English; English Teaching Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Note: Upon successful completion of the Pre-English requirements, students must declare the English major and choose a degree option. English majors with the option in English Teaching must earn 45 of their total credits in Department of English courses and 128 credits overall. English Teaching students must also complete Secondary Licensure Requirements. Please refer to the Teaching Licensure Degree Level for requirements. A major GPA of 2.75 is required to be eligible for student teaching.

Pre-English Core Courses

Rule: Complete four courses (12 credits) including a poetry emphasis and British and American Literature surveys.

Minimum Required Grade: C

12 Total Credits Required

Poetry emphasis

Rule: Complete one course (3 credits).

—	Course	Credits
	CRWR 211A - Intro Poetry Workshop	3 Credits
	LIT 120L - Poetry	3 Credits
	LIT 201 - Intro to Literary Studies	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Early British Literature survey

Rule: Complete one course (3 credits).

—	Course	Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Late British Literature and American Literature survey

Rule: Complete two courses (6 credits).

—	Course	Credits
	LIT 210L - American Lit I	3 Credits
	LIT 211L - American Lit II	3 Credits
	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
	Minimum Required Grade: C	6 Total Credits Required

Upper Division Requirements

Rule: Complete two courses (6 credits).

Note: ENLI/LING 465 and ENT 439 do not carry pre-requisites.

Course	Credits
ENLI 465 - Structure of Eng for Tchrs	3 Credits
ENT 439 - Studies in Young Adult Lit	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

English Teaching methods courses

Rule: Complete three courses (9 credits).

Note: Students must be admitted to the Teacher Education program prior to enrolling in ENT 440, 441, and 442. Other EDU pre-/co-requisites also apply to ENT 440, 441, and 442.

Course	Credits
ENT 440 - Teaching Writing	3 Credits
ENT 441 - Tchg Rdng & Literature	3 Credits
ENT 442 - Tchg Oral Lang & Media Lit	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

English electives

Rule: Complete two additional English courses

Note: Students may choose electives from ENIR (200-level or above), WRIT (above 101-level), LING (100-level or above), LIT (100-level or above), CRWR (100-level or above), or FILM (100-level or above).

Minimum Required Grade: C-

6 Total Credits Required

Upper Division Literature Electives

Rule: Complete two courses (6 credits)

Note: Please note that most of these courses carry pre-requisites.

Minimum Required Grade: C-

6 Total Credits Required

D Designation: Diversity

Rule: Complete one course (3 credits)

Course	Credits
LIT 304 - U.S. Writers of Color	3 Credits
LIT 305 - Lit by & About Native Amer	3 Credits

LIT 335 - Women & Lit	3 Credits
LIT 343 - African American Lit	3 Credits
LIT 378L - Gay and Lesbian Studies	3 Credits
LIT 379L - Gender & Sexuality in Eng. Fic	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

American literature focus

Rule: Complete one course (3 credits)

—	Course	Credits
	LIT 304 - U.S. Writers of Color	3 Credits
	LIT 305 - Lit by & About Native Amer	3 Credits
	LIT 314 - The American Novel	3 Credits
	LIT 315 - Voices of the Am Renaissance	3 Credits
	LIT 342L - Montana Writers	3 Credits
	LIT 343 - African American Lit	3 Credits
	LIT 363 - Modern Poetry	3 Credits
	LIT 373L - Lit & Environment	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including LIT 327. FILM 320 Shakespeare and Film substitutes for LIT 327 Shakespeare.

—	Course	Credits
	LIT 300 - Literary Criticism	3 Credits
	LIT 327 - Shakespeare	3 Credits

Minimum Required Grade: C-

6 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information.

Film Studies

In Film Studies, students receive a thorough introduction to the many facets of moving image culture, including a background in film history, theory, and aesthetics. In this interdisciplinary program, students are exposed to a broad array of national and international films, as well as filmic translations of well-known works of literature. Students analyze film from a variety of theoretical perspectives and become critical viewers of what is now one of the most predominant forms of cultural representation. Film Studies currently offers a minor for those students who wish to learn more in this discipline without committing fully to the degree program.

Bachelor of Arts - English; Film Studies Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Note: Upon successful completion of the Pre-English requirements, students must declare the English major and choose a degree option. English majors with the option in Film Studies must earn 45-60 of their total credits in Department of English courses.

Foundational courses

Rule: Complete two courses (6 credits).

Course	Credits
FILM 103L - Introduction to Film	3 Credits
LIT 270L - Film & Lit	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Focus courses

Rule: Complete two courses (6 credits).

—	Course	Credits
	FILM 300 - History of Film	3 Credits
	FILM 447 - Film Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Film electives

Rule: Complete 9 courses (27 credits) from the following list.

Note: Special topics courses (FILM 191, 291, 391, 491) have a repeatability of 6 credits for each level; e.g. although the course prefix and number may be the same, different course titles will count toward major requirements and graduation requirements for up to six credits at each course number level (6 credits of FILM 191, 6 credits of FILM 291, etc.).

Film Genres (FILM 327), Studies in Film (FILM 381), Advanced Studies in Film (FILM 481), Film Directors (FILM 484), and Independent Study (FILM 492) have a repeatability of 9 credits.

PHL 427 Topics in Philosophy of Art can count toward the Film Studies major when the topic specifically includes film.

—	Course	Credits
	ENT 442 - Tchg Oral Lang & Media Lit	3 Credits
	FILM 191 - Special Topics	1 To 6 Credits
	FILM 262L - German Cinema	3 Credits
	FILM 291 - Special Topics	1 To 6 Credits
	FILM 308 - Russian Cinema and Culture	3 Credits
	FILM 327 - Film Genres	3 Credits
	FILM 363 - The French Cinema	3 Credits
	FILM 365 - Latin Amer Civ Thru Lit & Film	3 Credits
	FILM 381 - Studies in the Film	3 Credits
	FILM 391 - Special Topics	1 To 9 Credits
	FILM 448 - Documentary: Thry and Practice	3 Credits
	FILM 481 - Advanced Studies in Film	3 Credits

	FILM 484 - Film Directors	3 Credits
	FILM 491 - Special Topics	1 To 9 Credits
	FILM 492 - Independent Study	1 To 9 Credits
	FILM 495 - Practicum	1 To 6 Credits
	MAR 101L - Intro to Media Arts	3 Credits
	MCLG 339 - Surv African Cinema	3 Credits
	NASX 360 - Native Amer and Cinema	3 Credits
	PHL 102 - Topical Intro to Philosophy	1 To 4 Credits
	PHL 427 - Topics in Philosophy of Art	1 To 4 Credits
	SPNS 359 - Span Amer Civ Lit & Film	3 Credits
Minimum Required Grade: C-		27 Total Credits Required

Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including FILM 320.

—	Course	Credits
	FILM 320 - Shakespeare and Film	3 Credits
	LIT 300 - Literary Criticism	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: Pass

4-18 Total Credits Required

General Linguistics

In conjunction with the Linguistics Program, English also offers an option in English Linguistics which provides a background in both literature. Students interested in Teaching English as a Second Language, which prepares students for the particular concerns of second-language acquisition and pedagogy, may pursue the Teaching English as a Second Language Certificate Program through the Anthropology Department. Please note that the Teaching English as a Second Language (ESL) Certificate Program is not a stand-alone route to licensure. For licensure requirements, refer to the College of Education section in this catalog.

Bachelor of Arts - English; Linguistics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Note: Upon successful completion of the Pre-English requirements, students must declare the English major and choose a degree option. English majors with the option in Linguistics must earn 45-60 of their total credits in Department of English courses.

Pre-English Core Courses

Rule: Complete three courses (9 credits).

Minimum Required Grade: C

9 Total Credits Required

Early British Literature survey

Rule: Complete one course (3 credits).

—	Course	Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
Minimum Required Grade: C		3 Total Credits Required

British Literature and American Literature surveys

Rule: Complete two courses (6 credits).

—	Course	Credits

LIT 210L - American Lit I	3 Credits
LIT 211L - American Lit II	3 Credits
LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Upper Division Requirements

Rule: Complete nine courses (27 credits).

Note: ENLI/LING 465 and LING 470 do not carry pre-requisites. LING 470 is a pre-requisite for all other LING courses above 470 (e.g. 471+).

Course	Credits
-	
ENLI 465 - Structure of Eng for Tchrs	3 Credits
LING 470 - Linguistic Analysis	3 Credits
LING 471 - Phonetics and Phonology	3 Credits
LING 472 - Generative Syntax	3 Credits
LING 474 - Historical Linguistics	3 Credits
LING 475 - Linguistic Field Methods	3 Credits
LING 477 - Bilingualism	3 Credits
LING 478 - Second Language Development	3 Credits
LING 489 - Morphology	3 Credits
Minimum Required Grade: C-	27 Total Credits Required

Upper Division English Electives

Rule: Complete one course

Note: Please note that these courses carry pre-requisites.

Course	Credits
LIT 349L - Medieval Lit	3 Credits
LIT 350L - Chaucer	3 Credits

Minimum Required Grade: C-	
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Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including LIT 327. FILM 320 Shakespeare and Film substitutes for LIT 327 Shakespeare.

Course	Credits
LING 473 - Language and Culture	3 Credits
LIT 327 - Shakespeare	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: Pass

4-18 Total Credits Required

Literature

Under the Literature option, students ground their study in the reading and examination of works through a series of historically based surveys as well as other core courses, covering the techniques of literary analysis, the application of literary theory, and finally the development of a research project in a senior capstone. Students complement these core courses with a selection of electives that engage specific genres, authors, and periods, as well as different disciplines (e.g. Literature and the Environment) and literatures of diversity (e.g. Native American Literature). M.A. students select graduate seminars in American, British, and comparative literatures as well as other disciplines, their course work culminating in a research thesis or a portfolio of seminar papers revised in collaboration with a committee. The literature emphasis imparts an understanding of not only the aesthetic richness of canonical and emerging literatures but also the historical and cultural forces that have contributed to their making. The classes are of a size that makes discussion very much a part of a student's experience.

Bachelor of Arts - English; Literature Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: Upon successful completion of the Pre-English requirements, students must declare the English major and choose a degree option. English majors with the option in Literature must earn 42-60 of their total credits in Department of English courses.

Pre-English Core Courses

Rule: Complete four courses (12 credits) including LIT 201, British, and American Literature surveys.

Course	Credits
LIT 201 - Intro to Literary Studies	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Early British Literature survey

Rule: Complete one course (3 credits).

Note: LIT 220 satisfies the "A" designation. Students who elect to take LIT 220 need not take another "A" designated-course at the 300-level (see Upper Division Core requirements). LIT 221 satisfies the "B" designation. Students who elect to take LIT 221 need not take another "B" designated-course at the 300-level (see Upper Division Core requirements).

Course	Credits
LIT 220L - Brit Lit: Med to Renaissance	3 Credits
LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Late British Literature and American Literature survey

Rule: Complete two courses (6 credits).

Note: LIT 210 satisfies the "B" designation. Students who elect to take LIT 210 need not take another "B" designated-course at the 300-level (see Upper Division Core requirements).

Course	Credits
LIT 210L - American Lit I	3 Credits
LIT 211L - American Lit II	3 Credits
LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Upper Division Requirements

Rule: Complete four courses (12 credits).

Note: LIT 220 satisfies the "A" designation. Students who elect to take LIT 220 need not take another "A" designated-course at the 300-level, but must substitute another 300-level LIT elective.

LIT 221 and LIT 210 satisfy the "B" designation. Students who elect to take LIT 221 or 210 need not take another "B" designated-course at the 300-level, but must substitute another 300-level LIT elective.

Minimum Required Grade: C-

12 Total Credits Required

A Designation: Medieval through early modern British Literature

Rule: Complete one course (3 credits).

—	Course	Credits
	LIT 349L - Medieval Lit	3 Credits
	LIT 350L - Chaucer	3 Credits
	LIT 351 - Donne & His Followers	3 Credits
	LIT 353 - Milton	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

B Designation: Enlightenment through Romantic British Literature or pre-1865 American Literature

Rule: Complete one course (3 credits).

—	Course	Credits
	LIT 353 - Milton	3 Credits
	LIT 355 - British Romanticism	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

C Designation: 400-level theory

Rule: Complete one course (3 credits).

—	Course	Credits
	LIT 420 - Critical Theory	3 Credits

LIT 421 - History of Criticism & Theory	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

D Designation: Diversity

Rule: Complete one course (3 credits)

Course	Credits
LIT 304 - U.S. Writers of Color	3 Credits
LIT 305 - Lit by & About Native Amer	3 Credits
LIT 314 - The American Novel	3 Credits
LIT 315 - Voices of the Am Renaissance	3 Credits
LIT 335 - Women & Lit	3 Credits
LIT 343 - African American Lit	3 Credits
LIT 363 - Modern Poetry	3 Credits
LIT 378L - Gay and Lesbian Studies	3 Credits
LIT 379L - Gender & Sexuality in Eng. Fic	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper Division English Electives

Rule: Complete three courses (9 credits) of 300- or 400-level English electives.

Note: Please note that most of these courses carry pre-requisites.

Note: Select any three courses (9 credits) from the course prefixes CRWR, ENIR, ENLI, FILM, LING, or LIT. All courses must be 300- or 400-level.

Minimum Required Grade: C-

9 Total Credits Required

Literature Seminar Capstone

Rule: Complete one course (3 credits).

Note: Students must complete the capstone requirement at UM, ideally during their last two semesters of undergraduate study.

Course	Credits
LIT 494 - Seminar: Lit Capstone	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including LIT 327. FILM 320 Shakespeare and Film substitutes for LIT 327 Shakespeare.

Course	Credits
LIT 300 - Literary Criticism	3 Credits
LIT 327 - Shakespeare	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: Pass

4-18 Total Credits Required

English Minor

Minor - English (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Note: English minors must earn at least 27 credits within the English Department (excluding WRIT 101).

Foundational courses

Rule: Complete four courses (12 credits).

Note: English minors are expected to have completed 9 credits in lower-division English courses and earned a grade of C or better in those courses prior to enrolling in LIT 300-level courses.

—	Course	Credits
	LIT 110L - Intro to Lit	3 Credits
	LIT 120L - Poetry	3 Credits
	LIT 201 - Intro to Literary Studies	3 Credits
	LIT 210L - American Lit I	3 Credits
	LIT 211L - American Lit II	3 Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Foundational courses (upper-division)

Rule: Complete two courses (6 credits).

Note: English minors may substitute FILM 320 Shakespeare and Film for LIT 327.

—	Course	Credits
	LIT 300 - Literary Criticism	3 Credits
	LIT 327 - Shakespeare	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Focus courses

Rule: Complete three upper-division English elective courses (9 credits).

Note: Students must complete three upper-division English elective courses. Any 300+level courses with the prefixes LIT, ENIR, FILM, CRWR, and LING qualify. Most of these upper-division courses carry pre-requisites.

Students wishing to enroll in 300- or 400-level CRWR workshops (CRWR 310/311/312/410/411/412) must complete the 200-level CRWR pre-requisite. CRWR 410/411/412 also require a writing submission for consent of instructor.

Minimum Required Grade: C-

9 Total Credits Required

Teaching English Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The English Teaching program provides content knowledge, pedagogy, and professional experiences required for teaching literacy in a democratic society. Based on current research and best practices, the English Teaching program integrates the study of language, literature, and media, creating learning communities and supporting teachers as critical thinkers, creative problem solvers, and reflective practitioners. Students who successfully complete this option and the requirements from the College of Education receive both a B.A. in English teaching and a secondary teaching license (grades 5-12) in English. At the graduate level, the English Teaching program offers advanced theory and pedagogy courses, culminating in an M.A. in English (Teaching). The English Teaching Program is also the home of the Montana Writing Project, which is dedicated to improving the teaching and learning of writing at all grade levels and offers a special focus on meeting the state-mandated Indian Education for All.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major /teaching track within that degree program which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - English (Minor); Track: Teaching English

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: English Teaching minors must earn 36 credits within the English Department. Individuals completing a teaching minor must also complete a teaching major in another content area. A minor GPA of 2.75 is required to be eligible for student teaching.

Foundational courses

Rule: Complete three courses (9 credits).

Minimum Required Grade: C-

9 Total Credits Required

Early British Literature survey

Rule: Complete one course (3 credits).

Course	Credits
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	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Late British Literature and American Literature surveys

Rule: Complete two courses (6 credits).

—	Course	Credits
	LIT 210L - American Lit I	3 Credits
	LIT 211L - American Lit II	3 Credits
	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Requirements

Rule: Complete two courses (6 credits).

Note: ENLI/LING 465 and ENT 439 do not carry pre-requisites.

—	Course	Credits
	ENLI 465 - Structure of Eng for Tchrs	3 Credits
	ENT 439 - Studies in Young Adult Lit	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

English Teaching methods courses

Rule: Complete three courses (9 credits).

Note: Students must be admitted to the Teacher Education Program prior to enrolling in ENT 440, 441, and 442. Other EDU pre-/co-requisites also apply to ENT 440, 441, and 442.

—	Course	Credits
	ENT 440 - Teaching Writing	3 Credits
	ENT 441 - Tchg Rdng & Literature	3 Credits
	ENT 442 - Tchg Oral Lang & Media Lit	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Upper Division Literature Electives

Rule: Complete two courses (6 credits).

Note: Please note that most of these courses carry pre-requisites.

Minimum Required Grade: C-

6 Total Credits Required

D Designation: Diversity

Rule: Complete one course (3 credits).

Course	Credits
LIT 304 - U.S. Writers of Color	3 Credits
LIT 305 - Lit by & About Native Amer	3 Credits
LIT 335 - Women & Lit	3 Credits
LIT 343 - African American Lit	3 Credits
LIT 378L - Gay and Lesbian Studies	3 Credits
LIT 379L - Gender & Sexuality in Eng. Fic	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

American literature focus

Rule: Complete one course (3 credits).

Course	Credits
LIT 304 - U.S. Writers of Color	3 Credits
LIT 305 - Lit by & About Native Amer	3 Credits
LIT 314 - The American Novel	3 Credits
LIT 315 - Voices of the Am Renaissance	3 Credits
LIT 342L - Montana Writers	3 Credits
LIT 343 - African American Lit	3 Credits
LIT 373L - Lit & Environment	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Upper-division Writing Courses

Rule: Complete two courses (6 credits).

Note: English Teaching students may substitute FILM 320 Shakespeare and Film for LIT 327.

Course	Credits
LIT 300 - Literary Criticism	3 Credits
LIT 327 - Shakespeare	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Teaching licensure requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information.

Film Studies Minor

Minor - Film Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Note: Students minoring in Film Studies must earn 27 total credits.

Foundational courses

Rule: Complete two courses (6 credits).

Course	Credits
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	FILM 103L - Introduction to Film	3 Credits
	LIT 270L - Film & Lit	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Focus courses

Rule: Complete two courses (6 credits).

—	Course	Credits
	FILM 300 - History of Film	3 Credits
	FILM 447 - Film Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Film electives

Rule: Complete 5 courses (15 credits) from the following list.

Note: Special topics courses (FILM 191, 291, 391, 491) have a repeatability of 6 credits for each level; e.g. although the course prefix and number may be the same, different course titles will count toward major requirements and graduation requirements for up to six credits at each course number level (6 credits of FILM 191, 6 credits of FILM 291, etc.).

Film Genres (FILM 327), Studies in Film (FILM 381), Advanced Studies in Film (FILM 481), Film Directors (FILM 484), and Independent Study (FILM 492) have a repeatability of 9 credits.

PHL 427 Topics of Philosophy of Art can count toward the Film Studies minor when the topic specifically includes film.

—	Course	Credits
	ENT 442 - Tchg Oral Lang & Media Lit	3 Credits
	FILM 191 - Special Topics	1 To 6 Credits
	FILM 262L - German Cinema	3 Credits
	FILM 291 - Special Topics	1 To 6 Credits
	FILM 308 - Russian Cinema and Culture	3 Credits
	FILM 320 - Shakespeare and Film	3 Credits
	FILM 327 - Film Genres	3 Credits
	FILM 363 - The French Cinema	3 Credits
	FILM 365 - Latin Amer Civ Thru Lit & Film	3 Credits

FILM 381 - Studies in the Film	3 Credits
FILM 391 - Special Topics	1 To 9 Credits
FILM 448 - Documentary: Thry and Practice	3 Credits
FILM 481 - Advanced Studies in Film	3 Credits
FILM 484 - Film Directors	3 Credits
FILM 491 - Special Topics	1 To 9 Credits
FILM 492 - Independent Study	1 To 9 Credits
FILM 495 - Practicum	1 To 6 Credits
MAR 101L - Intro to Media Arts	3 Credits
MCLG 339 - Surv African Cinema	3 Credits
NASX 360 - Native Amer and Cinema	3 Credits
PHL 102 - Topical Intro to Philosophy	1 To 4 Credits
PHL 427 - Topics in Philosophy of Art	1 To 4 Credits
SPNS 359 - Span Amer Civ Lit & Film	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Students choosing the English/Film Studies option or pursuing the Film Studies minor will receive an excellent liberal arts education through the close examination of the many facets of moving image culture. We believe that a solid understanding of cinema entails a good grasp of history and the philosophical, psychological and political theory from which film theory draws. In this interdisciplinary program, students will also be exposed to a broad array of national and international films, as well as filmic translations of well-known works of literature. Students will analyze film from a variety of theoretical perspectives and become critical viewers of what is now one of the most predominant forms of cultural representation.

Irish Studies Minor

Minor - Irish Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Note: Irish Studies students must earn at least 18 credits. These credits will include both the required coursework and electives.

Foundational courses

Rule: Complete 3 courses (9 credits).

Note: ENIR 249 is offered intermittently. Students may substitute ENIR 345 or ENIR 360 for ENIR 249.

—	Course	Credits
	ENIR 101 - Elementary Irish I	3 Credits
	ENIR 102 - Elementary Irish II	3 Credits
	ENIR 249 - The Irish	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Irish Literature Course

Rule: Complete 1 course (3 credits) from the following options

Note: LIT 331 Major Authors can count for the Irish Studies minor when the course focuses on an Irish author (e.g. James Joyce).

—	Course	Credits
	ENIR 345 - Literature in the Irish Lang	3 Credits
	ENIR 360 - Irish/N Irish Literature	3 Credits
	ENIR 380 - Topics in Irish Studies	3 Credits
	ENIR 395 - Special Topics	1 To 6 Credits
	LIT 331 - Major Author/s	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Minor electives

Rule: Complete 2 courses (6 credits) from the following options.

Note: Irish Theater is offered intermittently through the School of Fine Arts as THTR 391.

Students who wish to continue with Irish language through the 202 level may do so, but only Irish language 103 and 201 can count for minor electives.

LIT 376 & LIT 391 may count toward the Irish Studies minor when the topics cover Irish themes, content, and literature.

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Course	Credits
DANC 160A - Dance Forms: Irish	2 Credits
ENIR 103 - Elementary Irish III	3 Credits
ENIR 201 - Intermediate Irish I	3 Credits
ENIR 380 - Topics in Irish Studies	3 Credits
ENIR 395 - Special Topics	1 To 6 Credits
ENIR 496 - Independent Study	1 To 3 Credits
LIT 376 - Lit & Oth Disciplines	3 Credits
LIT 391 - Special Topics	1 To 9 Credits
THTR 391 - Special Topics/Exprmtl Courses	1 To 9 Credits
Minimum Required Grade: C-	6 Total Credits Required

The Department of English offers an interdisciplinary minor in Irish Studies which provides students access to instruction in Irish language, history, literature, and culture. This academic and artistic approach to Irish culture involves an interdisciplinary and inter-collegiate collaboration that brings together leading scholars in the humanities and the creative arts.

Environmental Studies

Phil Condon, Director

The Environmental Studies Program (EVST) seeks to provide students with the literacy, skills and commitment needed to foster a healthy natural environment and to create a more sustainable, equitable, and peaceful world. To these ends, the EVST program educates and challenges students to become knowledgeable, motivated, and engaged in environmental affairs. Our students acquire the skills and awareness to promote positive social change and improve the environment and communities of Montana and the world, for current and future generations. Our program is organized upon the following principles:

- Environmental studies require an interdisciplinary approach that integrates the natural sciences, social sciences, and humanities.
- Creating solutions to environmental problems requires enterprise and performance as well as reflection; therefore, an effective environmental education generates thinkers who can do as well as doers who can think.
- It is important to provide both classroom and experiential learning opportunities in the arts and responsibilities of democratic citizenship, including communication, collaboration, and committed civic participation.
- Students should be co-creators of their educational experience.

High School Preparation: Students in high school who are planning to major in environmental studies should take their school's college preparatory curriculum. Courses in biology, chemistry, math through pre-calculus, and writing are recommended.

Department Faculty

Professor

Len Broberg, Professor
Phil Condon, Professor/Director
Neva Hassanein, Professor
Vicki Watson, Professor

Associate Professor

Fletcher Brown, Associate Professor
Robin Saha, Associate Professor
Dan Spencer, Associate Professor

Assistant Professor

Rosalyn La Pier, Assistant Professor

Lecturer

Josh Slotnick, PEAS Farm Director, Lecturer

Emeritus

Tom Roy, Professor Emeritus

Course Descriptions

Environmental Sciences

- **ENSC 105N - Environmental Science**

Credits: 3. Offered autumn. Provides students with opportunities to use class knowledge to make a difference; helps students build all of the following: scientific literacy; skills in critical thinking, research and self-instruction; an understanding of the scientific basis of environmental issues, policies and laws; habits of sustainable living, scientifically-informed, active participation in social decisions, and service to their community and to the earth. **Course Attributes:**
Natural Science Course

- **ENSC 291 - Special Topics/Experimental Courses**

Credits: 1 TO 6. (R-6) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics.

- **ENSC 360 - Applied Ecology**

Credits: 3. Offered autumn. Prereq or coreq ENST 201. To succeed in this course, students also need college level courses in general biology, chemistry & statistics. Principles and concepts of ecology and how they can be applied to inform real life decisions about human interactions with the environment. Emphasizes the science of sustainability and the conservation of watersheds and biodiversity.

- **ENSC 391 - Special Topics/Experimental Courses**

Credits: 1 TO 9. (R 12) Offered intermittently. May be restricted to EVST majors. May require

consent of instructor. Experimental offerings of visiting professors, new courses, or one time offerings of current topics.

- **ENSC 398 - Cooperative Education/Intern**

Credits: 1 TO 6. Offered autumn and spring. Requires consent of instructor. Practical application of classroom learning through internship with governments, organizations or industry. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

- **ENSC 491 - Special Topics/Experimental Courses**

Credits: 1 TO 9. (R-9) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, new courses, or one time offerings of current topics.

- **ENSC 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Requires consent of instructor. Course material appropriate to the needs and objectives of the individual student.

- **ENSC 494 - Seminar/Workshop**

Credits: 1 TO 3. (R-6) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. A seminar on a current environmental topic.

- **ENSC 495 - Field Study**

Credits: 1 TO 10. Offered autumn. Prereq or coreq ENSC 360. Designing, executing, interpreting and documenting field studies. Project oriented.

- **ENSC 501 - Scientific Approaches to Environmental Problems**

Credits: 3. Offered autumn. Prereq., graduate standing in EVST or consent of instructor. The strength and limitations of the scientific approach to investigating and solving selected environmental problems with an emphasis on the natural sciences. Level: Graduate

- **ENSC 540 - Watershed Conservation**

Credits: 3. Offered autumn. Prereq., graduate standing or consent of instructor. Course assumes students have level of knowledge presented in a college level ecology course. Integrates watershed science, policy, planning, action and organizing. The science component explores watershed connections, evaluating change and assessing watershed condition. The policy component explains the scientific basis of national, state and local laws, programs and agencies that affect watersheds. The planning and action component discusses developing watershed conservation plans and selecting actions likely to address problems without creating other problems. The organizing component covers how to help watershed communities make choices, resolve conflicts, build commitment and find funding. Students work individually or in teams to assist Montana groups in developing watershed CPR plans, initiating monitoring projects, and/or conducting education projects. Level: Graduate

- **ENSC 550 - Pollution Ecology**

Credits: 3. Offered spring even-numbered years. Prereq., graduate standing or consent of instructor. Course assumes students have level of knowledge presented in a college level ecology course. Examines sources, fate, and effects of pollutants on organisms and ecosystems; methods of measuring and predicting pollutant fate and effects, assessing and reducing risks, estimating ecosystem assimilation capacity; setting standards and restoring ecosystems damaged by pollution. Briefly examines some relevant laws and policies at the federal, state and local level. Level: Graduate

- **ENSC 551 - Environmental Field Study**

Credits: 1 TO 3. (R-3) Offered intermittently. Prereq. or coreq., ENSC 540 or 550 or ENST 560 or consent of instructor. Same as BIOB 551. Designing, executing and interpreting environmental field studies. Oriented to studies of aquatic systems and watersheds. Students will assist with a class project and may also pursue their own projects. Projects focus on the Clark Fork, Bitterroot and Blackfoot River basins. Level: Graduate

- **ENSC 593 - Professional Paper**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
- **ENSC 594 - Graduate Seminar**
Credits: 1 TO 15. (R-15) Offered autumn and spring. Prereq., graduate standing. May be restricted to EVST majors. May require consent of instructor. In depth analysis of a current environmental topic. Different topics offered each semester. Level: Graduate
- **ENSC 595 - Special Topics**
Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., graduate standing. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, of new courses, or one-time offerings of current topics. Level: Graduate
- **ENSC 596 - Independent Study**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Work on selected problems by individual students under direct faculty supervision. Level: Graduate
- **ENSC 597 - Research**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Directed individual graduate research and study appropriate to background and objectives of the student. Level: Graduate
- **ENSC 598 - Internship**
Credits: 1 TO 8. (R-8) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Practical application of classroom learning during placements off campus. Level: Graduate
- **ENSC 599 - Thesis**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Environmental Studies

- **ENST 201 - Environmental Info Resources**
Credits: 3. Offered autumn and spring. Students learn how to find, evaluate and use existing information to increase understanding of environmental issues and resolve controversies. Students will research a subject using a variety of sources (refereed literature, government sources, internet sources, interviews); evaluate sources critically; write a literature review and give an oral presentation on their topic. Focus is on critical thinking and dealing with the information explosion. **Course Attributes:** Writing Course-Intermediate
- **ENST 225 - Community & Environment**
Credits: 3. Offered autumn. Same as SOCI 225. Exploration of the ways that communities address their environmental concerns. Introduction of relevant social science concepts.
- **ENST 230H - Nature and Society**
Credits: 3. UM campus course offered spring. Explores the relationship between ideas about nature and the development of political and social ideas, institutions, and practices, primarily in western (Euro-American) society. Complements ethics offerings in philosophy aimed at environmental studies majors. **Course Attributes:** Historical & Cultural Course
Writing Course-Approved
- **ENST 291 - Special Topics/Experimental Courses**

Credits: 1 TO 9. (R-9) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, of new courses, or one-time offerings of current topics.

- **ENST 294 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. A review and discussion of current research. Topics vary.

- **ENST 335L - The Environmental Vision**

Credits: 3. Offered autumn. Provides background, overview, interpretations, and understanding of key concepts, themes, approaches, and forms in American nature and environmental nonfiction as well as that literature's response to and influence on environmental events, figures, and movements. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Upper-Division Writing Course-Advanced

- **ENST 367 - Environmental Politics & Policies**

Credits: 3. Offered autumn. Foundation in public lands history, bedrock environmental laws, policy processes and institutions. Research and analysis of current environmental and natural resource policy issues. Focus is domestic illustrated by case studies. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **ENST 373A - Nature Works**

Credits: 3. Offered spring. Writing workshop for the creation, critique, and revision of essays about the environment to include natural history, personal narrative, science interpretation, advocacy/editorial, place-based essay, and others. Examination of concepts, forms, and approaches to writing about environmental concerns, awareness and sensitivity. Reading and responding to published work, primarily from the perspective of technique and approach. **Course Attributes:** Expressive Arts Course Writing Course-Upper-Division

- **ENST 382 - Environmental Law**

Credits: 3. Offered spring. Introduction to the history, law and theory of environmental regulation in the United States using public and private land regulation mechanisms as case studies. Basic principles of constitutional and administrative law relevant to environmental regulation, substantive public and private land use law and the history of environmental problems and their regulation. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **ENST 391 - Special Topics/Experimental Courses**

Credits: 1 TO 12. (R-12) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, of new courses, or one-time offerings of current topics.

- **ENST 395 - Field Studies: Env. Studies**

Credits: 2 TO 3. (R-12) Offered every term. Via extended backcountry travel, experiential examination of cultural history and public lands management, and how those affect ecosystem integrity. Investigation of personal roles in and relationships with human and ecological communities. Offered by the Wild Rockies Field Institute and Northwest Connections. **Course Attributes:** Internships/Practicums

- **ENST 396 - Supervised Internship (PEAS)**

Credits: 0 TO 10. (R-10) Offered Fall (2 cr.), Spring (2 cr.); Summer intensive, (6 cr.). Students learn small scale sustainable vegetable farming in a hands-on work environment at the PEAS farm (15 minute bike ride from campus). Lectures, readings and reflection inform the work. Summer students also visit local farms on once-a-week field trips. PEAS is repeatable, as the curriculum changes across the season, and students can attend any semester, though the 6 credit summer intensive course is the heart of the program. **Course Attributes:** Service Learning/Volunteer

- **ENST 398 - Cooperative Education/Intern**

Credits: 1 TO 6. Offered autumn and spring. Consent of instructor required. Practical application of

classroom learning through internship with governments, organizations or industry. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:**
Internships/Practicums

- **ENST 410 - TEK of Native Peoples**

Credits: 3. Offered intermittently. Examines traditional environmental knowledge (TEK) of Native peoples with a special focus on ancient peoples of the Northern Great Plains.

- **ENST 420 - US Environmental Movement**

Credits: 3. Offered Intermittently. Study of the environmental movement as a social movement. Examination of different approaches to environmental protection and restoration in view of the movement's historical roots and contemporary debates.

- **ENST 427 - Social Issues: The Mekong Delta**

Credits: 3. The course focuses on the history, culture, economy and environment of Vietnam, with particular emphasis on the Mekong Delta region. This is achieved through lectures from local professors at Can Tho University, active participation in field trips, the home stay, course readings, and synthesis through questions sets and discussions provided by University of Montana instructor. The goal of this half of the Vietnam study abroad program is to provide an understanding of the unique environments and the socio-economy of the Mekong Delta region to facilitate learning about the effects of climate change on these complex natural and anthropogenic systems. Co-convenes with ENST 514. **Course Attributes:** Co-Convened Course

- **ENST 430 - Culture & Agriculture**

Credits: 3. Offered spring, from start of semester to mid-April. Surveys treatment of farmers and farming in the humanities. Course covers specific agricultural crops and their effect on social and environmental history, artistic commentary on agricultural life and farmer philosophy. Themes range from agriculturally influenced historical events to Wendell Berry's poetry to Albert Borgmann's philosophy.

- **ENST 437 - Climate Change: Mekong Delta**

Credits: 3. This course focuses on the threats posed by climate change in Vietnam, with particular emphasis on the Mekong Delta region. This is achieved through lectures from Can Tho University professors, active participation in field trips, the homestay, course readings, and synthesis through questions sets and discussions provided by University of Montana instructor. The goal of this half of the Vietnam study abroad program is to provide an understanding of the potential impacts of climate change on the ecosystems and people of the Mekong Delta, and explore opportunities for people to adapt to and mitigate these impacts. Co-convenes with ENST 516. **Course Attributes:**
Co-Convened Course

- **ENST 472 - Gen Sci: Conservation Education**

Credits: 3. Offered autumn and spring. A study of the foundations of environmental science and conservation education with applications to community service and teaching.

- **ENST 476 - Environmental Citizenship**

Credits: 3. Offered spring. Prereq., open to juniors and seniors only or by consent of instructor. Same as CCS 476. Develops leadership and environmental citizenship skills, values and virtues through student-initiated projects informed by principles of organizing and sustainable behavior change theories of social marketing.

- **ENST 480 - Food, Agriculture, Environment**

Credits: 3. Offered spring. Exploration of the premise that agricultural sustainability requires practices, policies, and social arrangements that balance concerns of environmental soundness, economic viability, and social justice among all sectors of society.

- **ENST 487 - Globalization, Justice & Environment**

Credits: 3. Offered autumn. Study of current trends in economic globalization and its effects on efforts to work for social justice and environmental sustainability, particularly in the Global South.

Examination of different models and theories of globalization, analysis of ethical issues raised, and assessment of alternatives proposed. **Course Attributes:** Writing Course-Advanced

- **ENST 489S - Environmental Justice Issues & Solutions**

Credits: 3. Offered autumn. Examination of evidence, causes and consequences of social inequality in the distribution of environmental risks and in access to natural resources and environmental amenities. Community, government and industry responses and service approaches for addressing environmental inequities. **Course Attributes:** Social Sciences Course

- **ENST 491 - Special Topics/Experimental Courses**

Credits: 1 TO 12. (R-12) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, of new courses, or one-time offerings of current topics.

- **ENST 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Consent of instructor required. Course material appropriate to the needs and objectives of the individual student.

- **ENST 493 - Study Abroad: Environmental Justice Latin America**

Credits: 3. Offered summer. Two week travel seminar to one or more Latin American countries to examine Latin American perspectives on environmental justice and efforts toward sustainable development within the context of the global economy and U. S. foreign policy. Required one-credit seminar offered spring semester to provide background readings. **Course Attributes:** Faculty-Led Study Abroad

- **ENST 494 - Seminar/Workshop**

Credits: 1 TO 3. (R-6) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. A seminar on a current environmental topic.

- **ENST 499 - Senior Thesis/Capstone**

Credits: 3. Offered intermittently. Prereq., senior standing in EVST. For seniors who want to design and perform a significant capstone project involving research and/or service. Students have responsibility for designing their projects which are subject to faculty approval. A final report and public presentation are required. Honors credit available.

- **ENST 505 - Literature of Nature Writing**

Credits: 3. Offered spring. Prereq., graduate standing. Study of nature, environmental, and place-based writing, with emphasis on the American tradition and its relationship to twenty-first century environmental concerns, challenges, and opportunities, and to the current practice of nature and environmental writing. Level: Graduate

- **ENST 510 - Native American Environmental Issues**

Credits: 3. This graduate readings seminar provides an overview of environmental issues of Native American communities through the 19th to 21st centuries. Level: Graduate

- **ENST 513 - Natural Resource Conflict Resolution**

Credits: 3. Offered autumn. Same as NRSM 513 and LAW 613. Prereq., graduate standing. Examines the basic framework for preventing and resolving natural resource and environmental conflicts in America. Reviews the history of alternative approaches, emphasizes the theory and practice of collaboration, and considers future trends. This highly interactive course uses lectures, guest speakers, case studies, and simulations. Level: Graduate

- **ENST 514 - Social Issues: The Mekong Delta**

Credits: 3. This course focuses on the history, culture, economy and environment of Vietnam, with particular emphasis on the Mekong Delta region. This is achieved through lectures from local professors at Can Tho University, active participation in field trips, the home stay, course readings, independent graduate research, and synthesis through questions sets and discussions provided by University of Montana instructor. The goal of this half of the Vietnam study abroad program is to

provide an understanding of the unique environments and the socio-economy of the Mekong Delta region to facilitate learning about the effects of climate change on these complex natural and anthropogenic systems. Co-convenes with ENST 427. Level: Graduate **Course Attributes:**
Co-Convened Course

- **ENST 515 - Environmental Negotiation Mediation**

Credits: 3. Offered intermittently. Same as NRSM 515 and COMX 515. Prereq., graduate standing. This course prepares students to effectively engage in multiparty negotiation on natural resource and environmental issues. It is grounded in theory and provides an opportunity to develop practical skills in both negotiation and facilitation/mediation. Guest speakers, case studies, and simulations allow students to develop, test, and refine best practices. The course is fast-paced, highly interactive, and serves as the second of three required courses in the Natural Resources Conflict Resolution Program. Level: Graduate

- **ENST 516 - Climate Change: Mekong Delta**

Credits: 3. This course focuses on the threats posed by climate change in Vietnam, with particular emphasis on the Mekong Delta region. This is achieved through lectures from Can Tho University professors, active participation in field trips, field data collection, analysis and interpretation, the homestay, course readings, independent graduate research, and synthesis provided by University of Montana professors. The goal of this half of the Vietnam study abroad program is to provide an understanding of the potential impacts of climate change on the ecosystems and people of the Mekong Delta, and explore opportunities for people to adapt to and mitigate these impacts. Co-convenes with ENST 516. Level: Graduate **Course Attributes:** Co-Convened Course

- **ENST 520 - Environmental Organizing**

Credits: 3. Offered spring. Prereq., graduate standing. Developing understanding of and skills in community and environmental organizing. Emphasis on theory and practice of civic engagement and social change with a focus on developing and running campaigns and working in a group. Team projects. Level: Graduate

- **ENST 521 - Foundation in Environmental Education**

Credits: 3. Offered autumn. Prereq., graduate standing in environmental studies. Same as C&I 521. Problem-solving approaches to environmental education; problem identification, research and design and implementation of an educational approach to selected environmental issues. Level: Graduate

- **ENST 530 - The Greening of Religion**

Credits: 3. Offered yearly. A critical examination of different religious traditions' views on nature and society, and contemporary religious traditions' responses to environmental issues. Level: Graduate

- **ENST 535 - Local Climate Solutions**

Credits: 3. Offered intermittently. This course seeks to develop students' understanding and skills for participating in local solutions to climate change that can also support broader conservation, efficiency and sustainability efforts. This will be accomplished by engaging in planning and carrying out group projects that further advance existing climate change mitigation or adaptation efforts. Level: Graduate

- **ENST 537 - Building Effective Environment Organizations**

Credits: 3. Offered intermittently. Prereq., graduate standing. Focus on the tasks and skills necessary to building and managing effective environmental organizations, particularly non-profit. Budgeting, fund-raising, grant-writing, attracting and utilizing volunteers, working with the media. Strategic approaches and how they are shaped by issue, context, and structure. Level: Graduate

- **ENST 542 - Transboundary Environmental Issues**

Credits: 3. Offered intermittently in autumn. Prereq., graduate standing in environmental studies program. Review of the political systems and administrative systems of each country relevant to natural resource policy decision-making and ecological systems. Review pertinent literature, interact with stakeholders, and produce group reports. Level: Graduate

- **ENST 548 - Supervision and Teaching Environmental Education**
 Credits: 3. Offered intermittently. Prereq., ENST 521 or EDU 521. Design, selection and evaluation of materials for the teaching of environmental education. Level: Graduate
- **ENST 555 - Research Methods for Social Change**
 Credits: 3. Offered intermittently. Prereq., graduate standing. Introduction to qualitative methods of research design, data collection, and analysis. Emphasis on research that facilitates and documents social change processes. Hands-on research experience through fieldwork projects. Includes instruction on writing social science and on research ethics. Level: Graduate
- **ENST 560 - Environmental Impact Analysis**
 Credits: 3. Offered intermittently. Prereq., graduate standing or consent of instructor. Covers legal and scientific aspects of the Environmental Impact Analysis (EIA) including: What is required by international, national and state law and regulations? How does one organize an effective interdisciplinary team research effort and public participation program? What scientific tools are used in EIA? How could EIA process be improved? Level: Graduate
- **ENST 561 - Land Use Law**
 Credits: 3. Offered autumn. Same as GPHY 561 and LAW 687. Prereq., graduate standing. Basic overview of the law of land use planning including background in the traditional governmental regulatory, proprietary, and fiscal land use tools. Examination of modern techniques for land use planning; consideration of constitutional limits of authority of state and local governments. Focus on skills in interpreting, drafting and applying state legislation and local ordinances. Level: Graduate
- **ENST 563 - Introduction to Environmental Law**
 Credits: 3. Offered autumn. Prereq., graduate standing in EVST. Same as LAW 650. Philosophy and values underlying environmental regulation, basic introduction to administrative law, in-depth study of air and water pollution and the environmental policy acts. Level: Graduate
- **ENST 564 - Advanced Environmental Law**
 Credits: 3. Offered autumn. Prereq., graduate standing in EVST. Same as LAW 649. In-depth study of the laws addressing toxic substances and solid and hazardous waste, and the Endangered Species Act. Exploration of interaction between land use regulation and environmental law. Level: Graduate
- **ENST 565 - Public Land & Resources Law**
 Credits: 3. Offered spring. Prereq., graduate standing in EVST and consent of instr. Same as LAW 654. Historical development of United States public land law, state-federal relations, and the roles of Congress, the executive and the courts; the law applying to specific public land resources: water, minerals, timber, range, and preservation. Level: Graduate
- **ENST 567 - Water Law**
 Credits: 3. Offered spring. Same as LAW 663. Prereq., graduate standing. Interstate water problems; federal/state powers; federal/Indian water rights/Montana water law. Level: Graduate
- **ENST 570 - Ethics & Restoration**
 Credits: 3. Offered yearly. Prereq., graduate level or consent of instr. A critical examination of the ethical issues that emerge in the field of ecological restoration, and decisions to manipulate nature intentionally for social and ecological goals. Level: Graduate
- **ENST 573 - Environmental Writing**
 Credits: 3. Offered autumn. Prereq., graduate standing. Writing workshop designed to improve skills in writing on environmental topics for general audiences. Approaches include personal narrative, natural history, science interpretation, advocacy/argument, place-based essays. Includes analysis of published work from the perspective of technique and craft. Level: Graduate
- **ENST 579 - Collaborative Conservation**

Credits: 3. (R-4) Offered every semester. Same as NRSM 579. Prereq., ENST 513 or consent of instructor. Designed as the capstone experience of the Natural Resources Conflict Resolution Program. Provides practical experience in multi-party collaboration and conflict resolution. Students may design their own project in consultation with the director of the NRCR Program, or participate in a project organized and convened by faculty. Projects may be conducted year-round. Level: Graduate

- **ENST 580 - The Politics of Food**

Credits: 3. Offered intermittently. This seminar explores social, economic, and ecological issues related to the contemporary food and agricultural system and alternatives to that system. Level: Graduate

- **ENST 590 - Supervised Internship PEAS**

Credits: 0 TO 8. (R-8) Spring and autumn, 2 cr.; summer intensive, 3 cr. Prereq., graduate standing. Students learn small scale sustainable vegetable farming in a hands-on work environment at the PEAS farm (15 minute bike ride from campus). Lectures, readings and reflection inform the work. Summer students also visit local farms on a once-a week field trips. PEAS is repeatable, as the curriculum changes across the season, and students can attend any semester, though the 3 credit (grad level) summer intensive course is the heart of the program. Level: Graduate **Course Attributes:** Research & Creative Schlrshp

- **ENST 593 - Professional Paper**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Faculty-Led Study Abroad

- **ENST 594 - Graduate Seminar**

Credits: 1 TO 15. (R-15) Offered autumn and spring. Prereq., graduate standing. May be restricted to EVST majors. May require consent of instructor. In-depth analysis of a current environmental topic. Different topics offered each semester. Level: Graduate

- **ENST 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., graduate standing. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **ENST 596 - Independent Study**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Work on selected problems by individual students under direct faculty supervision. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **ENST 597 - Research**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Directed individual graduate research and study appropriate to background and objectives of the student. Level: Graduate

- **ENST 598 - Internship**

Credits: 1 TO 8. (R-8) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Practical application of classroom learning during placements off campus. Level: Graduate **Course Attributes:** Internships/Practicums

- **ENST 599 - Thesis**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Environmental Studies B.A.

Bachelor of Arts - Environmental Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 54

Required Cumulative GPA: 2.5

Note: To obtain depth of knowledge in an area of focus, students are expected to select a minor or double major from another campus discipline, or work with an EVST advisor on selecting or designing an EVST focus area.

Lower Division Core Courses

Rule: Complete the following subcategories of courses

24 Total Credits Required

Environmental Science and Environmental Studies

Rule: Complete all courses

Course	Credits
ENSC 105N - Environmental Science	3 Credits
ENST 201 - Environmental Info Resources	3 Credits
ENST 225 - Community & Environment	3 Credits
ENST 230H - Nature and Society	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Chemistry

Rule: Complete the following course

Course	Credits
CHMY 121N - Intro to General Chemistry	3 Credits

Minimum Required Grade: C-	3 Total Credits Required
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Math

Rule: Complete the following course

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Biology

Rule: Complete 1 of the following

—	Course	Credits
	BIOB 101N - Discover Biology	3 Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Quantitative Skills - Statistics

Rule: Complete 1 of the following

—	Course	Credits
	FORS 201 - Forest Biometrics	3 Credits
	PSYX 222 - Psychological Statistics	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core

Rule: Complete the following subcategories of courses

15 Total Credits Required

Natural Science - Ecology

Rule: Complete one of the following:

—	Course	Credits
	BIOE 370 - General Ecology	3 Credits
	ENSC 360 - Applied Ecology	3 Credits
	FORS 330 - Forest Ecology	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Policy

Rule: Complete one of the following:

—	Course	Credits
	ENST 367 - Envr Politics & Policies	3 Credits
	ENST 382 - Environmental Law	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Humanities

Rule: Complete one of the following:

—	Course	Credits
	ENST 335L - The Environmental Vision	3 Credits
	ENST 430 - Culture & Agriculture	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Social Science

Rule: Complete one of the following:

—	Course	Credits
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	ENST 487 - Globalization, Justice & Envir	3 Credits
	ENST 489S - Env. Justice Iss & Solut	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Approved Community Service/Internship Experience

Rule: Complete one of the following:

Course	Credits
ENST 396 - Supervised Internship (PEAS)	0 To 10 Credits
ENST 398 - Cooperative Education/Intern	1 To 6 Credits
Minimum Required Grade: C-	
3 Total Credits Required	

Elective Environmental Studies Courses

Rule: Complete 9 upper division credits offered by the Environmental Studies Program in addition to required courses from above.

Course	Credits
ENSC 391 - Special Topics/Exp. Courses	1 To 9 Credits
ENSC 398 - Cooperative Education/Intern	1 To 6 Credits
ENSC 491 - Special Topics/Exper Courses	1 To 9 Credits
ENSC 492 - Independent Study	1 To 6 Credits
ENSC 494 - Seminar/Workshop	1 To 3 Credits
ENSC 495 - Field Study	1 To 10 Credits
ENST 373A - Nature Works	3 Credits
ENST 377 - Rhetoric, Nature, Environ	3 Credits
ENST 391 - Special Topics/Exp Courses	1 To 12 Credits
ENST 395 - Field Studies: Env. Studies	2 To 3 Credits
ENST 420 - US Environmental Movement	3 Credits
ENST 472 - Gen Sci: Conserv Ed	3 Credits

	ENST 476 - Environmental Citizenship	3 Credits
	ENST 480 - Food, Agriculture, Environment	3 Credits
	ENST 491 - Special Topics/Exper Courses	1 To 12 Credits
	ENST 492 - Independent Study	1 To 6 Credits
	ENST 493 - Study Abroad: Envir Justice LA	3 Credits
	ENST 494 - Seminar/Workshop	1 To 3 Credits
	ENST 499 - Senior Thesis/Capstone	3 Credits
	EVST 427 - Environmental Philosophy	3 Credits
	EVST 432 - Human Role Environ Change	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Foreign Language Requirement

Rule: Students must complete successfully the second semester of a Modern and Classical Language at the University of Montana

Minimum Required Grade: C-

10 Total Credits Required

Additional Requirements

Rule: Complete the following subcategories of courses

6 Total Credits Required

Native American Studies

Rule: Complete 1 of the following:

	Course	Credits
	NASX 105H - Intro Native Amer Studies	3 Credits
	NASX 201X - Indian Cultr Exprssd Thru Lang	3 Credits
	NASX 231X - Indig World View Perspectives	3 Credits
	NASX 235X - Oral/Written Trads Native Amer	3 Credits
	NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits

NASX 304E - Native American Beliefs/Philos	3 Credits
NASX 306X - Contemp Global Iss Indg People	3 Credits
NASX 340 - Native American Lit	3 Credits
NASX 354X - Indians of MT since Rsrvtn Era	3 Credits
NASX 488 - Stds in Native Amer Autbio	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Additional Science Course

Rule: Complete 1 of the following:

Note: BIOB 170N: Principles of Biological Diversity may only be used to satisfy this requirement if not used to satisfy the introductory Biology requirement.

Course	Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
ERTH 303N - Weather and Climate	3 Credits
GEO 108N - Climate Change	3 Credits
NRSM 265 - Elements of Ecological Restora	3 Credits
NRSM 385 - Watershed Hydrology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Environmental Studies Minor

Minor - Environmental Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: Must complete all of the following:

Course	Credits
ENSC 105N - Environmental Science	3 Credits
ENST 225 - Community & Environment	3 Credits
ENST 230H - Nature and Society	3 Credits
	9 Total Credits Required

Upper Division Electives

Rule: Complete the following subcategories of courses

16 Total Credits Required

Environmental Studies

Rule: Must complete 13 credits from the following

Course	Credits
ENSC 398 - Cooperative Education/Intern	1 To 6 Credits
ENSC 491 - Special Topics/Exper Courses	1 To 9 Credits
ENSC 492 - Independent Study	1 To 6 Credits
ENSC 495 - Field Study	1 To 10 Credits
ENST 335L - The Environmental Vision	3 Credits
ENST 367 - Envr Politics & Policies	3 Credits
ENST 373A - Nature Works	3 Credits
ENST 377 - Rhetoric, Nature, Environ	3 Credits
ENST 382 - Environmental Law	3 Credits
ENST 391 - Special Topics/Exp Courses	1 To 12 Credits

ENST 395 - Field Studies: Env. Studies	2 To 3 Credits
ENST 396 - Supervised Internship (PEAS)	0 To 10 Credits
ENST 398 - Cooperative Education/Intern	1 To 6 Credits
ENST 420 - US Environmental Movement	3 Credits
ENST 430 - Culture & Agriculture	3 Credits
ENST 476 - Environmental Citizenship	3 Credits
ENST 480 - Food, Agriculture, Environment	3 Credits
ENST 487 - Globalization, Justice & Envir	3 Credits
ENST 489S - Env. Justice Iss & Solut	3 Credits
ENST 491 - Special Topics/Exper Courses	1 To 12 Credits
ENST 492 - Independent Study	1 To 6 Credits
ENST 493 - Study Abroad: Envir Justice LA	3 Credits
ENST 494 - Seminar/Workshop	1 To 3 Credits
ENST 499 - Senior Thesis/Capstone	3 Credits
Minimum Required Grade: C-	13 Total Credits Required

Ecology

Rule: Must complete 1 of the following

Course	Credits
BIOE 172N - Introductory Ecology	3 Credits
BIOE 370 - General Ecology	3 Credits
ENSC 360 - Applied Ecology	3 Credits
FORS 330 - Forest Ecology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Geography Department

Christiane von Reichert, Chair

Geography provides a broad-ranging perspective on humans as inhabitants and transformers of the face of the earth. The search for this understanding involves thorough study of the physical earth, its habitation by humans, and the resulting diversity of regions and places. Geographers study the physical earth by examining the interlocking systems of the natural environment, including climate, landforms, soils, and biota. Humans are studied by examining those diverse historical, cultural, social, economic, and political structures and processes which affect the location and spatial organization of population groups and their activities. Regions and places, whether described as nations, cities, ecological units, or landscapes, are studied by integrating and interpreting their physical and human relationships in an effort to better understand them and the problems that they face.

Geographers are often found working in business, industry, government, and education. Geography as a discipline offers a great range of employment opportunities. Those in planning might be called upon to determine the most satisfactory location for a new school or an airport, or undertake the environmental or socioeconomic studies required for community and regional planning. Others enter fields such as environmental law, diplomacy, intelligence, and teaching. Graduates trained in cartography and Geographical Information Systems find professional opportunities creating digital maps and doing spatial analysis for a wide array of government entities.

The Department of Geography maintains particular strengths in each of the following major branches within the discipline: 1) physical geography (geomorphology, mountain environments, climate and global change); 2) human-environment interaction (environmental management and planning, water policy, and mountain-society interactions); 3) geography and society (sustainable communities, economic geography of rural areas, and migration and population change); 4) regional geography (with particular strengths in the geography of Montana, North America, Africa, Asia, and Europe); 5) geographical techniques (cartographic principles and design, Geographic Information System GIS, remote sensing, transport planning and GIS-T, field methods, quantitative and qualitative method).

The Department of Geography offers the Bachelor of Arts, Bachelor of Science, Master of Arts and Master of Sciences degrees in geography. For a B.A. in geography, an option in community and environmental planning is available. For a B.S. in geography an option in physical geography is available. Also offered are a minor in geography and a teaching major and minor in geography. Several interdisciplinary minors are available to students: a minor in mountain studies, a minor in climate change and a minor in international development studies. The bachelor degree program provides a broad liberal education, it qualifies graduates for a variety of professional jobs, and it prepares students who excel for graduate studies in geography, planning, GIS, or related fields. Graduate programs prepare candidates for a relatively greater range of employment, including teaching in community and junior colleges, and for doctoral studies in geography and allied disciplines. In addition to a general degree in geography without option, students may pursue an option within the M.S. program in the following areas: community and environmental planning, or cartography and GIS. See the [Graduate School website](#) for more information concerning the M.A. and M.S. programs.

A certificate in GIS Sciences and Technologies, jointly offered by the Department of Geography (College of Humanities and Sciences) and the Department of Forest Management (College of Forestry and Conservation), is also available. This GIST certificate is a complement to an existing major or to a bachelor's degree already obtained. For details, please see below or the GIST website.

Department Faculty

Professor

Sarah J. Halvorson, Professor
Ulrich Kamp, Professor
David Shively, Professor
Christiane von Reichert, Professor and Chair

Associate Professor

Anna Klene, Associate Professor

Assistant Professor

Diep Dao, Assistant Professor
Thomas Sullivan, Visiting Assistant Professor

Adjunct

Laura Becerra
Leah Samberg

Lecturer

Rick Graetz, Lecturer
Kevin McManigal, Lecturer & GIST Certificate Coordinator

Affiliates

Donald Alford, Hydrology Consultant
Heather Almquist
Claudia J. Carr, Associate Professor of Environmental Science
Faith Ann Heinsch
Zachary A. Holden, Ecologist
Ia Iashvili
Irena Mrak, Assistant Research Professor
Tamara Wall

Emeritus

John Donahue, Emeritus Professor
Jeffrey Gritzner, Emeritus Professor
Darshan S. Kang, Emeritus Professor
Paul Wilson, Emeritus Professor

Course Descriptions

Earth Systems

- **ERTH 303N - Weather and Climate**

Credits: 3. Offered spring. Same as CCS 303N. Origin, composition, structure, and dynamics of the atmosphere, gas and radiation laws, energy budget and balance, weather elements, North American weather systems, and climate change. To succeed in this course students should have comfort with basic algebra. **Course Attributes:** Natural Science Course

Geography

- **GPHY 111N - Intro to Physical Geography**

Credits: 3. Offered autumn and spring. Introduction to the earth's major natural environmental systems, their spatial distribution and interrelationships, including weather and climate, vegetation and ecosystems, soils, landforms, and earth-surface processes. **Course Attributes:** Natural Science Course

- **GPHY 112N - Intro to Phys Geography Lab**
 Credits: 1. Offered autumn and spring. Prereq. or coreq., GPHY 111. Introduction to concepts and techniques needed to understand and analyze the information contained in various types of maps, graphs, aerial photos, imagery, and other graphics and geographic data sets. This is prerequisite to GPHY 385. **Course Attributes:** Natural Science Lab Course
- **GPHY 121S - Human Geography**
 Credits: 3. Offered autumn and spring. Introduction to Human Geography focuses upon the linkages between geography and society including analysis of regions, ethnic groups, urban landscapes, migration and population change, geopolitics, economics, and cultural differences. **Course Attributes:** Social Sciences Course
- **GPHY 141S - Geography of World Regions**
 Credits: 3. Offered autumn. An overall view of how the lands and peoples of the world are organized into coherent geographical regions, how landscapes differ from region to region, and how the people differ in terms of their traits, beliefs, ways of life, and economic livelihood. **Course Attributes:** Social Sciences Course Indigenous and Global
- **GPHY 144 - Montana's Mountains**
 Credits: 3. Consent of Instructor. A field-based course offered during winter session in the winter splendor of the North Fork of the Flathead River and Glacier National Park. Topics addressed include physical geography, geology, winter ecology, national park management, environmental history, and the changing economy of the region.
- **GPHY 191X - Special Topics**
 Credits: 1 TO 3. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. **Course Attributes:** Internships/Practicums Indigenous and Global
- **GPHY 241 - Montana**
 Credits: 3. Offered autumn. The physical, cultural, economic, political, and historical geography of the state including Montana's mountains and the prairies.
- **GPHY 243 - Africa**
 Credits: 3. Offered intermittently. A survey of the biophysical and cultural geography of Sub-Saharan Africa. Emphasis is on the region's cultural-historical development and current ecological, demographic, and economic patterns.
- **GPHY 245X - The Middle East**
 Credits: 3. Offered intermittently. A survey of the biophysical and cultural geography of Southwest Asia and North Africa. Emphasis on environmental change; rehistory; patterns of cultural and historical change; issues of socio-economic, religious, and political diversity; and the broader political significance of the region. **Course Attributes:** Indigenous and Global
- **GPHY 284 - Intro to GIS and Cartography**
 Credits: 3. Offered every term. Open to sophomores or juniors or with Consent of Instructor. This course is designed as a practical introduction to the use of Geographic Information Systems (GIS) for storing, retrieving, analyzing and displaying spatial data. It will also cover the history of cartography and the conventions of the modern map-making process. Students need to register for a required lab section.
- **GPHY 291 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **GPHY 295 - Mountain Field Studies**
 Credits: 1. Offered autumn and spring as a series of one-credit courses, maximum of three-credits per semester. Field studies of Montana's Rocky Mountain Front, Crown of the Continent, or

Yellowstone. Students prepare to conduct field work, spend time in the field observing wildlife, physical landscapes and cultural aspects of these landscapes, and follow up their observations in written reports.

- **GPHY 311N - Biogeography**

Credits: 3. Offered intermittently. Changing patterns of plant and animal distributions in space and time. Combination of historical and ecological approaches to biological species and communities. Study of external causes of plant and animal distributions, especially climatic change and human impacts. **Course Attributes:** Natural Science Course

- **GPHY 314 - Global Mountain Environments**

Credits: 3. Offered most autumns. The study of mountain environments and their physical processes around the globe: Andes, Appalachians, East African Mountains, European Alps, Hindu Kush-Himalaya-Karakoram, Pamir, Rocky Mountains, Southern Alps of New Zealand, Tien Shan, and others. Topics include mountain building, alpine glaciers, mountain geomorphology and climatology, mountain watersheds, mountain biogeography, and mountain hazards such as earthquakes and mass movements.

- **GPHY 317 - Geomorphology**

Credits: 3. Offered intermittently. Prereq., GPHY 111N or GEO 101N. Important landforms and landscapes, their biophysical processes, and their formative elements.

- **GPHY 323S - Econ. Geog. of Rural Areas**

Credits: 3. Offered spring odd-numbered years. Study of the location of economic activities, including agriculture, industry, and services. Focus on the changing nature of rural areas. **Course Attributes:** Social Sciences Course

- **GPHY 335 - Water Policy**

Credits: 3. Offered autumn. Prereq., WRIT 101 or WRIT 201, and one Approved Writing Course. Exploration of water resources issues facing the public, resource managers, and water users in the western United States today. Examines concepts, terms, and regulatory environment which provide the foundation for modern water management and policy. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **GPHY 336 - Exploration & Discovery**

Credits: 3. Offered intermittently. Emphasis on the evidence of language, genetics, material culture, and transoceanic plant and animal exchanges in assessing mobility and population distributions in prehistory; factors that motivate exploration; the history of navigation; the impacts of exploration upon science, society, economics, and government.

- **GPHY 338 - Mountains and Society**

Credits: 3. Offered spring. Physical and cultural aspects of the mountains of North and South America, Europe, Africa, and Asia. Emphasis on combining the physical landscape with an overview of the indigenous people who inhabit the worlds' heights.

- **GPHY 342 - North America**

Credits: 3. Offered intermittently. Physiographic regions of North America; highlights of historical geography blended with physical and cultural aspects of the continent. Lesser known places are explored.

- **GPHY 344 - Crown of the Continent**

Credits: 3. Offered autumn. The study of the geographical setting of the Crown of the Continent of North America, including the richness of physical geography, history, culture, and models of conservation. Examines ongoing research initiatives, impacts of climate change, regional transformations, and the relationship between people and this mountainous environment.

- **GPHY 347 - Regional Geography (Multiple Regions)**

Credits: 3. (R-9) Offered intermittently. Selected regions will be listed as appropriate in each Class

Schedule.

- **GPHY 348 - Field Studies in Geography**
Credits: 3. (R-12) Offered autumn and spring. Through extended backcountry travel, experiential examination of regional landforms, climate, hydrology, soils, and patterns of vegetation and wildlife. Local landscapes, natural-resource endowment, and societies with particular emphasis on human-environmental interaction. Geographical skills and techniques, including map reading and navigational skills. Offered by the Wild Rockies Field Institute as part of a semester-long, 12-credit field experience with corequisite courses in allied fields.
- **GPHY 378 - Preceptorship in Geography**
Credits: 1 TO 3. (R-6) Offered autumn and spring. Consent of instructor. Assisting a faculty member by tutoring, conducting review sessions, helping students with research projects, and carrying out other class-related responsibilities. Open to juniors and seniors who apply to instructor for consent.
- **GPHY 385 - Field Techniques**
Credits: 3. Offered autumn and intermittently in spring. Prereq., GPHY 112N or Consent of Instructor. Field techniques used by geographers and planners in making field observations and in collecting data.
- **GPHY 391 - Special Topics**
Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **GPHY 392 - Independent Study**
Credits: 1 TO 9. (R-9) Offered every term. Consent of Instructor. Independent study in any subfield of geography.
- **GPHY 395 - Field Studies**
Credits: 1 TO 9. (R-9) Offered fall and/or spring. Field experience in the region. Includes geographically relevant field courses offered as part of Northwest Connections' Landscapes and Livelihood Field Semester, focusing on natural and human communities and on conservation solutions of the Southwest Crown of the Continent Region: Sustainability and Agriculture (3 cr), and Biogeography of Northwest Montana (4 cr).
- **GPHY 400 - Geography Capstone**
Credits: 1. Offered autumn. Prereq., Senior standing. Exploration of current research, projects, and programs of geographers and scientists/practitioners in allied disciplines and fields, and preparation of a professional portfolio. Student preparation for post-graduate professional and academic careers is emphasized.
- **GPHY 421 - Sustainable Cities**
Credits: 3. Offered spring even-numbered years. Prereq., upper-division or graduate standing. Same as CCS 421. A discussion of sustainability efforts in cities around the world. Topics include, for example, urban sprawl and smart growth, alternative energy, public transportation, integrated waste management, integrated water management, green architecture, and urban agriculture.
- **GPHY 432 - Human Role Environ Change**
Credits: 3. Offered intermittently. A systematic examination of the ways in which the major physical systems and ecosystems of the earth have been modified by human activity, and approaches to the rehabilitation of these systems.
- **GPHY 433 - Cultural Ecology**
Credits: 3. Offered most spring. Prereq., WRIT 101 or WRIT 201 and one Approved Writing Course or consent of instructor. Examines issues related to culture and the natural environment. Topics include cultural origins and diversity, geography of religion, geolinguistics, plant and animal domestication, livelihood systems, folk and popular culture, ethnic geography, political patterns,

demography, industries, urban genesis, and the transformation of environmental systems. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **GPHY 434 - Food and Famine**

Credits: 3. Offered intermittently. Exploration of the production, distribution, and consumption of food; the causes and consequences of hunger; and measures that might be taken to relieve hunger.

- **GPHY 438 - Mountain Field Study**

Credits: 3. (R-6) Upper-division or graduate standing and consent of instructor. Examination of aspects of the study of mountain geography through a two-week field course based in a mountainous country and/or region. Possible areas of focus include, but are not limited to, the Northern Rocky Mountains, the Alps, the Himalaya, and the Andes.

- **GPHY 442 - Regionalism & Rocky Mtn West**

Credits: 3. Offered intermittently. Investigation of regionalism as a concept and its future in the Rocky Mountain West. Regionalism as a geographical, economic, political, and cultural entity.

Course Attributes: Writing Course-Upper-Division

- **GPHY 465 - Planning Principles & Processes**

Credits: 3. Offered autumn even-numbered years. Prereq., upper-division or graduate standing. Surveys planning principles, practices and issues in urban and rural environments. Attention is devoted to Montana, state planning programs in the United States., and federal programs and policies that influence land-use planning. Emphasizes skills and techniques used in plan development and implementation.

- **GPHY 466 - Environmental Planning**

Credits: 3. Offered autumn odd-numbered years. Introduction to practice of environmental planning which includes elements of physical planning, planning design at the landscape scale, and conservation planning. Includes field visits and project-based work.

- **GPHY 468 - Community & Regional Analysis**

Credits: 3. Offered autumn. Prereq., M 115 or M 121 or Consent of Instructor. Coreq., GPHY 469. Socio-demographic analysis of communities and regions: population, employment, and spatial interaction. Hands-on course designed for future planners, GIS analysts, and others interested in socio-demographic change.

- **GPHY 469 - Planning & Analysis Laboratory**

Credits: 1. Offered autumn. Coreq., GPHY 468. Laboratory to accompany GPHY 468.

- **GPHY 481 - Advanced Cartographic Design**

Credits: 3. Offered autumn. Prereq GPHY 284 or GPHY 381 or FORS 250 or Consent of Instructor. The course concentrates on the presentation of spatial data and the construction of cartographic products that have clear communication and excellent aesthetic design. The class meets the University's service learning course objectives through a semester long project where students consult with a client, design and construct a map, and deliver a final product.

- **GPHY 482 - Spatial Analysis & GIS**

Credits: 3. Offered intermittently. Prereq., GPHY 284 and STAT 216, or Consent of Instructor. Quantitative analysis of spatial data, including techniques for pattern analysis, classification, and interpolation within a GIS environment.

- **GPHY 485 - Internet GIS**

Credits: 3. Offered intermittently. Prereq., GPHY 284 or GPHY 381; coreq., GPHY 489. Principles and techniques for distributing GIS and mapping applications through the Internet.

- **GPHY 486 - Transport, Planning & GIS**

Credits: 3. Offered intermittently during wintersession (2 credits) or spring semester (3 credits.)

Prereq., M 115 or M 121 or consent of instr. Coreq., GPHY 489. A project-oriented course focusing on patterns and trends in urban passenger transportation, principles of transport planning, and modeling in GIS-T.

- **GPHY 487 - Remote Sensing/Raster GIS**

Credits: 3. Offered autumn. Prereq. or coreq., GPHY 284 or GPHY 381 or Consent of Instructor. Coreq., GPHY 489. Basic principles of remote sensing and analyzing images within a raster GIS. Review current data sources.

- **GPHY 488 - Applications of GIS**

Credits: 0 TO 3. Offered spring. Prereq., GPHY 284 or GPHY 381 or FORS 250 or Consent of Instructor; Application of GIS for managing natural and cultural resources. Covers choropleth maps, dot maps, proportional figure maps, isarithmic maps, and others. Includes computer mapping and GIS exercises. Students need to register for a required lab section.

- **GPHY 489 - Cartography/GIS Laboratory**

Credits: 1. (R-4) Offered autumn and spring. Coreq., GPHY 485, 486, or 487. Lab to accompany cartography and GIS courses.

- **GPHY 491 - Special Topics**

Credits: 0 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GPHY 492 - Independent Study**

Credits: 1 TO 9. (R-9) Offered every term. Consent of instructor. Independent study in any subfield of geography.

- **GPHY 497 - Workshop in Teaching Geography**

Credits: 2 TO 3. Offered intermittently. Concepts and techniques in geography, with emphasis on their use in teaching geography in Montana schools. Students are required to prepare and present a teaching unit project. Designed for pre-service or in-service teachers.

- **GPHY 498 - Internship**

Credits: 1 TO 6. Offered every term. Consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements within governmental agencies or the business community. A maximum of 6 credits of Internship may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **GPHY 499 - senior thesis / capstone**

Credits: 3. (R-6) Offered autumn and spring. Senior standing and consent of instructor. Independent research project in any geographical topic supervised by a faculty member, and leading to completion of the baccalaureate degree. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **GPHY 500 - Geography Graduate Colloquium**

Credits: 1. (R-3) Offered autumn. Presentation of faculty and student research. Guest lecturers. Graded pass/not pass only. Enrollment required every autumn graduate students are in residence. Level: Graduate

- **GPHY 504 - Geographical Research**

Credits: 1. Offered autumn. To be taken during first semester of graduate studies. Understanding of diverse research approaches in geography and development of a thesis topic. To be continued in spring in GPHY 505. Level: Graduate

- **GPHY 505 - Research Design**

Credits: 2. Offered spring. Prereq., GPHY 504. Preparation of a thesis proposal: research design, data collection, analysis, interpretation, and presentation. Recommended to be taken during the second semester of graduate studies. Level: Graduate

- **GPHY 520 - Seminar Geographical Thought**
 Credits: 3. Offered autumn. Geographical ideas, concepts, approaches, and techniques from ancient to modern times. Recommended to be taken during first semester of graduate studies. Level: Graduate
- **GPHY 525 - Advanced Physical Geography**
 Credits: 3. (R-9) Offered intermittently. Advanced topics in climate and global change, paleo-environments and biogeography, landform analysis, soils, and other selected topics. Topic titles will appear in the Class Schedule. Level: Graduate
- **GPHY 550 - Seminar in Geography**
 Credits: 3. (R-9) Offered intermittently. Seminar topics in geography and society, human-environmental interaction, physical geography, regional geography, or geographical techniques. Level: Graduate
- **GPHY 560 - Seminar in Planning**
 Credits: 3. Offered spring odd-numbered years. A critical analysis of land planning history, theory, approaches, and practice. Emphasis is on the United States and England. Level: Graduate
- **GPHY 561 - Land Use Planning Law**
 Credits: 3. Offered autumn. Same as ENST 561 and LAW 687. Basic overview of the law of land-use planning including, background in the traditional governmental regulatory, proprietary, and fiscal land use tools. Examination of modern techniques for land-use planning; consideration of constitutional limits of the authority of state and local governments. Focus on skills in interpreting, drafting, and applying state legislation and local ordinances. Level: Graduate
- **GPHY 562 - Land Use Planning Clinic**
 Credits: 1 TO 6. (R-6) Offered every term. Prereq. or coreq., GPHY 561. Same as ENST 562. Students assist local communities in long-range planning efforts and development of growth management plans as required by Montana law; ordinance drafting, development proposals, and land use issues. Level: Graduate
- **GPHY 564 - Planning Design**
 Credits: 3. Offered spring even-numbered years. Prereq., graduate standing or Consent of Instructor. Analysis of land-use problems and design. Level: Graduate
- **GPHY 578 - Preceptorship in Geography**
 Credits: 1 TO 3. (R-6) Offered autumn and spring. Graduate standing and Consent of Instructor. Assisting a faculty member by tutoring, helping students with research projects, and carrying out other class-related activities. Level: Graduate
- **GPHY 580 - Seminar GIS & Cartography**
 Credits: 3. (R-9) Offered spring. Seminar topics in cartography and GIS. Applications to advanced studies in human and physical geography. Level: Graduate
- **GPHY 587 - Image Analysis & Modeling**
 Credits: 3. Offered every two years. Prereq., GPHY 487 or FORS 351 or Consent of instructor; coreq., GPHY 589. Advanced topics in image analysis (e.g. hyperspectral images and pattern-recognition-based classification) and foundations of simple raster-based models. Level: Graduate
- **GPHY 588 - Spatial Analysis and Modeling**
 Credits: 3. Offered autumn. Coreq., GPHY 589. Theoretical/conceptual and practical aspects of entity-based GIS modeling and spatial analysis. Point pattern analysis (i.e. cluster detection, density analysis, kriging), network analysis (i.e. network construction, network-based spatial statistics, accessibility modeling), and areal pattern analysis (i.e. spatial autocorrelative pattern, spatial regression modeling). Applications in urban and environmental planning, transportation, natural resource management, ecology, health, criminology, engineering, and business. Level: Graduate

- **GPHY 589 - Cartography/GIS Laboratory**
Credits: 1. (R-4) Offered autumn and spring. Laboratory to accompany GPHY 587 or 588. Level: Graduate
- **GPHY 595 - Special Topics**
Credits: 1 TO 8. (R-9) Offered intermittently. Prereq., Consent of Instructor. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums
- **GPHY 596 - Independent Study**
Credits: 1 TO 9. (R-9) Offered every term. Graduate standing and consent of instructor. Independent research in geography or planning. Level: Graduate **Course Attributes:** Service Learning/Volunteer
- **GPHY 597 - Professional Paper**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Graduate standing in Geography and Consent of Advisor. Level: Graduate
- **GPHY 598 - Internship**
Credits: 1 TO 9. (R-9) Offered every term. Graduate standing and consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate **Course Attributes:** Internships/Practicums
- **GPHY 599 - Thesis**
Credits: 1 TO 6. Offered every term. Graduate standing in Geography and Consent of Advisor. Level: Graduate

Geography B.A.

The general geography B.A. degree (without option) is very flexible. In addition to meeting the core requirements for all geography majors, students may take a wide range of electives in geography (minimum 11, maximum 35 elective credits). Electives may be chosen from the fields of regional geography, geographic methods and techniques, or systematic geography (physical geography, human-environment interaction, or geography and society).

Geography B.S.

The B.S. in Geography is designed to accommodate those students who are interested in pursuing more science-based and technical areas of study and work in the field of Geography, such as aspects involving physical geography and geospatial technologies, or environmental planning. Those pursuing a geography B.S. degree (with or without an option) must complete 6-10 additional credits (a two-course sequence) of science coursework. The classes must be selected and approved by the student and advisor as appropriate to individual student goals (e.g., B100 105N (BIOL 120N), B10E 172N (BIOL 121)).

Bachelor of Science - Geography

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Note: Depending on the courses selected, the degree requirements vary from 36 to 39 credits.

Introduction to Geography

Rule: Must complete all of the following courses:

Course	Credits
GPHY 111N - Intro to Physical Geography	3 Credits
GPHY 112N - Intro to Phys Geography Lab	1 Credits
GPHY 121S - Human Geography	3 Credits
Minimum Required Grade: C-	7 Total Credits Required

Regional Geography Course

Rule: Must complete at least 1 of the following courses

Course	Credits
GPHY 141S - Geography of World Regions	3 Credits
GPHY 144 - Montana's Mountains	3 Credits
GPHY 241 - Montana	3 Credits
GPHY 243X - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
GPHY 342 - North America	3 Credits
GPHY 344 - Crown of the Continent	3 Credits
GPHY 347 - Regional Geography (Mult Reg)	3 Credits
GPHY 348 - Field Studies in Geography	3 Credits
GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
GPHY 444 - High Asia	3 Credits

	GPHY 445 - Regional Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geographic Methods

Rule: Must complete all of the following courses

—	Course	Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
	GPHY 385 - Field Techniques	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Systematic Geography

Rule: Must complete the following subcategories of courses

Minimum Required Grade: C-

9 Total Credits Required

Physical Geography

Rule: Must complete at least 1 of the following courses

—	Course	Credits
	ERTH 303N - Weather and Climate	3 Credits
	GPHY 311N - Biogeography	3 Credits
	GPHY 314 - Global Mountain Environments	3 Credits
	GPHY 317 - Geomorphology	3 Credits
	GPHY 438 - Mountain Field Study	3 Credits
	GPHY 525 - Adv Physical Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geography and Society

Rule: Must complete at least 1 of the following:

—	Course	Credits
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	GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
	GPHY 421 - Sustainable Cities	3 Credits
	GPHY 434 - Food and Famine	3 Credits
	GPHY 443 - Cultural & Global Competence	3 Credits
	GPHY 515 - Adv Human Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Human Environment Interaction

Rule: Must complete at least 1 of the following:

—	Course	Credits
	GPHY 335 - Water Policy	3 Credits
	GPHY 336 - Exploration & Discovery	3 Credits
	GPHY 338 - Mountains and Society	3 Credits
	GPHY 432 - Human Role Environ Change	3 Credits
	GPHY 433 - Cultural Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Degree Electives

Rule: 36 Geography credits are required for the major. May require additional Geography elective credits to fulfill the major.

Capstone

Rule: Seniors must complete the following course

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

—	Course	Credits
	GPHY 400 - Geography Capstone	1 Credits
Minimum Required Grade: C-		1 Total Credits Required

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: GPHY 335 will also count toward the upper division core requirements

GPHY 499 will also count toward upper division elective credits.

Other science-based writing courses(e.g. GEO 320, GEO 499, BIOO 470, BIOO 475) may be approved by the advisor.

—	Course	Credits
	GPHY 335 - Water Policy	3 Credits
	GPHY 499 - senior thesis / capstone	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Science Electives

Rule: Must complete 1 of the following science categories

Note: Science sequence must be approved by advisor as appropriate to individual student's goals. Different science sequences may be approved by the advisor.

6-10 Total Credits Required

Biology

Rule: May complete the following courses

—	Course	Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Chemistry

Rule: May complete the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

College Chemistry

Rule: May complete the following courses

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	Minimum Required Grade: C-	10 Total Credits Required

College Physics

Rule: May complete the following courses

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
	Minimum Required Grade: C-	10 Total Credits Required

Physics with Calculus

Rule: May complete the following courses

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
	Minimum Required Grade: C-	10 Total Credits Required

General Ed Symbolic Systems (Mathematics)

Rule: Must complete 1 of the following subcategories

Note: GenEd credits do not count towards degree credits.

Note: Students MUST meet the symbolic systems requirement by taking M 115 and STAT 216, OR just one of M 162, M 171, or STAT 451. M 171 Calculus is recommended.

3-7 Total Credits Required

Math Fundamentals

Rule: May complete all of the following courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
	Minimum Required Grade: C-	7 Total Credits Required

Advanced Math

Rule: May complete 1 of the following courses

Note: M 171 Calculus I is recommended.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
	STAT 451 - Statistical Methods I	3 Credits
	Minimum Required Grade: C-	3-4 Total Credits Required

Physical Geography

In addition to satisfying the general requirements for a B.S. degree in geography, a student pursuing the option in physical geography must complete additional requirements, including EARTH 303N (GEOG 322N), GPHY 317 (GEOG 324), and GPHY 411N (GEOG 426N), though substitutions which broaden the student's curriculum may be approved by their advisor. Also, students must complete an additional appropriate math course above the 150 level to complement the one used to fulfill their symbolic systems requirements (the second semester of Calculus is recommended), and the two-course sequence in science used to fulfill the B.S. requirement MUST be one of the following: CHMY121N-123N (CHEM 151N-152N), CHMY 141N-143N (CHEM 161N-162N), PHSX 205N-207N (PHYS 121N-122N), PHSX 215N-217N (PHYS 211N- 212N), or BIOO 105N (BIOL 120N), BIOE 172N (BIOL 121N)).

Bachelor of Science - Geography; Physical Geography Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 47

Required Cumulative GPA: 2.5

Note: Depending on the courses selected the degree requirements vary from 47 to 56 credits.

Introduction to Geography

Rule: Must complete all of the following courses:

Course	Credits
GPHY 111N - Intro to Physical Geography	3 Credits
GPHY 112N - Intro to Phys Geography Lab	1 Credits
GPHY 121S - Human Geography	3 Credits
Minimum Required Grade: C-	7 Total Credits Required

Regional Geography Course

Rule: Must complete at least 1 of the following courses

Course	Credits
GPHY 141S - Geography of World Regions	3 Credits
GPHY 144 - Montana's Mountains	3 Credits
GPHY 241 - Montana	3 Credits
GPHY 243X - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
GPHY 342 - North America	3 Credits
GPHY 344 - Crown of the Continent	3 Credits
GPHY 347 - Regional Geography (Mult Reg)	3 Credits
GPHY 348 - Field Studies in Geography	3 Credits

	GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
	GPHY 444 - High Asia	3 Credits
	GPHY 445 - Regional Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geographic Methods

Rule: Must complete all of the following courses

—	Course	Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
	GPHY 385 - Field Techniques	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Systematic Geography

Rule: Must complete the following subcategories of courses

Minimum Required Grade: C-

9 Total Credits Required

Physical Geography

Rule: Must complete at least 1 of the following courses

Note: These courses simultaneously count towards the Upper Division Systematic Geography-Physical Geography and the Physical Geography Option core (see below).

—	Course	Credits
	ERTH 303N - Weather and Climate	3 Credits
	GPHY 311N - Biogeography	3 Credits
	GPHY 314 - Global Mountain Environments	3 Credits
	GPHY 317 - Geomorphology	3 Credits
	GPHY 438 - Mountain Field Study	3 Credits
	GPHY 525 - Adv Physical Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geography and Society

Rule: Must complete at least 1 of the following:

—	Course	Credits
	GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
	GPHY 421 - Sustainable Cities	3 Credits
	GPHY 434 - Food and Famine	3 Credits
	GPHY 443 - Cultural & Global Competence	3 Credits
	GPHY 515 - Adv Human Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Human Environment Interaction

Rule: Must complete at least 1 of the following:

—	Course	Credits
	GPHY 335 - Water Policy	3 Credits
	GPHY 336 - Exploration & Discovery	3 Credits
	GPHY 338 - Mountains and Society	3 Credits
	GPHY 432 - Human Role Environ Change	3 Credits
	GPHY 433 - Cultural Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Capstone

Rule: Seniors must complete the following course

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

—	Course	Credits
	GPHY 400 - Geography Capstone	1 Credits
Minimum Required Grade: C-		1 Total Credits Required

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: GPHY 335 will also count toward the upper division core requirements

GPHY 499 will also count toward upper division elective credits.

Other science-based writing courses (e.g. GEO 320, GEO 499, BIOO 470, BIOO 475) may be approved by the advisor.

—	Course	Credits
	GPHY 335 - Water Policy	3 Credits
	GPHY 499 - senior thesis / capstone	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physical Geography Option Science Electives

Rule: Must complete 1 of the following science categories

6-10 Total Credits Required

Biology

Rule: May complete the following courses

—	Course	Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Chemistry

Rule: May complete the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

College Chemistry

Rule: May complete the following courses

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

College Physics

Rule: May complete the following courses

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete the following courses

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physical Geography Option Core

Rule: Must complete all of the following courses

Note: One course can be used to satisfy the Upper Division Systematic Geography – Physical Geography. Substitutions which broaden the student’s curriculum may be approved by their advisor.

—	Course	Credits
	ERTH 303N - Weather and Climate	3 Credits
	GPHY 311N - Biogeography	3 Credits
	GPHY 317 - Geomorphology	3 Credits
Minimum Required Grade: C-		6-9 Total Credits Required

Advanced Math

Rule: Must complete 1 additional math or statistics course in addition to the one chosen for Math Fundamentals. For instance, if M 171 has been taken, M 172 is recommended.

Minimum Required Grade: C-

3-4 Total Credits Required

General Ed Symbolic Systems (Math Fundamentals)

Rule: Must complete 1 of the following courses

Note: Gen Ed credits do not count towards degree credits.

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	STAT 451 - Statistical Methods I	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Community and Environmental Planning

Geography Minor

Minor - Geography (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 19

Required Cumulative GPA: 2.0

Introduction to Geography

Rule: Must complete all of the following courses

—	Course	Credits
	GPHY 111N - Intro to Physical Geography	3 Credits
	GPHY 112N - Intro to Phys Geography Lab	1 Credits
	GPHY 121S - Human Geography	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Regional Core

Rule: Must complete at least 1 of the following courses

—	Course	Credits
	GPHY 141S - Geography of World Regions	3 Credits
	GPHY 144 - Montana's Mountains	3 Credits
	GPHY 241 - Montana	3 Credits
	GPHY 243X - Africa	3 Credits
	GPHY 245X - The Middle East	3 Credits
	GPHY 342 - North America	3 Credits
	GPHY 344 - Crown of the Continent	3 Credits
	GPHY 347 - Regional Geography (Mult Reg)	3 Credits
	GPHY 348 - Field Studies in Geography	3 Credits
	GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
	GPHY 444 - High Asia	3 Credits

	GPHY 445 - Regional Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geographic Methods

Rule: Must complete 1 of the following courses

—	Course	Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
	GPHY 385 - Field Techniques	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Systematic Geography

Rule: Must complete at least 1 course from 2 subcategories: 'Physical Geography', 'Geography and Society', and 'Human-Environment Interaction'

6 Total Credits Required

Physical Geography

Rule: May complete 1 of the following courses

—	Course	Credits
	ERTH 303N - Weather and Climate	3 Credits
	GPHY 311N - Biogeography	3 Credits
	GPHY 314 - Global Mountain Environments	3 Credits
	GPHY 317 - Geomorphology	3 Credits
	GPHY 438 - Mountain Field Study	3 Credits
	GPHY 525 - Adv Physical Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geography and Society

Rule: May complete 1 of the following courses

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—	Course	Credits
	GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
	GPHY 421 - Sustainable Cities	3 Credits
	GPHY 434 - Food and Famine	3 Credits
	GPHY 443 - Cultural & Global Competence	3 Credits
	GPHY 515 - Adv Human Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Human Environment Interaction

Rule: May complete 1 of the following courses

—	Course	Credits
	GPHY 335 - Water Policy	3 Credits
	GPHY 336 - Exploration & Discovery	3 Credits
	GPHY 338 - Mountains and Society	3 Credits
	GPHY 432 - Human Role Environ Change	3 Credits
	GPHY 433 - Cultural Ecology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Mountain Studies Minor

Mountain Studies is an interdisciplinary field of study focusing on the physical and human dimensions of mountain environments. Coursework in the minor emphasizes physical geography and mountain-society interactions, including a critical analysis of the processes of change and influence shaping local and regional mountain environments today. The minor in Mountain Studies takes advantage of existing faculty expertise and an array of courses to provide students with a science-based curriculum and global perspective. Students pursuing the minor in mountain studies will develop knowledge and skills appropriate for graduate study and for working with government and non-government agencies and groups.

Minor - Mountain Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.5

Note: In addition to completing the requirements for a major in any discipline, students electing the minor in Mountain Studies must have a GPA of 3.0 in the major and complete a minimum of 18 additional credits in this minor.

Upper Division Core

Rule: Must complete all of the following courses

Course	Credits
GPHY 314 - Global Mountain Environments	3 Credits
GPHY 338 - Mountains and Society	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Region-Specific Mountain Studies

Rule: Must complete 6 credits from the following courses

Note: Two sections of NRSM 391 may be taken to fulfill this requirements, each for 3 credits:

- 1) Community and Conservation in the Northern Rockies
- 2) Ecological Restoration in Greater Yellowstone

Course	Credits
BIOL 342 - Field Ecology	5 Credits
BIOL 459 - Alpine Ecology	3 Credits
BIOO 101N - Survey MT Wildlife & Habitats	3 Credits
BIOO 335 - Rocky Mountain Flora	3 Credits
GEO 231 - Geosciences Field Methods	2 Credits
GPHY 144 - Montana's Mountains	3 Credits
GPHY 344 - Crown of the Continent	3 Credits
GPHY 391 - Special Topics	1 To 12 Credits
GPHY 438 - Mountain Field Study	3 Credits
GPHY 442 - Regionalism & Rocky Mtn West	3 Credits

	GPHY 444 - High Asia	3 Credits
	NRSM 352 - Himalayan Environment and Dev	3 Credits
	NRSM 391 - Special Topics	0 To 12 Credits
	PTRM 353 - Tourism & Sustnbility Himalaya	3 Credits
	PTRM 418 - Winter Wilderness Field Studies	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

General Mountain Studies

Rule: Must complete 6 credits from the following courses

Note: One section of NRSM 311 fulfills this requirement: Conservation Biology in the Northern Rockies

Course	Credits
BIOL 451 - Landscape Ecology	3 Credits
FORS 330 - Forest Ecology	3 Credits
GEO 391 - Special Topics	1 To 9 Credits
GEO 433 - Global Tectonics	3 Credits
GEO 488 - Snow, Ice and Climate	3 Credits
GPHY 311N - Biogeography	3 Credits
NASX 351 - Traditional Eco Knowledge	3 Credits
NRSM 311 - Field Stds ecol/Human Commun	2 To 3 Credits
NRSM 385 - Watershed Hydrology	3 Credits
PTRM 482 - Wilderness & Protctd Area Mgt	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Teaching Geography

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course

requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Students who want to be licensed to teach geography at the middle and high school level must complete the B.A. degree requirements in geography (general geography, no option required). They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a teaching minor in geography. See the Department of Curriculum & Instruction for information about admission to the Teacher Education Program and completion of the licensure program.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Geography; Track: Teaching Geography

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Introduction to Geography

Rule: Must complete all of the following courses:

—	Course	Credits
	GPHY 111N - Intro to Physical Geography	3 Credits
	GPHY 112N - Intro to Phys Geography Lab	1 Credits
	GPHY 121S - Human Geography	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Regional Geography Course

Rule: Must complete at least 1 of the following courses

Note: GPHY 141 Geography of World Regions is highly recommended for Geography teaching majors.

—	Course	Credits
	GPHY 141S - Geography of World Regions	3 Credits

	GPHY 144 - Montana's Mountains	3 Credits
	GPHY 241 - Montana	3 Credits
	GPHY 243X - Africa	3 Credits
	GPHY 245X - The Middle East	3 Credits
	GPHY 342 - North America	3 Credits
	GPHY 344 - Crown of the Continent	3 Credits
	GPHY 347 - Regional Geography (Mult Reg)	3 Credits
	GPHY 348 - Field Studies in Geography	3 Credits
	GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
	GPHY 444 - High Asia	3 Credits
	GPHY 445 - Regional Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geographic Methods

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

5-6 Total Credits Required

GIS

Rule: Must complete the following course

	Course	Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Field Techniques/Workshop

Rule: Must complete 1 of the following courses

Note: GPHY 284 and 385 are offered at least once per year. GPHY 497 is offered intermittently in summer.

	Course	Credits
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	GPHY 385 - Field Techniques	3 Credits
	GPHY 497 - Workshop in Teaching Geography	2 To 3 Credits
Minimum Required Grade: C-		2-3 Total Credits Required

Upper Division Systematic Geography

Rule: Must complete the following subcategories of courses

9 Total Credits Required

Physical Geography

Rule: Must complete at least 1 of the following courses

—	Course	Credits
	ERTH 303N - Weather and Climate	3 Credits
	GPHY 311N - Biogeography	3 Credits
	GPHY 314 - Global Mountain Environments	3 Credits
	GPHY 317 - Geomorphology	3 Credits
	GPHY 438 - Mountain Field Study	3 Credits
	GPHY 525 - Adv Physical Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geography and Society

Rule: Must complete at least 1 of the following:

—	Course	Credits
	GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
	GPHY 421 - Sustainable Cities	3 Credits
	GPHY 434 - Food and Famine	3 Credits
	GPHY 443 - Cultural & Global Competence	3 Credits

GPHY 515 - Adv Human Geography	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Human Environment Interaction

Rule: Must complete at least 1 of the following:

Course	Credits
GPHY 335 - Water Policy	3 Credits
GPHY 336 - Exploration & Discovery	3 Credits
GPHY 338 - Mountains and Society	3 Credits
GPHY 432 - Human Role Environ Change	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: GPHY 335 or GPHY 433 will also count toward the upper division core requirements.
GPHY 499 will also count toward upper-division electives.

Course	Credits
GPHY 335 - Water Policy	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
GPHY 499 - senior thesis / capstone	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Degree Electives

Rule: Must complete sufficient credits of GPHY electives to fulfill the 39 degree credit total

Note: Students must fulfill the degree credit total of 39 credits plus the university requirement for 39 upper division credits.

EDU 497 Methods: 5-12 Social Studies' counts toward degree credit totals.

Minimum Required Grade: C-

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Track

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

General Ed Mathematics

Rule: Must complete 1 of the following

Note: Students are encouraged to take M 115. Students who successfully complete M 122 Trigonometry, M 171 Calculus I, or M 172 Calculus II also meet the degree specific Gen Ed Mathematics requirement. Gen Ed credits do not count towards degree credits.

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Teaching Geography Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Geography (Minor); Track: Teaching Geography

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Introduction to Geography

Rule: Must complete all of the following courses

Course	Credits
GPHY 111N - Intro to Physical Geography	3 Credits
GPHY 112N - Intro to Phys Geography Lab	1 Credits
GPHY 121S - Human Geography	3 Credits
Minimum Required Grade: C-	7 Total Credits Required

Regional Core

Rule: Must complete at least 1 of the following courses

Course	Credits
GPHY 141S - Geography of World Regions	3 Credits
GPHY 144 - Montana's Mountains	3 Credits
GPHY 241 - Montana	3 Credits
GPHY 243X - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
GPHY 342 - North America	3 Credits
GPHY 344 - Crown of the Continent	3 Credits

	GPHY 347 - Regional Geography (Mult Reg)	3 Credits
	GPHY 348 - Field Studies in Geography	3 Credits
	GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
	GPHY 444 - High Asia	3 Credits
	GPHY 445 - Regional Geography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Geographic Methods

Rule: Must complete 1 of the following courses

—	Course	Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
	GPHY 385 - Field Techniques	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Systematic Geography

Rule: Must complete at least 1 course from 2 subcategories: 'Physical Geography', 'Geography and Society', and 'Human-Environment Interaction'

6 Total Credits Required

Physical Geography

Rule: May complete 1 of the following courses

—	Course	Credits
	ERTH 303N - Weather and Climate	3 Credits
	GPHY 311N - Biogeography	3 Credits
	GPHY 314 - Global Mountain Environments	3 Credits
	GPHY 317 - Geomorphology	3 Credits
	GPHY 438 - Mountain Field Study	3 Credits
	GPHY 525 - Adv Physical Geography	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Geography and Society

Rule: May complete 1 of the following courses

—	Course	Credits
	GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
	GPHY 421 - Sustainable Cities	3 Credits
	GPHY 434 - Food and Famine	3 Credits
	GPHY 443 - Cultural & Global Competence	3 Credits
	GPHY 515 - Adv Human Geography	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Human Environment Interaction

Rule: May complete 1 of the following courses

—	Course	Credits
	GPHY 335 - Water Policy	3 Credits
	GPHY 336 - Exploration & Discovery	3 Credits
	GPHY 338 - Mountains and Society	3 Credits
	GPHY 432 - Human Role Environ Change	3 Credits
	GPHY 433 - Cultural Ecology	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Geographic Information Systems Certificate

Certificate in GIS Sciences and Technologies

The Certificate in GIS Sciences and Technologies, jointly offered by the departments of Geography and Forest Management, is aimed at present or future professionals or scientists who require skills in GIS technologies. The purpose of this program is to provide undergraduate students or individuals possessing an undergraduate degree with the training, knowledge, and understanding necessary to acquire, process, analyze, and properly display digital geographic data.

Special Requirements for the Certificate

To earn a certificate in GIS Sciences and Technologies, students must either complete or have completed an undergraduate degree and complete a minimum of 20 semester credit hours of course work, including 9 to 11 required credits and 9 to 11 elective credits as described below. Students must achieve at least an overall grade point average of 3.0 for courses within the program in order to earn a certificate. The certificate will be awarded upon the successful completion of all of the requirements of the certificate and the undergraduate degree.

Certificate of Art - Geographic Information Systems

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 20

Required Cumulative GPA: 3.0

Required GIS Core Courses

Rule: Must complete 1 from each of the following subcategories

Minimum Required Grade: C-

9-11 Total Credits Required

Introduction to GIS

Rule: Must complete 1 and only 1 of the following courses

Note: Prior to Fall 2013, this was fulfilled by FOR 250 & 350 or GPHY 381 & 382. In 2013 this requirement could be fulfilled with FORS 284.

—	Course	Credits
	FORS 250 - Intro to GIS for Forest Mgt	3 Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Photogrammetry/Remote Sensing

Rule: Must complete 3-4 credits of the following courses

Note: GPHY 487 and 489 should be completed together.

—	Course	Credits
	FORS 351 - Env Remote Sensing	3 Credits
	GPHY 487 - Remote Sensing/Raster GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Additional Required Courses

Rule: Must complete 3-4 credits of the following courses

Note: GPHY 488 and 489 should be completed together. Spring 2014 and 2015, GPHY 488 and 489 are fulfilled by GPHY 491 GIS Applications.

—	Course	Credits
	FORS 350 - Forestry Apps of GIS	3 Credits
	GPHY 488 - Thematic Cartography & GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Advanced Elective Courses

Rule: Must complete 9-11 credits of the following subcategories

Note: Students can choose electives from any subcategory/ies.

Minimum Required Grade: C-

9-11 Total Credits Required

Raster GIS, Remote Sensing, and Image Analysis

Rule: May complete 4-8 credits from the following courses

Note: GPHY 587 and 489 should be completed together.

—	Course	Credits
	FORS 551 - Digital Image Processing	4 Credits
	GPHY 587 - Image Analysis & Modeling	3 Credits
	GPHY 589 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		4-8 Total Credits Required

Vector GIS and Networks

Rule: May complete 3-11 credits of the following courses

Note: GPHY 486 and 489 should be completed together. GPHY 588 and 589 should be completed together.

—	Course	Credits
	GPHY 486 - Transport, Planning & GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
	GPHY 580 - Seminar GIS & Cartography	3 Credits
	GPHY 588 - Vector GIS	3 Credits
	GPHY 589 - Cartography/GIS Laboratory	1 Credits
Minimum Required Grade: C-		3-11 Total Credits Required

Data Management and Programming

Rule: May complete 3-10 credits of the following courses

Note: GPHY 468 and 469 should be completed together.

—	Course	Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits

	FORS 505 - Sampling Methods	3 Credits
	GPHY 468 - Community & Regional Analysis	3 Credits
	GPHY 469 - Planning & Analysis Laboratory	1 Credits
Minimum Required Grade: C-		3-10 Total Credits Required

GIS Applications

Rule: May complete 3-11 credits of the following courses

Note: GPHY 482 and 489 should be completed together.

	Course	Credits
	ANTY 452 - GIS in Archaeology	3 Credits
	FORS 503 - GIS:Meth & Applic I	3 Credits
	GPHY 385 - Field Techniques	3 Credits
	GPHY 481 - Advanced Cartographic Design	3 Credits
	GPHY 482 - Spatial Analysis & GIS	3 Credits
	GPHY 489 - Cartography/GIS Laboratory	1 Credits
	GPHY 564 - Planning Design	3 Credits
	WILD 562 - Wildlife Habitat Modeling	3 Credits
Minimum Required Grade: C-		3-11 Total Credits Required

Geosciences Department

James R. Staub, Chair

Human impact on Earth systems and reliance on Earth's resources will increase as human population and economic production grows. These impacts are creating "global grand challenges": complex, globally important problems that require an interdisciplinary approach. The most pressing grand challenges over the next decade will be resource scarcity/depletion (especially water and petroleum), adaption to and mitigation of climate change and natural hazards, and environmental stewardship of highly stressed physical and biological Earth systems. As University of Montana Geoscientists, we address these challenges in our research and teaching. We develop the knowledge to find and extract mineral and water resources, solve problems caused by using those resources and develop models of the past, present and future Earth. Faculty, staff, graduate students, and undergraduate students are helping Montana and the World develop a sustainable future.

Our Vision:

We will build and teach a fundamental understanding of Earth processes to benefit humankind and sustain Earth systems.

Our Goals:

1. Conduct geoscience research, including obtaining extramural funding to perform essential and transformative research.
2. Disseminate research findings by publishing in peer-reviewed journals and presenting at national and international scientific conferences.
3. Teach students how to learn from known sources of information and create new knowledge from their own research.
4. Engage all graduate students and selected undergraduates in research and publication.
5. Produce graduates competent in their disciplines who can perform well in field, laboratory and computational settings, and who are prepared to serve as high-quality professionals in geoscience and related fields.
6. Provide opportunities for students to work and learn in other countries through international research and learning opportunities.
7. Educate the general student population about the nature of science and basic scientific principles through the study of Earth and its natural systems.
8. Engage the public with important geoscience issues through outreach and community education.

UM Geosciences in the National Context

With B.S., M.S. and Ph.D. degrees, UM Geosciences is one of 120 Ph.D. granting Geoscience departments in the United States. U.S. News & World Report ranks the UM Geosciences program with Universities like Florida State, Michigan Tech, University of Georgia, University of Pennsylvania, and University of South Carolina. We are ranked above schools like University of Idaho, University of Missouri, UNLV, and Notre Dame.

Employment

Geoscientists completing our program are employed by private industry, federal, state, and local governmental agencies, environmental consulting firms, non-profit organizations, and by schools needing Earth Science teachers. Jobs in geosciences are available at the B.S., M.S. and Ph.D. levels. The M.S. degree is considered the main working professional degree. The Ph.D. degree is required for positions at universities and with organizations specializing in research. However, there are ample opportunities for geoscience employment with the B.S. degree. Our graduates have a wide range of educational and employment opportunities. Over the last decade, 95% of our graduate program alumni are employed in Geosciences: 13% work for government, 23% for industry, 31% for consultancies and 2% for non-governmental organizations, 10% are teaching, and 17% went on for a Ph.D. UM Geosciences graduates have exceptional placement rates.

Undergraduate Degree Requirements

We offer three Bachelor of Science degrees: Geosciences B.S., International Field Geosciences Joint B.S. with University of Cork (Ireland), and International Field Geosciences Dual B.S. with Potsdam University (Germany). We also offer an option in Earth Science Education.

The Upper-division Writing Expectation must be met for all degree options by successfully completing an upper-division writing course from the approved list in the Academic Policies and Procedures section of this catalog or by completing GEO 499 (GEOS 499).

Department Faculty

Professor

Joel T. Harper, Ph.D, University of Wyoming, 1998
Marc S. Hendrix, Ph.D., Stanford University, 1992
Nancy W. Hinman, Ph.D., University of California (San Diego), 1987
James W. Sears, Ph.D., Queen's University, 1979
George Stanley, Ph.D., University of Kansas, 1977
James R. Staub, Ph.D., University of South Carolina, 1985 (Dept. Chair)

Associate Professor

Julia A. Baldwin, Ph.D., Massachusetts Institute of Technology, 2003
Rebecca O. Bendick, Ph.D., University of Colorado, Boulder, 2000
Marco P. Maneta, Ph.D., University of Extremadura (Spain), 2006
Andrew C. Wilcox, Ph.D., Colorado State University, 2005

Assistant Professor

Payton Gardner, PhD., University of Utah, 2009

Lecturer

Kathleen M. Harper, Ph.D., University of Wyoming, 1997

Research Faculty

Carrine E. Blank, Ph.D., University of California, Berkeley; Integrative Biology, 2002
Michael Hofmann, Ph.D., The University of Montana, 2005

Affiliates

Robert Lankston, Faculty Affiliate
Patrick Meere
Tetsuji Onou
Jill Scott
Alisa Wade

Emeritus

Donald W. Hyndman
Ian M. Lange, Ph.D., University of Washington, 1968
Johnnie N. Moore, Ph.D., University of California (Los Angeles), 1976
Raymond C. Murray, Ph.D., University of Wisconsin, 1955
Steven D. Sheriff, University of Wyoming, 1981
Graham R. Thompson, Ph.D., Case Western Reserve University, 1971
Donald Winston, Ph.D., University of Texas, 1963
William W. Woessner, Ph.D., University of Wisconsin (Madison), 1978

Course Descriptions

Geoscience

- **GEO 101N - Introduction to Physical Geology**
Credits: 3. Offered autumn and spring. General geology including the work of wind, flowing water, glacial ice, gravity, earthquakes, volcanoes and plate tectonics in shaping the earth. **Course Attributes:** Natural Science Course
- **GEO 102N - Introduction to Physical Geology Lab**
Credits: 1. Offered autumn and spring. Prereq. or coreq., GEO 101N (preferred) or 105N or 108N. A series of laboratory and field experiences designed around basic geologic processes and materials. Familiarization with common minerals, rocks, land forms, and structures. Intended to provide laboratory experience primarily with GEO 101N, but can be taken with or following any of the other freshman GEO courses listed above. **Course Attributes:** Natural Science Lab Course
Natural Science Course

- **GEO 105N - Oceanography**

Credits: 3. Offered spring. The ocean covers 70 % of the globe, and yet vast regions remain unexplored. Interactions between the atmosphere and the sea moderate and control our climate. Nearly 40 % of the world's population lives within 100 kilometers of the coast. The oceans are geographically, environmentally, culturally, and economically critical to society. This course introduces oceanography, including the origin of water and ocean basins; marine resources; atmospheric circulation; air-sea interaction; ocean-climate feedback; currents, tides, and coastal processes; marine ecology; and use and misuse of the oceans. **Course Attributes:**
Natural Science Course

- **GEO 106N - History of Life**

Credits: 3. Offered spring. The evolution of plants, invertebrates and vertebrate animals, highlighting major events in the evolution of life on Earth. Includes laboratory experience with fossils. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **GEO 107 - Natural Hazards**

Credits: 3. Offered spring. Examination of volcanism, earthquakes, landslides, floods, coastal erosion, hurricanes, and asteroid impacts. Emphasis on processes, recognition and consequences of catastrophic events, and how to minimize their societal impacts.

- **GEO 108N - Climate Change**

Credits: 3. Offered autumn. The geoscience perspective on the earth's climate system. Climate processes and feedbacks, climate history from early earth to the ice ages, present and future changes due to natural processes and human activities. **Course Attributes:**
Natural Science Course

- **GEO 151 - Introduction to Fossil Fuels**

Credits: 3. Offered autumn. A broad introduction to the basic principles and concepts related to the exploration for, the composition of, and the utilization of fossil fuels (coal, coal bed methane, natural gas, and oil). Environmental issues related to fossil fuel development and utilization are also addressed.

- **GEO 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GEO 191N - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Internships/Practicums Natural Science Course

- **GEO 211 - Earth's History and Evolution**

Credits: 4. Offered autumn and spring. Prereq., GEO 101N and GEO 102N. Traces the history of the Earth since its inception 4.6 billion years ago. Presents scientific theories for the origin of the Earth and the nature of important earth shaping events of the past, including the development of the oceans, atmosphere, and climate.

- **GEO 225 - Earth Materials**

Credits: 4. Offered autumn. Prereq., any geoscience 100 level lecture course, GEO 102N, CHMY 121N or 141N. Study of minerals and rocks utilizing an Earth Systems approach; mineral identification and paragenesis; survey of the distribution of minerals from the interior to the surfaces of planets and the processes that led to their formation.

- **GEO 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GEO 304E - Science and Society**

Credits: 3. Offered autumn. Role of scientific knowledge in human societies from the pre-Classical to the present. Discussion of tools for integrating science into ethical, political, and social decisions, including analyses of modern case studies from physical sciences. **Course Attributes:** Ethical & Human Values Course

- **GEO 305 - Igneous & Metamorph Petrology**

Credits: 4. Offered spring. Prereq., GEO 225, CHMY 143N. Igneous rock associations, igneous processes and origins; metamorphic minerals and phase relationships, metamorphic zones, facies, and conditions; metamorphic environments, metallic minerals and mineral deposits.

- **GEO 309 - Sedimentation/Stratigraphy**

Credits: 4. Offered spring. Prereq. GEO 211, 225. Origins of sediments and sedimentary rocks; climate, weathering, and weathering products; transport, deposition, and depositional environments of sediments; concepts and methods of stratigraphy including correlation of sedimentary rocks and an introduction to basin analysis.

- **GEO 311 - Paleobiology**

Credits: 3. Offered spring. Prereq. GEO 101N or equiv. level Biology. Survey of the major groups of organisms in the geologic record and hands-on study of fossils; application of geologic and biologic data and principles to solve problems in geoscience and bioscience.

- **GEO 315 - Structural Geology**

Credits: 4. Offered autumn. Prereq., GEO 211, 225. Structures of deformed rocks; mechanical principles; graphical interpretation of structural problems, tectonic principles.

- **GEO 317 - Planetary Science**

Credits: 3. Offered autumn even-numbered years. Prereq., PHSX 205N/206N or PHSX 215N/216N and M 162, 171. Same as ASTR 351. Physical and geological characteristics of planets, satellites, asteroids, comets, and meteoroids with an emphasis on comparative planetology.

- **GEO 318 - Surface Processes**

Credits: 4. Offered spring. Prereq., GEO 101/102, GEO 211, M 162 or M 171, and PHSX 205/206 or PHSX 215/216. This course will introduce students to the study of the earth using the laws and principles of physics. The course will describe the mechanisms underlying the processes that shape the earth and drive its evolution, including climate, tectonics, hydrology, glaciers, and geomorphology. The course will combine lectures, field data collection, data analysis, and lab activities.

- **GEO 320 - Global Water**

Credits: 4. Offered autumn. Prereq. one semester of college chemistry, WRIT 101 or equiv., and completion of one writing course. Students are encouraged to take the UDWPA prior to taking this course. Fulfills the Upper Division Writing Requirement. Water is necessary for life. Without it, life as we know it cannot exist. This course discusses the chemistry of water as it moves through the hydrological cycle. We discuss how water chemistry evolves through atmospheric water, rain water, ground water, surface water, and sea water. Students will have an understanding of the chemical attributes of water in major water reservoirs. Class discussions, formal and informal writing assignments, a short laboratory experiment, and a field trip highlight examples of water chemistry. Students will use excel to solve problems and will learn citation conventions relevant for scientific writing. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **GEO 327 - Geochemistry**

Credits: 4. Offered alternate years. Prereq. one year of college chemistry, one semester of calculus, and one semester of physical geology, or consent of instructor. One semester of mineralogy recommended. The chemical properties of elements control their geological distribution and underlie the basic physical properties of rocks. An understanding of geochemistry will help students understand water chemistry, sediment geochemistry, and igneous petrology. The course covers chemical principles applied to geologic materials and processes, including the origin and chemical composition of earth, atmosphere, and hydrosphere. Principles of stable and radiogenic isotope geochemistry are discussed. Students will use excel to solve problems. Class discussions,

problems sets, and exams are used to assess student performance.

- **GEO 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GEO 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Specific topics of particular interest to individual students.

- **GEO 398 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., 12 credits in geosciences. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. No more than 3 credits of GEO 398 may be applied to the geosciences minor. A maximum of 6 credits of Internship may count toward graduation. **Course Attributes:**
Internships/Practicums

- **GEO 420 - Hydrogeology**

Credits: 4. Offered spring. Prereq., GEO 101N-102N; PHSX 205N/206N or PHSX 215N/216N ; M 162 or 171 strongly recommended or consent of instr. Occurrence, movement, quality, and methods of quantification of groundwater. Geological framework and physics of groundwater flow. Supply, contamination, and management problems.

- **GEO 421 - Hydrology**

Credits: 3. Offered autumn. Prereq. one semester college calculus and physics or consent of instructor. Introduction to the physical mechanisms that drive the water cycle at different scales. The course covers heat, momentum and mass transfer and storage mechanisms in turbulent systems and their role in the global and local climates. At the local scale, the equations that govern surface and subsurface water flows are studied. Along with the overarching goals, students will improve their quantitative skills, will gain experience accessing and reading the professional literature and will improve their capabilities to acquire knowledge independently.

- **GEO 433 - Global Tectonics**

Credits: 3. Offered autumn. Prereq., GEO 315, M 162, and 2.25 or better overall GPA in geosciences courses. Geodynamics and tectonics of the Earth and other planets. Course material includes methods of observing tectonic processes and tectonic phenomena, both at the surface and in the deep earth, over a wide range of time scales.

- **GEO 443 - Principles of Sedimentary Petrology**

Credits: 4. Offered autumn. Prereq., GEO 225 or graduate standing. Field, hand specimen and thin section petrology of siliciclastic and carbonate rocks, emphasis on tectonic and diagenetic interpretation of siliciclastic rock and environments of deposition and diagenesis of carbonate rocks.

- **GEO 460 - Process Geomorphology**

Credits: 4. Offered autumn. Prereq., one semester college calculus and physics. Quantitative examination of landforms, runoff generation, weathering, mechanics of soil erosion by water and wind, mass wasting, glacial and periglacial processes and hillslope evolution.

- **GEO 482 - Global Change**

Credits: 3. Offered Spring. Same as CCS 482. Prereq., upper division/higher standing in Geosciences or consent of instructor. Lectures, readings, discussions and practicum on the complexity of global climate. Emphasizes the physical, geochemical and geologic processes affecting climate change over geologic and recent time scales.

- **GEO 488 - Snow, Ice and Climate**

Credits: 3. Offered spring. Prereq., M 121. Study of basic physical processes occurring in snow and

ice, and how these processes govern the interaction between frozen water and the climate system. The first half of the course focuses in snow, with special attention to snow formation in the atmosphere, snow metamorphism, water flow through snow, and basic avalanche mechanics. The second half of the course focuses on ice and includes glacier and ice sheet flow dynamics, glacier hydrology, and ice age theory. Graduate students will be required to complete additional problem sets requiring higher level math; perform additional reading assignments; perform at a higher level on assignments and exams where students are asked to outline and describe various physical processes; submit a well researched and reference research proposal that is able to synthesize previous research and provide a sophisticated research plan.

- **GEO 491 - Special Topics**

Credits: 1 TO 8. (R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics.

- **GEO 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Specific topics of particular interest to individual students.

- **GEO 494 - Senior Geology Seminar**

Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., upper-division standing in geosciences or consent of instr. Independent study of various topics under the direction of a faculty member.

- **GEO 498 - Internship**

Credits: 1 TO 6. Offered every term. Prereq., 12 credits in geosciences. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. No more than 3 credits of GEOS 398 may be applied to the geosciences minor. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums

- **GEO 499 - Senior Thesis /Capstone**

Credits: 3 TO 10. (R-10) Offered every term. Prereq., 18 credits in geosciences. Independent research project in any geosciences topic supervised by faculty member, and leading to completion of baccalaureate degree. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **GEO 508 - Fundamentals of Academic Research**

Credits: 2. Offered autumn. Prereq., graduate standing. An introduction to research methods and tools in the academic setting intended for first semester graduate students in geosciences. Topics include proposal writing, presenting research results in oral and written formats, using computer tools for research in the geosciences, and ongoing research of department faculty. Level: Graduate

- **GEO 528 - Sedimentary Basin Analysis**

Credits: 4. Offered intermittently. Influence of allocyclic processes (tectonism, climate, eustacy, etc.,) in shaping the evolution of sedimentary basins. Emphasis on integration and synthesis of tools of sedimentary basins analysis, including the study of depositional systems, provenance, paleocurrents, subsidence, sequence stratigraphy, and well logs. Level: Graduate

- **GEO 531 - Environmental Geochemical Metal Contamination**

Credits: 4. Offered intermittently. Prereq., GEO 570, 579; CHMY 442; FOR 511 or consent of instr. Integration of major processes and cycles transporting, fixing, and transforming inorganic contaminants in aquatic systems, soils, sediments and subsurface environments. Concentration on research to solve complex environmental problems. Level: Graduate

- **GEO 548 - Topics in Cryosphere**

Credits: 3. (R-6 M.S., R-12 Ph.D.) Prereq., graduate standing or consent of instructor. Readings, discussions, lectures, and field experiments on various topics related to snow, ice, and climate processes. Recent topics: meltwater infiltration in snow, glacier hydrology, climate cycles, ice, and sea level rise. Level: Graduate

- GEO 560 - Fluvial Geomorphology**
 Credits: 3. Offered spring. Prereq., graduate standing or consent of instructor. Application of fluid mechanics to sediment transport and development of river morphology. Form and process in river meanders, the pool-riffle sequence, aggradation, grade, and baselevel. Level: Graduate
- GEO 570 - Aqueous Geochemistry**
 Credits: 4. Offered alternate years. Prereq. one year college chemistry and one year of calculus, or consent of instructor. Water is necessary for life. Water carries nutrients, dissolved minerals, and contaminants through the hydrological cycle and within living systems. This course discusses the chemistry of aqueous systems including aqueous kinetics, aqueous thermodynamics, acid/base chemistry, carbonate systematics, oxidation/reduction reactions, mineral solubility, and complexation. It includes an introduction to the use of geochemical models to model kinetic and thermodynamic systems. Concepts are applied to examples from natural systems that are selected based on the interests of the students in the class. Students are evaluated by problem sets, exams, and a term paper Level: Graduate
- GEO 572 - Advanced Hyrdogeology**
 Credits: 3. Offered autumn. Prereq., GEO 420 or consent of instr. Advanced concepts used in groundwater investigations, including flow systems analysis, hydrogeologic monitoring and sampling, resource evaluation, exploration, development and monitoring, and contaminant transport. Special problem areas in groundwater exploration and management. Level: Graduate
- GEO 573 - Application Groundwater Modeling**
 Credits: 3. Offered spring. Prereq., GEO 420 or consent of instr. Development of numerical modeling techniques, finite difference and finite element modeling of groundwater flow systems. Application of standard 2D and 3D models to field problems. Level: Graduate
- GEO 579 - Chemistry of Hot Springs**
 Credits: 3. Offered alternate years. Prereq., one year of college of chemistry or consent of instr. Hydrothermal systems support the most ancient microorganisms and may have been the locus for the first appearance of life on Earth. Terrestrial hot springs are the surface expression of deep circulation of fluids that concentrate elements, opening a window into processes leading to ore formation. This course discusses the chemistry and geology of hydrothermal systems including solute/gas geothermometry, acid/base reactions, oxidation/reduction reactions, mineral equilibrium, and microbial ecology as applied to terrestrial and submarine hydrothermal systems. The course includes an introduction to the use of geochemical models and a field trip to a hot spring system. Students are evaluated on class discussions and presentations, problems sets, and a term paper. Level: Graduate
- GEO 580 - Topics Mineral & Petrol**
 Credits: 1 TO 12. (R-6 for M.S., R-12 for Ph.D.) Prereq., consent of instr. Offerings on request of graduate students by arrangement with appropriate faculty. Recent topics: tectonics and petrology; alkaline igneous rocks. Level: Graduate
- GEO 582 - Tps Structure & Geophysics**
 Credits: 1 TO 12. (R-6 for M.S., R-12 for Ph.D.) Prereq., consent of instr. Offerings on request of graduate students by arrangement with appropriate faculty. Recent topics: structural analysis, Precambrian crustal evolution, field trips on Rocky Mountain structure. Level: Graduate
- GEO 583 - Tps Strat, Sed & Paleo**
 Credits: 1 TO 12. (R-6 for M.S., R-12 for Ph.D.) Prereq., consent of instr. Offerings on request of graduate students by arrangement with appropriate faculty. Recent topics: evolution of life; Proterozoic stratigraphy; reefs through time. Level: Graduate
- GEO 585 - Tps Hydro Low-Temp Geochem**
 Credits: 1 TO 12. (R-6 for M.S., R-12 for Ph.D.) Prereq., consent of instr. Offerings on request of graduate students by arrangement with appropriate faculty. Recent topics: field methods, well design, contaminant transport, geochemical modeling. Level: Graduate

- **GEO 587 - Geomorph Seminar**
Credits: 1 TO 6. (R-6 for M.S., R-12 for Ph.D.) Offered alternate years. Prereq., consent of instr. Reading and discussion of relevant papers. Offerings on request of graduate students by arrangement with appropriate faculty. Recent topics: landscape evolution; weathering processes; tectonic geomorphology. Level: Graduate
- **GEO 590 - Supervised Internship**
Credits: 1 TO 12. Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate **Course Attributes:** Research & Creative Schlrshp
- **GEO 595 - Special Topics**
Credits: 1 TO 8. (R-8) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums
- **GEO 597 - Advanced Problems**
Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., consent of instr. Investigations of geological problems exclusive of thesis or dissertation research. Level: Graduate
- **GEO 599 - Thesis Research**
Credits: 1 TO 12. (R-6) Offered every term. Prereq., thesis proposal approval. Directed research to serve as thesis for the master degree. Credit assigned upon submittal of final copy of approved and bound thesis. Level: Graduate
- **GEO 699 - Dissertation Research**
Credits: 1 TO 12. (R-12) Offered every term. Prereq., dissertation proposal approval. Directed research to serve as dissertation for the Ph.D. degree. Credit assigned upon submittal of final copy of approved and bound dissertation. Level: Graduate

Geosciences B.S.

Bachelor of Science - Geosciences

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Note: This option is designed for students who seek post-graduate employment as a professional geoscientist or preparation for graduate study in geosciences.

Lower Division Core

Rule: Must complete all of the following courses

Note: .

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Course	Credits
GEO 101N - Intro to Physical Geology	3 Credits
GEO 102N - Intro to Physical Geology Lab	1 Credits
GEO 200 - Historical Geology	2 Credits
GEO 225 - Earth Materials	4 Credits
GEO 228 - Earth Surface Processes	2 Credits
GEO 231 - Geosciences Field Methods	2 Credits
Minimum Required Grade: C-	14 Total Credits Required

Degree Electives

Rule: Must complete 6 geosciences courses numbered 300 and above for a minimum of 18 credits

Minimum Required Grade: C-

18 Total Credits Required

Cognate Sciences

Rule: In addition to completing course work in Geosciences, a minimum of 30 credits in cognate science classes must be completed.

Note: More advanced courses in Chemistry, Computer Science, Math, and Physics may be used to meet the 30 credit minimum total in cognate sciences. Course substitutions for the 30 credit minimum in cognate sciences must be approved by a departmental advisor.

Physics

Rule: Must complete 1 of the following sequences

10 Total Credits Required

Physics

Rule: May complete the following sequence

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits

	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete the following sequence

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Chemistry

Rule: Must complete the following courses

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Math

Rule: Must complete 1 of the following subcategories

7-8 Total Credits Required

Math Option 1

Rule: May complete the following 2 courses

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 274 - Intro to Differential Equation	3 Credits

Minimum Required Grade: C-	7 Total Credits Required
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Math Option 2

Rule: May complete the following 2 courses

Course	Credits
M 171 - Calculus I	4 Credits
M 172 - Calculus II	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Computer Science

Rule: Must complete 1 course in Computer Science (Programming or Modeling)

Note: These courses are recommended to complete the Computer Science requirement. Credit may be received for only 1 of these 2 courses for the 30 credit minimum cognate science requirement.

Course	Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper Division Writing

Rule: Must complete 1 upper division writing course

Note: These courses are recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

Course	Credits
GEO 320 - Global Water	4 Credits
GEO 499 - senior thesis / capstone	3 To 10 Credits
Minimum Required Grade: C-	3 Total Credits Required

Languages

Rule: Must complete 1 of the following courses

Note: Students graduating in Geosciences may substitute one of these courses in place of the Modern and Classical Language requirement.

	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Earth Science Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Science - Geosciences; Earth Science Education Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 54

Required Cumulative GPA: 2.0

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Lower Division Core

Rule: Must complete all of the following courses

Note: .

Minimum Required Grade: C-

17 Total Credits Required

Rule: Must complete all of the following courses.

—	Course	Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
	GEO 200 - Historical Geology	2 Credits
	GEO 225 - Earth Materials	4 Credits
	GEO 228 - Earth Surface Processes	2 Credits
	GEO 231 - Geosciences Field Methods	2 Credits
Minimum Required Grade: C-		14 Total Credits Required

Environmental Geoscience Course

Rule: Must complete one of the following.

—	Course	Credits
	GEO 105N - Oceanography	3 Credits
	GEO 108N - Climate Change	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Geosciences

Minimum Required Grade: C-

9 Total Credits Required

Required Upper Division Geoscience

Rule: Complete all of the following.

—	Course	Credits
	GEO 304E - Science and Society	3 Credits
	GEO 311 - Paleobiology	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Elective Upper Division Geoscience

Rule: Complete one additional GEO course at the 300- or 400-level

Note: GEO 320 Global Water is recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

Physics

Rule: Must complete 1 of the following sequences

10 Total Credits Required

Physics

Rule: May complete the following sequence

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete the following sequence

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Chemistry

Rule: Must complete the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123 - Intro to Organic & Biochem	3 Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		7 Total Credits Required

Math

Rule: Must complete the following courses

—	Course	Credits
	M 151 - Precalculus	4 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Astronomy

Rule: Must complete the following course

—	Course	Credits
	ASTR 131N - Elementary Astronomy I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching Methods Course

Rule: Must complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Languages

Rule: Must complete 1 of the following courses

Note: Students graduating in Geosciences may substitute one of these courses in place of the Modern and Classical Language requirement.

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Course	Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C-	3 Total Credits Required

International Field Geosciences Dual

This degree is designed specifically for students who seek to combine a rigorous education in the Geosciences with a year-long international geosciences experience and an emphasis on field-based learning. It requires living and attending classes overseas. Students demonstrating a high level of performance at the University will be eligible for partial financial support as funds are available. Although most of the course work completed during the year abroad will take place at University Potsdam in Germany, additional course work is required at the University College Cork in Ireland. For students who satisfy all degree requirements, a B.S. degree in International Field Geosciences will be awarded by the University of Montana and a second B.S. degree in International Field Geosciences will be awarded by Potsdam University.

Bachelor of Science - International Field Geos Dual

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Note: This option is designed specifically for students who seek to combine a rigorous education in the Geosciences with a yearlong international Geosciences experience and an emphasis on field-based learning. It requires attending classes and living overseas. Students demonstrating a high level of performance at the University will be eligible for partial financial support as funds are available. Although most of the course work completed during the year abroad will take place at the Potsdam University in Germany, additional course work is required at the University College Cork in Ireland. For students who satisfy all degree requirements, a B.S. degree in International Field Geosciences will be awarded by The University of Montana and a second B.S. degree in International Field Geosciences will be awarded by the Potsdam University.

Lower Division Core

Rule: Must complete all of the following courses

Note: .

Course	Credits
GEO 101N - Intro to Physical Geology	3 Credits
GEO 102N - Intro to Physical Geology Lab	1 Credits

	GEO 200 - Historical Geology	2 Credits
	GEO 225 - Earth Materials	4 Credits
	GEO 228 - Earth Surface Processes	2 Credits
	GEO 231 - Geosciences Field Methods	2 Credits
Minimum Required Grade: C-		14 Total Credits Required

Upper Division Core

Rule: Must complete all of the following courses

—	Course	Credits
	GEO 326 - Sedimentary Geol Field Trip 1	2 Credits
	GEO 429 - Field Geology	6 Credits
Minimum Required Grade: C-		8 Total Credits Required

Degree Electives

Rule: Must complete 15 credits from the following courses:

—	Course	Credits
	GEO 305 - Igneous & Metamorph Petrology	4 Credits
	GEO 311 - Paleobiology	3 Credits
	GEO 315 - Structural Geology	3 Credits
	GEO 320 - Global Water	4 Credits
	GEO 327 - Geochemistry	4 Credits
	GEO 420 - Hydrogeology	4 Credits
	GEO 433 - Global Tectonics	3 Credits
	GEO 442 - Architecture of Sed Deposits	4 Credits
	GEO 460 - Process Geomorphology	4 Credits
	GEO 491 - Special Topics	1 To 8 Credits
Minimum Required Grade: C-		15 Total Credits Required

Physics

Rule: Must complete 1 of the following sequences

10 Total Credits Required

Physics

Rule: May complete the following sequence

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete the following sequence

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Chemistry

Rule: Must complete 1 of the following subcategories

8-10 Total Credits Required

Chemistry Option 1

Rule: May complete all of the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
Minimum Required Grade: C-		8 Total Credits Required

Chemistry Option 2

Rule: May complete all of the following courses

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Math

Rule: Must complete 1 of the following subcategories

7-8 Total Credits Required

Math Option 1

Rule: May complete the following 2 courses

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 274 - Intro to Differential Equation	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Math Option 2

Rule: May complete the following 2 courses

—	Course	Credits
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	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Computer Science

Rule: Must complete 1 of the following courses

—	Course	Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits
	GPHY 284 - Intro to GIS and Cartography	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing

Rule: Must complete the following course

Note: This course is recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

—	Course	Credits
	GEO 320 - Global Water	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Languages

Rule: May complete the following language sequence

—	Course	Credits
	GRMN 101 - Elementary German I	5 Credits
	GRMN 102 - Elementary German II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Overseas Coursework

Rule: Must complete the following courses and field work at Potsdam University and University College of Cork

Note: In addition to Geosciences coursework completed at UM students must complete the following:

1. Selection of one field course run by Potsdam University listed below
 - 1a. BP 15 (Field Course - France)
 - 1b. BW01 (Field Course - Norway)
 - 1c. BW02 (field Course - Alps)
2. 1 formal field course module run by University College Cork, selected from
 - 2a. GL 2016 (Easter Field Course - Dingle Peninsula)
 - 2b. GL 3019 (Easter Field Course - Western Scotland)
 - 2c. ER 3002 (Easter Field Course - North Clare)
 - 2d. GL 4008 (Easter Field Course - Central Greece)
 - 2e. another equivalent-level field course run by UCC and approved apriori by their UCC and UM advisors
3. Any 4 of the following courses offered by Potsdam University
 - 3a. Regional Geology
 - 3b. Paleoclimate @ Quaternary Geology
 - 3c. Analysis of Geologic Maps
 - 3d. Analytic Geochemistry
 - 3e. Natural Hazards
 - 3f. Tectonophysics & Rheology
 - 3g. Seismology
 - 3h. Seismics
 - 3i. Geoelectrics
 - 3j. Sedimentary Systems & Stratigraphic Geomorphology
 - 3k. Tectonics and Geodynamics
4. 2 additional cognate science courses to be taken at Potsdam University

Minimum Required Grade: C-

27-30 Total Credits Required

International Field Geosciences Joint

This degree is designed specifically for students who seek to combine a rigorous education in the Geosciences with a yearlong international geosciences experience and an emphasis on field-based learning. It requires living and attending classes overseas. Students demonstrating a high level of performance at the University will be eligible for partial financial support as funds are available. Although most of the course work completed during the year abroad will take place at University College Cork (UCC) in Ireland, additional course work is required through Potsdam University in Germany. For students who satisfy all degree requirements, a joint B.S. degree in International Field Geosciences will be awarded by the University of Montana and the University College Cork.

Bachelor of Science - International Field Geos Joint

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Note: This option is designed specifically for students who seek to combine a rigorous education in the Geosciences with a yearlong international Geosciences experience and an emphasis on field-based learning. It requires attending classes and living overseas. Students demonstrating a high level of performance at the University will be eligible for partial financial support as funds are available. Although most of the course work completed during the year abroad will take place at University College Cork (UCC) in Ireland, additional

course work is required through Potsdam University in Germany. For students who satisfy all degree requirements, a joint B.S. degree in International Field Geosciences will be awarded by The University of Montana and the University College Cork.

Lower Division Core

Rule: Must complete all of the following courses

Note: .

—	Course	Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
	GEO 200 - Historical Geology	2 Credits
	GEO 225 - Earth Materials	4 Credits
	GEO 228 - Earth Surface Processes	2 Credits
	GEO 231 - Geosciences Field Methods	2 Credits
Minimum Required Grade: C-		14 Total Credits Required

Upper Division Core

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

13 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

—	Course	Credits
	GEO 315 - Structural Geology	3 Credits
	GEO 429 - Field Geology	6 Credits
Minimum Required Grade: C-		9 Total Credits Required

Subcategory 2

Rule: Must complete 1 of the following courses

—	Course	Credits
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	GEO 442 - Architecture of Sed Deposits	4 Credits
	GEO 443 - Prin of Sedimentary Petrology	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Degree Electives

Rule: Must complete 12 credits from the following courses:

Course	Credits
GEO 305 - Igneous & Metamorph Petrology	4 Credits
GEO 311 - Paleobiology	3 Credits
GEO 320 - Global Water	4 Credits
GEO 327 - Geochemistry	4 Credits
GEO 420 - Hydrogeology	4 Credits
GEO 433 - Global Tectonics	3 Credits
GEO 442 - Architecture of Sed Deposits	4 Credits
GEO 443 - Prin of Sedimentary Petrology	4 Credits
GEO 460 - Process Geomorphology	4 Credits
GEO 491 - Special Topics	1 To 8 Credits
Minimum Required Grade: C-	12 Total Credits Required

Physics

Rule: Must complete 1 of the following sequences

10 Total Credits Required

Physics

Rule: May complete the following sequence

Course	Credits
PHSX 205N - College Physics I	4 Credits

	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete the following sequence

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Chemistry

Rule: Must complete 1 of the following subcategories

8-10 Total Credits Required

Chemistry Option 1

Rule: May complete all of the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 123N - Intro to Organic & Biochem	3 Credits
	CHMY 124N - Intro to Organic & Biochem Lab	2 Credits
Minimum Required Grade: C-		8 Total Credits Required

Chemistry Option 2

Rule: May complete all of the following courses

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Math

Rule: Must complete 1 of the following subcategories

7-8 Total Credits Required

Math Option 1

Rule: May complete the following 2 courses

—	Course	Credits
	M 162 - Applied Calculus	4 Credits
	M 274 - Intro to Differential Equation	3 Credits
Minimum Required Grade: C-		7 Total Credits Required

Math Option 2

Rule: May complete the following 2 courses

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Computer Science

Rule: Must complete 1 of the following courses

—	Course	Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits

	GPHY 284 - Intro to GIS and Cartography	3 Credits
	STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing

Rule: Must complete the following course

Note: This course is recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

—	Course	Credits
	GEO 320 - Global Water	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Languages

Rule: Must complete 1 of the following subcategories

6-10 Total Credits Required

German

Rule: May complete the following language sequence

—	Course	Credits
	GRMN 101 - Elementary German I	5 Credits
	GRMN 102 - Elementary German II	5 Credits
Minimum Required Grade: C-		10 Total Credits Required

Irish

Rule: May complete the following language sequence

—	Course	Credits
	ENIR 101 - Elementary Irish I	3 Credits
	ENIR 102 - Elementary Irish II	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Overseas Coursework

Rule: Must complete the following courses and field work at University College of Cork and Potsdam University

Note: In addition to Geosciences coursework completed at UM students must complete the following:

1. 1 formal field course run by the Institute of Earth and Environmental Science at Potsdam University to sites in and around Europe (arranged in consultation with advisor)
2. 1 formal field course module run by University College Cork, selected from
 - 2a. GL 2016 (Easter Field Course - Dingle Peninsula)
 - 2b. GL 3019 (Easter Field Course - Western Scotland)
 - 2c. ER 3002 (Easter Field Course - North Clare)
 - 2d. GL 4008 (Easter Field Course - Central Greece)
 - 2e. another equivalent-level field course run by UCC and approved a priori by their UCC and UM advisors
3. While in residence at Cork, students must complete any 9 of the following courses in consultation with their UCC and UM advisors
 - 3a. Sed processes and Petrology
 - 3b. Igneous and MM Petrology
 - 3c. Invertebrate Paleontology & Evolution
 - 3d. Plate Tectonics & Global Geophysics
 - 3e. Igneous Petrogenesis & Geochemistry
 - 3f. Metamorphism & Geochronology
 - 3g. Advanced Structural Geology
 - 3h. Sedimentary Environments
 - 3i. Stratigraphy & Geologic Maps
 - 3j. Environmental Geology
 - 3k. Terr Ecosystems Through Time
 - 3l. Micropaleontology & Palynology
 - 3m. Petroleum Geology & Basin Analysis
 - 3n. Applied Geophysics & Computer Applications
 - 3o. Advanced Igneous Petrology
 - 3p. Hydrogeology
4. 1 additional formal upper-level Geosciences course at Potsdam University. Recommended are courses that focus on computer-based visualization or geoscience data using GIS or other visualization platforms.

Minimum Required Grade: C-

33-36 Total Credits Required

Geosciences Minor

Minor - Geosciences (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Lower Division Core Courses

Rule: Must complete all of the following

Note: This sequence of courses is recommended but alternative sequences may be approved by an advisor.

Course	Credits
GEO 101N - Intro to Physical Geology	3 Credits
GEO 102N - Intro to Physical Geology Lab	1 Credits
GEO 200 - Historical Geology	2 Credits
GEO 225 - Earth Materials	4 Credits
GEO 228 - Earth Surface Processes	2 Credits
GEO 231 - Geosciences Field Methods	2 Credits
Minimum Required Grade: C-	14 Total Credits Required

Degree Electives

Rule: Must complete 4 credits in Geosciences courses numbered 300 and above

Minimum Required Grade: C-

4 Total Credits Required

History Department

Robert H. Greene, Chair

For the student in search of a broad education rather than training for a particular occupation, the History Department offers an exciting program of instruction. It is designed to provide an understanding of the background and ramifications of present local, national, and world affairs. The program emphasizes understanding rather than the memorization of names and dates. Students are taught how to read critically, analyze thoughtfully, conduct research carefully, and write intelligently.

Toward this end, the department offers a wide variety of courses ranging in time, location, and subject. For those students interested in local history there are courses on Montana, the West and unique aspects of the frontier. Other classes stress the nature of early American society, the American Revolution, family and gender in America, the Civil War, and diplomacy in the Cold War. Still others emphasize European social, cultural, and intellectual history, European exploration, the French Revolution, Islamic civilization, Latin American history, Asian history, and Russian history. Topical courses concentrate upon documentary analysis, diplomacy, war and peace, terrorism, and environmental history.

The History Department helps to prepare men and women for many different kinds of occupations. Graduates are employed in federal, state or local government positions ranging from domestic to foreign service, from senators to research analysts. Many teach history in Montana or in other states while others pursue their educations at advanced graduate schools earning master or doctoral degrees. Several have been awarded Rhodes or Marshall Scholarships.

Lawyers, journalists and businessmen also are trained by the department; many combine history with political science, journalism, or business. History provides not only a basis for the pursuit of one's chosen profession but also furnishes knowledge and perspective for intelligent leadership of citizens in community affairs.

The department offers the Bachelor of Arts, Master of Arts, and the Doctor of Philosophy degrees.

Department Faculty

Professor

Richard Drake, Professor of History
John Eglin, Professor of History
Linda S. Frey, Professor of History
Anya Jabour, Professor of History; Co-Director, Women & Gender Studies
Mehrdad Kia, Professor of History; Director, Central and Southwest Asian Studies Center
Michael Mayer, Professor of History

Associate Professor

Robert H. Greene, Associate Professor of History; Chair of the History Department
Jody Pavilack, Associate Professor of History; Director of Undergraduate Studies
Tobin Miller Shearer, Associate Professor of History; Director of African-American Studies
Kyle G. Volk, Associate Professor of History; Director of Graduate Studies
Jeff Wiltse, Associate Professor of History

Adjunct

Gillian Glaes, Visiting Associate Professor of History

Lecturer

George Price, Lecturer

Research Faculty

Ted Catton, Associate Research Professor
Diane Krahe, Faculty Affiliate
Steven I. Levine, Research Faculty Associate

Affiliates

Hayden Ausland, Professor
David Beck, Professor
Richmond Clow, Professor
Wade Davies, Professor & Co-Chair
Ardeshir Kia, Associate Director, Central and Southwest Asia Program

Emeritus

George Dennison, Past President of the University of Montana; Professor Emeritus of History
David Emmons, Professor Emeritus of History
William E. Farr, Professor Emeritus of History; Associate Director, Center for the Rocky Mountain West
Dan Flores, A.B. Hammond Professor Emeritus of Western History
Harry Fritz, Professor Emeritus of History
Paul Gordon Lauren, Regents Professor Emeritus of History and Distinguished Mansfield Fellow
Ken Lockridge, Professor Emeritus of History
Frederick Skinner, Professor Emeritus of History

History

- **HIST 141H - Black: Africa to Hip-Hop**

Credits: 3. Offered autumn. Same as AAS 141H. This course introduces students to the primary questions, themes, and approaches to African-American Studies. In addition to examining key historical periods such as Reconstruction, the Harlem Renaissance, and the Civil Rights era, students will encounter Hip-Hop, African-American film, African-American religion, and contemporary identity politics. This course concludes by discussing the reasons for and new directions in African-American studies, including diaspora studies, Pan-Africanism, and post-colonial studies. Overall students will gain new insight into the social, cultural, political, and intellectual, experiences of a diverse people and into the history and contemporary experience of the United States. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **HIST 208H - Discovering Africa**

Credits: 3. Offered intermittently. Same as AAS 208H. Interdisciplinary study of the history of pre-colonial Africa, focusing on social, economic, political and cultural institutions and traditions including the wealth, diversity and complexity of ancient and classical African civilizations and cultures. **Course Attributes:** Historical & Cultural Course Non-Western Course

- **HIST 262 - Abolitionism: The First Civil Rights Movement**

Credits: 3. Offered spring. Same as AAST 262. Interdisciplinary, historical perspective on the early 19th century movement to abolish slavery and racial discrimination in the United States.

- **HIST 457 - Artistic Trad Cent & SW Asia**

Credits: 3. Offered autumn and spring. Same as HSTR 459. Analysis of the study of human artistic creativity and scientific innovations of various cultures in Central and Southwest Asia since ancient times. **Course Attributes:** Cross List

- **HIST 462 - Central Asia Seminar**

Credits: 3. Offered spring. Advanced analysis of the historical and contemporary issues involving the human communities, cultures, and economies in Central and Southwest Asia. **Course Attributes:** Cross List

- **HIST 464 - Hist of Indian Affairs to 1776**

Credits: 3. Offered Autumn. Same as NASX 464. A study of American Indian relations with Europeans and the United States from first contact to 1776.

- **HIST 465 - Hist Amer Indian Affrs 19 Cent**

Credits: 3. Offered Spring. Same as NASX 465. A study of tribal encounters and adjustments to the American nations in the nineteenth century.

- **HIST 466 - Hist of Indian Affrs from 1890**

Credits: 3. Offered Autumn. Same as NASX 466. A study of tribal encounters and adjustments to the American nation from 1890.

- **HIST 482 - Revolution & Reform in China**

Credits: 3. Offered autumn. A history of the rise and fall of the Maoist regime and the complicated impact of the epochal post Mao reform movement.

History: American

- **HSTA 101H - American History I**

Credits: 4. (AM) Offered autumn. A comprehensive introductory history of Colonial, Revolutionary and 19th century America, to 1877. Lecture-discussion. Credit not allowed for both 101H and 103H.

Course Attributes: Historical & Cultural Course American and European

- **HSTA 102H - American History II**

Credits: 4. (AM) Offered spring. A comprehensive introductory history of the U.S. since 1877. Lecture-discussion. Credit not allowed for both 102H and 104H. **Course Attributes:** Historical & Cultural Course American and European

- **HSTA 103H - Honors American History I**

Credits: 4. (AM) Offered autumn. Enrollment by consent of instructor. A comprehensive introductory history of Colonial, Revolutionary, and 19th century America, to 1877. Lecture-honors discussion. Credit not allowed for both 103H and 101H. **Course Attributes:** Historical & Cultural Course Honors Course Writing Course-Lower-Division Writing Course-Approved American and European

- **HSTA 104H - Honors American History II**

Credits: 4. (AM) Offered spring. Enrollment by consent of instructor. A comprehensive introductory history of the U. S. since 1877. Lecture-honors discussion. Credit not allowed for both 104H and 102H. **Course Attributes:** Historical & Cultural Course Honors Course American and European

- **HSTA 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **HSTA 198 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

- **HSTA 255 - Montana History**

Credits: 3. (AM) Offered autumn. An introductory and interpretive history from Lewis and Clark to 2000.

- **HSTA 262 - Abolitionism**

Credits: 3. (AM) Same as AAS 262. Offered spring. Interdisciplinary, historical perspective on early 19th century movement to abolish slavery and racial discrimination in the United States.

- **HSTA 291 - Special Topics**

Credits: 1 TO 12. (R-12) (AM) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **HSTA 311 - Early America**

Credits: 3. (AM) Offered even-numbered years. Emphasis changes from year to year. Can touch upon the political economy of Puritanism, through gender and family to the preconditions for the American Revolution.

- **HSTA 315 - Early American Republic**

Credits: 3. (AM) Offered spring odd-numbered years. Democracy, nationalism and sectionalism, the War of 1812, the second party system, social order and disorder, the capitalist revolution. **Course Attributes:** Writing Course-Approved Writing Course-Intermediate

- **HSTA 316 - American Civil War Era**

Credits: 3. (AM) Offered autumn odd-numbered years. Civil War and Reconstruction; the triumph of the industrialist and capitalist ethic.

- **HSTA 320 - Birth of Modern US**

Credits: 3. (AM) Offered autumn odd-numbered years. The history of the U.S. from 1877 to 1920 is

largely the story of Americans responding to profound social, cultural and economic change. In an effort to bring order to their changing world, Americans created new institutions, retooled their ideologies, and improved the nation's infrastructure. The order they created is, in modified form, still with us today. Students will explore the myriad changes that transformed the United States during this period and study the social, political, and cultural struggles that shaped the emergence of Modern America.

- **HSTA 321 - America in Crisis**

Credits: 3. (AM) Offered autumn. This era in U.S. history was marked by a series of crises: the contested transition to modernity during the 1920s, the Great Depression, and World War II and its aftermath. This course will explore how Americans responded to these crises, why they responded to them the way they did, and how their responses altered the society in which they lived.

- **HSTA 322 - U.S. History: WWII to Present**

Credits: 3. (AM) Offered spring. The Cold War and its consequences, the civil rights revolution, affluence and anxiety, counter-culture, political radicalism, feminism, the Nixon years, Watergate and after.

- **HSTA 323 - U.S. in the 1950s**

Credits: 3. (AM) Offered alternate years, Examines the political, social, cultural, intellectual developments of America in the 1950s. Particular emphasis is placed on cultural history.

- **HSTA 324 - U.S. in the 1960s**

Credits: 3. (AM) Offered alternate years, Examines the political, social, cultural, intellectual developments of America in the 1960s. Topics include the Great Society, political radicalism, the counter culture, black radicalism, and Vietnam.

- **HSTA 327 - Atlantic World Slavery**

Credits: 3. (AM) Offered alternate years. This course will examine the development and demise of slavery in the early modern Atlantic world, from the late fifteenth to the late nineteenth centuries. Specifically, we will explore the ways the transatlantic slave trade forged economic and cultural connections between Europe, Africa, and the Americas, thereby causing immeasurable suffering while conditioning conceptions of race, reshaping politics and religion, and transforming the ecology of nearly a third of the globe.

- **HSTA 333 - American Military History**

Credits: 3. (R-6) (AM) Offered intermittently. The French and Indian Wars to Vietnam and beyond; chronological and topical accounts.

- **HSTA 335 - Movie America**

Credits: 3. (AM) Offered intermittently. This course examines major topics and themes in United States history from the early twentieth century to the present using movies as primary sources.

- **HSTA 342H - Afr Amer Hist to 1865**

Credits: 3. (AM) Offered intermittently. Same as AAS 342. Survey of the African American experience from the African background to the end of the Civil War. Focus on Black American quest for the American Dream, and how Blacks attempted to deal with the challenges of enslavement and racism. **Course Attributes:** Historical & Cultural Course

- **HSTA 343H - Afr Amer Hist Since 1865**

Credits: 3. (AM) Offered intermittently. Same as AAS 343H. Study of the African American experience since the Civil War. Change and continuity in the African American experience, the fight against Jim Crow, the struggle for civil rights, and post-civil rights economic, political, social and cultural developments and challenges. **Course Attributes:** Historical & Cultural Course

- **HSTA 347 - Voodoo, Muslim, Church: Black Religion**

Credits: 3. (AM) Spring, odd years. The African American religious experience encompasses Islam, Christianity, Santeria, voodoo, and many others. In this course, students will examine the history of

religious expression within the African-American community from the colonial era through the twentieth century. Central to the course question, "How did religion shape the experience of the African-American community?" Students will also examine the ways in which religious practice influenced social, political, and cultural changes in American history. Same as AAS 347. **Course Attributes:** Writing Course-Upper-Division Writing Course-Approved Writing Course-Intermediate

- **HSTA 361 - The American South**

Credits: 3. (AM) Offered intermittently. Social history of the American South with particular attention to race, class, and gender. **Course Attributes:** Historical & Cultural Course

- **HSTA 370H - Wmn Amer Colonial to Civil War**

Credits: 3. Offered autumn. Interpretive overview of major themes and events in U.S. womens history to 1865. Same as WGS 370H. **Course Attributes:** Historical & Cultural Course

- **HSTA 371H - Wmn Amer Civil War to Present**

Credits: 3. Offered spring. Interpretive overview of major themes and events in U.S. women's history from 1865 to the present. Same as WGS 371. **Course Attributes:** Historical & Cultural Course

- **HSTA 372 - The American Revolution**

Credits: 3. (AM) Offered alternate years. Delving into the history of the early modern Atlantic world, this course examines the transnational ramifications of the American Revolution. Specifically, it examines the Revolution's economic and ideological origins, European involvement in the Revolutionary War, as well as the Revolution's impact on African American slavery and the slave trade. We will also consider its implications for Haitian and Latin American independence. And finally, we will discuss the creation of the U.S. Constitution, America's struggle for political sovereignty, and the Revolution's impact on Native Americans, women and families, and conceptions of American identity during the Early National period.

- **HSTA 377 - Alcohol in American History**

Credits: 3. (AM) Offered intermittently. This course explores the controversial history of alcohol in American history beginning in the colonial period and ending in the recent past. It blends varied historical approaches, including political, legal, business, social, and cultural history, to interrogate the manifold ways that alcohol has shaped the American nation and the everyday lives of its citizens.

- **HSTA 380 - American Constitutional History**

Credits: 3. (AM) Offered intermittently. An examination of major issues in the American constitutional past. Topics include the creation of the U.S. Constitution and the problem of "original intent," courts and judicial review, slavery and anti-slavery, the bill of rights, industrial capitalism and the welfare state, and majority rule and minority rights in American democracy

- **HSTA 382H - History of American Law**

Credits: 3. (AM) Offered intermittently. Issues in the social history of law from the colonial period to the present. **Course Attributes:** Historical & Cultural Course

- **HSTA 385 - Families & Children in America**

Credits: 3. (AM) Offered intermittently. Historical overview of families and children in the United States from the colonial era to the present. Topics include changing patterns of family life, the evolution of attitudes toward children and youth, the relationship between the American family and the nation-state, and debates over "family values" from the nation's founding to the present. **Course Attributes:** Historical & Cultural Course Writing Course-Approved Writing Course-Intermediate

- **HSTA 391 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **HSTA 415 - The Black Radical Tradition**

Credits: 3. (AM) Offered autumn, odd years. Same as AAS 415. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Prereq. HSTR 200. From slave revolts through to the Move rebellion in Philadelphia, this course examines how the African-American community has engaged in radical efforts to change the status quo in the name of seeking justice. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **HSTA 417 - Prayer & Civil Rights**

Credits: 3. (AM) Offered autumn, even years. Same as AAS 417 and RELS 417. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Prereq. HSTR 200. This course explores the meaning of public prayer in the Civil Rights Movement. Built around the question, "Does religion help or hinder the pursuit of social change?" this class combines historical and religious studies inquiry to trace changes in civil rights activists' efforts to make use of religion. By focusing on a particular religious practice - in this case prayer - in a specific, but limited period of time, this course challenges students to consider how meaning is formed through historical action and study the social significance of religious practice. This formed through historical action and study the social significance of religious practice. This course complicates prevailing ideas about the normalcy of African-American religious practitioners' prayer, invites students to examine their assumptions about the nature of prayer, and traces how religion spilled out of sanctuaries into the streets during the civil rights era. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **HSTA 418 - Women and Slavery: Research Sem**

Credits: 3. (AM) Offered intermittently. Prereq. HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Study of the connection between women's status and slavery in antebellum America, looking at slave women, slaveholding women, and antislavery women. Upper division writing course for the history major. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **HSTA 419 - Southern Women: Research Sem**

Credits: 3. (AM) Offered intermittently. Prereq. HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Examination of the connections between race, class, and gender in the South. Conflict and cooperation among black and white women in politics, reform, and work. Upper division writing course for the history major. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **HSTA 422 - U.S. After WWII: Research Sem**

Credits: 3. (AM) Offered alternate years. Prereq. HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. This course offers students an opportunity to do original research and produce an article-length research paper on a topic in post-war American history. It meets the department's requirement of an upper-level research seminar as well as the upper-division writing expectation in the major. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **HSTA 461 - Research in Montana History**

Credits: 3. (AM) Offered intermittently. Prereq. HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. This course is a research and writing seminar in Montana history. Students will learn advanced research methodology in history and will be exposed to a variety of databases and source collections in Montana history that are available locally and online. Students will research and write a primary-source based paper on a topic in Montana history. This course fulfills the upper-division writing requirement for the history department and the university. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **HSTA 469 - Atlantic America Research Sem**

Credits: 3. (AM) Offered intermittently. Prereq. HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. This seminar is designed to teach

advanced undergraduate and graduate students the fundamentals of original research in the fields of early American and Atlantic world history. Every student will pursue an original research project, based on primary materials, and focused chronologically within the period of early contact to the U.S. Civil War. You will read texts that will serve as models of historical writing and others that will help you develop your skills as a researcher, writer, and editor. We will hone our writing skills through drafting and discussion. Consent of instructor required. **Course Attributes:**

Writing Course-Upper-Division Writing Course-Advanced

- **HSTA 471 - Writing Women's Lives**

Credits: 3. (AM) Offered intermittently. Prereq. HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Consent of instructor required. Upper-division writing-intensive seminar in women's history. Students will write an original research paper based on primary source materials. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **HSTA 491 - Special topics**

Credits: 1 TO 12. (R 12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **HSTA 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Consent of instructor.

- **HSTA 501 - Readings in Early Am Hist**

Credits: 3. Graduate readings course in U.S. history covering the period from pre-contact to 1877. Level: Graduate

- **HSTA 502 - Readings in Modern Am Hist**

Credits: 3. Graduate readings course in U.S. history covering the period from 1877 to the present. Level: Graduate

- **HSTA 550 - Early America**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 551 - The Early American Republic**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 552 - Industrial America: 1863-1932**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 553 - Modern America**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 564 - US Environmental History**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 566 - The American West**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 567 - Research in History**

Credits: 3. Intensive reading. Level: Graduate

- **HSTA 570 - U.S. Women's History**

Credits: 3. Intensive readings. Level: Graduate

- **HSTA 594 - Seminar**

Credits: 1 TO 12. (R-12) Prereq., 27 credits in history. Directed research. Level: Graduate

- **HSTA 595 - Special Topics**

Credits: 0 TO 9. (R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **HSTA 596 - Independent Study**

Credits: 0 TO 12. (R-12) Course material appropriate to the needs and objectives of the individual student. Level: Graduate

- **HSTA 597 - Independent Study**

Credits: 1 TO 9. (R-9) Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

- **HSTA 598 - Internship**

Credits: 1 TO 8. (R-8) Prereq., consent of department and Internship Services office. Practical application of classroom learning in off-campus placements. Level: Graduate

- **HSTA 599 - Professional Paper**

Credits: 1 TO 6. (R-6) Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

- **HSTA 699 - Thesis/Dissertation**

Credits: 1 TO 6. (R-6) Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

History: World

- **HSTR 101H - Western Civilization I**

Credits: 4. (EU) Offered autumn. A comprehensive, introductory history of western civilization from classical antiquity to 1648. Lecture-discussion. Credit not allowed for both 101H and 103H. **Course Attributes:** Historical & Cultural Course American and European

- **HSTR 102H - Western Civilization II**

Credits: 4. (EU) Offered spring. A comprehensive, introductory history of western civilization from 1648 to the present. Lecture-discussion. Credit not allowed for both 102H and 104H. **Course Attributes:** Historical & Cultural Course American and European

- **HSTR 103H - Honors Western Civilization I**

Credits: 4. (EU) Offered autumn. Limited enrollment by consent of instr. only. A comprehensive, introductory history of western civilization from classical antiquity to 1648. Lecture-honors discussion. Credit not allowed for both 103H and 101H. **Course Attributes:**

Historical & Cultural Course Honors Course Writing Course-Approved
American and European

- **HSTR 104H - Honors Western Civilization II**

Credits: 4. (EU) Offered spring. Limited enrollment by consent of instr. only. A comprehensive introductory history of western civilization from 1648 to the present. Lecture-honors discussion. Credit not allowed for both 104H and 102H. **Course Attributes:** Historical & Cultural Course Honors Course Writing Course-Lower-Division American and European

- **HSTR 146H - The Silk Road**

Credits: 3. (WRLD) Offered autumn and spring. Same as AS and ANTH 106H. Introduction to the study of the human communities, cultures, and economies in Central and Southwest Asia along the ancient four thousand mile-long Silk Road. **Course Attributes:** Historical & Cultural Course Indigenous and Global

- **HSTR 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **HSTR 198 - Cooperative Educ/Internship I,**
 Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.
Course Attributes: Internships/Practicums Internship graduation limit 6
- **HSTR 200 - Intro: Historical Methods**
 Credits: 1. Offered autumn and spring. Enrollment limited to history majors or by consent of the instructor. This course introduces students to the practice of history and prepares them for upper-division courses in the field. Students will learn to critically read secondary sources, research in primary sources, analyze documents, and write clear and convincing historical essays. This course is required for recently declared history majors and minors. Students should take it before taking upper-division history courses.
- **HSTR 230H - Colonial Latin America**
 Credits: 3. (WRLD) Offered autumn. Latin America from conquest by Spain and Portugal to wars for independence. Focus on social relations, imperial and local politics, hegemony, resistance, and change. **Course Attributes:** Historical & Cultural Course Indigenous and Global
- **HSTR 231H - Modern Latin America**
 Credits: 3. (WRLD) Offered spring. Latin America from wars of independence to the present. Focus on social relations, development models, politics, and popular movements. **Course Attributes:** Historical & Cultural Course Indigenous and Global
- **HSTR 240 - East Asian Civilizations**
 Credits: 3. (WRLD) Offered autumn. Same as AS 201. An interdisciplinary, pluralist, and exploratory introduction to civilizations of East Asia. Primary focus on China, Japan, and Korea, the relations among them and their patterns of interaction with the outside world in pre-modern and modern periods.
- **HSTR 241H - Central Asian Cult & Civ**
 Credits: 3. (WRLD) Offered autumn. Same as ANTY 241H. Introduction to Central Asia's history, culture and ways of thinking. Focus on the political and social organization of Central Asia and cultural changes as expressed in art and interactions with China, India and the Middle East.
Course Attributes: Historical & Cultural Course Indigenous and Global
- **HSTR 262H - Islamic Civil: Classical Age**
 Credits: 3. (WRLD) Offered autumn. A concise history of the Islamic world from the 6th century to the fall of the Abbasid Empire in the 13th century, focusing primarily on the teachings of Islam and the causes for the rapid expansion of the Islamic empire. **Course Attributes:** Historical & Cultural Course Non-Western Course
- **HSTR 264 - Islamic Civ: Modern Era**
 Credits: 3. (WRLD) Offered spring. History of the Islamic world and particularly the Persian, Arabic, and Turkish speaking lands between 1453 and 1952.
- **HSTR 272E - Terrorism:Viol Mod Wrld**
 Credits: 3. (WRLD) Offered autumn. Prereq., lower-division course in Perspective 5 or consent of instr. The rise and spread of terrorism in the modern world, from the French Revolution to the present. **Course Attributes:** Ethical & Human Values Course
- **HSTR 291 - Special Topics**
 Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **HSTR 300 - Writing For History**
 Credits: 3. Students will learn the fundamentals of writing history through study of a topic that will

change according to the expertise of the instructor of record. Through a multi-drafting writing process students will hone their research skills, learn how to craft interpretive theses, develop outlines, and gain experience in drafting and re-drafting their written work. Students will also learn how to compose strong prose, organize historical arguments, and manage the mechanics of proper citation. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Approved Writing Course-Intermediate

- **HSTR 302H - Ancient Greece**

Credits: 3. (EU) Offered intermittently. Greek history from the earliest times through the Macedonian ascendancy, based on the writings of the Greek historians. **Course Attributes:** Historical & Cultural Course

- **HSTR 312 - Age of Absolut 1648-1789**

Credits: 3. (EU) Offered intermittently. The political, economic, intellectual, and social development of Europe 1648-1789. **Course Attributes:** Historical & Cultural Course

- **HSTR 320 - Europ Social & Intellect Hist**

Credits: 3. (EU) Offered autumn. The influence of the Renaissance, Baroque and Classical Ages, and the Enlightenment on early modern history.

- **HSTR 323 - Europ Social & Intellect Hist**

Credits: 3. (EU) Offered autumn. Romanticism, Realism, and the Avant-Garde against the historical background of the Industrial Revolution and urbanization. **Course Attributes:** Historical & Cultural Course

- **HSTR 325 - Europ Social & Intellect Hist**

Credits: 3. (EU) Offered spring. The triumph of the Avant-Garde and the decline of traditional culture: 1914-1945. **Course Attributes:** Historical & Cultural Course

- **HSTR 326 - Contemporary Europe**

Credits: 3. (EU) Offered autumn odd-numbered years. European politics, culture, and society since 1945.

- **HSTR 334 - Latin America: Reform & Revolution**

Credits: 3. (WRLD) Offered intermittently. Different ideologies and projects in Latin America aimed at gradual or radical transformation of political systems and/or socio-economic relations. From the Haitian Revolution to the Bolivarian vision of Hugo Chavez. **Course Attributes:** Writing Course-Approved Writing Course-Intermediate

- **HSTR 335 - Latin America: Workers & Labor**

Credits: 3. (WRLD) Offered intermittently. Study of the experiences and agency of diverse working people in Latin America. Influence of race, ethnicity, gender, religion, and generation on working class identity and movements. Labor organizations and politics in historic context.

- **HSTR 343 - Modern Japan**

Credits: 3. (WRLD) Offered spring. Japanese culture, politics, and economics since 1800: the Tokugawa period, the Meiji Restoration, militarization and the Great Pacific War, the American occupation, Japan as a model of modernization.

- **HSTR 345H - Modern China**

Credits: 3. (WRLD) Offered autumn. China since 180, emphasizing internal weaknesses of the Manchu dynasty, confrontation with the west, and the emergence of Nationalist and Communist regimes. **Course Attributes:** Historical & Cultural Course Non-Western Course

- **HSTR 348 - Britain 1485-1688**

Credits: 3. (EU) Offered autumn. Social, political, religious, and intellectual history of the British peoples during the tumultuous period of reformation, exploration, constitutional crisis, and civil war.

- **HSTR 349 - Britain from Rev - Reform 1688**
Credits: 3. (EU) Offered spring. The social, political, cultural, and intellectual consequences of British expansion, financial and industrial revolutions, and revolutionary movements.
- **HSTR 350 - Modern Britain**
Credits: 3. (EU) Offered autumn odd-numbered years. Social, political, intellectual and cultural history of the United Kingdom from an age of industry, empire, and political reform to one of economic decline and international retreat.
- **HSTR 352 - France Revol 1789-1848**
Credits: 3. (EU) Offered autumn. Political, economic, and social upheaval and development.
- **HSTR 353 - Modern France**
Credits: 3. (EU) Offered intermittently. Political, economic and social development.
- **HSTR 354 - Italy: 1300-1800**
Credits: 3. (EU) Offered autumn odd-numbered years. The emergence of the Italian states with an emphasis on cultural achievements in the late Medieval, Renaissance, Baroque, and Neoclassical periods.
- **HSTR 355 - Italy: 1800-Present**
Credits: 3. (EU) Offered spring even-numbered years. The emergence of a united Italy, the triumph of fascism and contemporary Italian society.
- **HSTR 357 - Russia to 1881**
Credits: 3. (EU) Offered intermittently. Emphasis on the autocratic political tradition, Westernization, and territorial expansion.
- **HSTR 358 - Russia Since 1881**
Credits: 3. (EU) Offered intermittently. Emphasis on modernization and the revolutionary movement; the Bolshevik Revolution and Stalinist era; the decline of Soviet system. **Course Attributes:** Writing Course-Approved Writing Course-Intermediate
- **HSTR 361 - Germ:Augsburg-Bismarck**
Credits: 3. (EU) Offered intermittently. Political, economic and social development of the states of the Holy Roman Empire from 1555-1866.
- **HSTR 363 - Eastern Europe**
Credits: 3. (EU) Offered spring. Main currents in the history of Eastern Europe from earliest times to the present. Focus on the lands of Poland, Bohemia, Hungary, and the Balkan region.
- **HSTR 364 - Environmental History**
Credits: 3. (AM) Offered intermittently. Prereq., lower-division course in Perspective 5 or consent of instr. A history of the human-nature interaction in the United States.
- **HSTR 367 - 19th Cent Amer West**
Credits: 3. (AM) Offered intermittently. Euro-American movement and conflict in the nineteenth century trans-Mississippi west.
- **HSTR 368 - Iran Between Two Revolutions**
Credits: 3. (WRLD) Offered autumn. The several intellectual traditions and philosophies some ephemeral and visionary, most eclectic and confused, and virtually all conflicting that are usually believed to underlie the varying concept of Iranian and Arab nationalism in the 20th century.
- **HSTR 369 - 20th Cent Amer West**
Credits: 3. (AM) Offered spring. The contemporary trans-Mississippi West.

- **HSTR 374 - War, Peace, & Society**

Credits: 3. (WRLD) Offered intermittently. A thematic and interdisciplinary approach to warfare and peace, sociopolitical structures and military organization, power among states, technological change, the role of the individual in organized violence, and moral views of war and peace.

- **HSTR 377 - European Internal Relat**

Credits: 3. (EU) Offered intermittently. The nature, evolution, and functions of the European diplomatic system from the Ancient World to 1870.

- **HSTR 380 - Foreign Relations of the Great**

Credits: 3. (WRLD) Offered intermittently. Begins with a discussion of the classical system of diplomacy and then moves into the causes and results of the First World War, the rise of Hitler and the Second World War, America's emergence as a superpower, the Cold War, the influence of Asia, the implications of the 9/11 attack and terrorism, and the continuing search for peace and stability in a world of conflict.

- **HSTR 384 - Hist Internat Human Rights**

Credits: 3. (WRLD) Offered intermittently. A treatment of the powerful global influence of visions of human rights upon the historical and contemporary world in which movements such as abolitionism, women's rights, humanitarian law, racial equality, decolonization and democratization, and the impact of the Universal Declaration of Human Rights.

- **HSTR 386 - Nationalism Modern Middle East**

Credits: 3. (WRLD) Offered spring. The socioeconomic, political, and cultural causes which resulted in the transformation of the Iranian society from a traditional Islamic entity to a modern secular state and the factors which led to the downfall of the secular state and the establishment of an Islamic republic. **Course Attributes:** Historical & Cultural Course Non-Western Course

- **HSTR 391 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **HSTR 392 - Independent Study**

Credits: 1 TO 12. (R 12) Offered intermittently.

- **HSTR 394 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. A review and discussion of current research. Topics vary.

- **HSTR 396 - Independent Study**

Credits: 1 TO 12. (R-12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **HSTR 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **HSTR 400 - Historical Research Seminar**

Credits: 3. Offered autumn and spring. Prereq., HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Topics vary according to the instructor. The goal of this course is for students to propose and execute a substantial research project. Upper division writing course for the history major. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **HSTR 401 - The Great Historians**

Credits: 3. (EU) Offered intermittently. The history and philosophy of history. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Approved Writing Course-Intermediate

- **HSTR 418 - Britain 1500 - 1800**

Credits: 3. (EU) Offered spring alternate years. Prereq., HSTR 200. Recommended HSTR 348 or 349. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Students will discuss specific issues in the historiography of the early modern period in British history (c1500-1800) and produce research papers grounded in primary sources. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **HSTR 435 - Lat Am Human Rgts & Memory**

Credits: 3. (WRLD) Offered intermittently. The legacy of state violence and ongoing struggles for truth and justice in select Latin American case studies. Different uses of memory and narration in bearing witness to social and political conflict and human rights violations.

- **HSTR 437 - US-Latin America Relations**

Credits: 3. (WRLD) Prereq., HSTR 200. Enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Research and writing seminar on U.S.-Latin American relations from the late 18th century through the 20th century. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **HSTR 441 - Islam and the West**

Credits: 3. (WRLD) Offered spring. Advanced analysis of the historical and contemporary issues involving the human communities, cultures, and economies in Central and Southwest Asia.

- **HSTR 442 - Cities/Landscps Central Asia**

Credits: 3. (WRLD) Offered autumn. Same as ANTY 442. Analysis of the main centers of civilization and culture, rich sites and monuments of Central Asia and Southwest Asia since ancient times.

- **HSTR 448 - Tradition & Reform in China**

Credits: 3. (WRLD) Taught annually. Prereq., junior standing or consent of instructor. A history of key reform movements from the mid-19th century (when China was rocked by rebellion and the entry of the West) to the Maoist period.

- **HSTR 459 - Artistic Trad Cent & SW Asia**

Credits: 3. (WRLD) Offered autumn and spring. Analysis of the study of human artistic creativity and scientific innovations of various cultures in Central and Southwest Asia since ancient times.

- **HSTR 472 - Problems of Peace and Security**

Credits: 3. (WRLD) Offered intermittently. Prereq., lower-division course in Perspective 5 or consent of instr. Contemporary and historical problems of civilian policy and military strategy, power and technology, intelligence operations in democratic societies, human rights and security issues, conscription, and ethics in statecraft.

- **HSTR 491 - Special Topics**

Credits: 1 TO 12. (R 12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **HSTR 492 - Independent Study**

Credits: 1 TO 12. (R 12) Offered intermittently. Prereq., consent of instr.

- **HSTR 494 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

- **HSTR 495 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **HSTR 496 - Independent Study**
Credits: 1 TO 12. (R-12) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **HSTR 500 - Tchg Discussion Sections**
Credits: 1. (R-4) Supervised teaching and reading keyed to survey courses in American history and western civilization. Level: Graduate
- **HSTR 516 - Modern Europe**
Credits: 3. Offered alternate years. Intensive reading in 19th and 20th century European history. Level: Graduate
- **HSTR 540 - Europ Cultural & Intellect**
Credits: 3. Intensive reading. Level: Graduate
- **HSTR 585 - Latin America**
Credits: 3. Offered alternate years. Intensive reading in Colonial and Modern Latin American history. Level: Graduate
- **HSTR 594 - Seminar**
Credits: 1 TO 12. (R-12) Prereq., 27 credits in history. Directed research. Level: Graduate
- **HSTR 595 - Special Topics**
Credits: 1 TO 9. (R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:**
Internships/Practicums
- **HSTR 596 - Independent Study**
Credits: 1 TO 12. (R-12) Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Service Learning/Volunteer
- **HSTR 597 - Research in History**
Credits: 1 TO 9. (R-9) Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **HSTR 598 - Internship**
Credits: 1 TO 8. (R-8) Prereq., consent of department and Internship Services office. Practical application of classroom learning in off-campus placements. Level: Graduate **Course Attributes:**
Internships/Practicums
- **HSTR 599 - Professional Paper**
Credits: 1 TO 6. (R-6) Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
- **HSTR 699 - Thesis/Dissertation**
Credits: 1 TO 9. (R-6) Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

History-Political Science

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course

requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

This major is intended solely for students who want to be licensed to teach history, government, and one additional social science at the middle and high school levels. Requirements for the combined history/political science major are as follows: **in history**, a minimum of 31 credits, including: HSTR 101 or 102, HSTA 101 and 102, HSTR 200, HSTA 255, one elective course in world history, three upper-division elective courses to include at least one American and one European course, and one HSTA/HSTR 400-level approved writing course; **in political science**, a minimum of 30 credits, including: PSCI 210, 220, 230, 250, three upper-division elective courses in American government or public law, and three upper-division elective courses in comparative or international relations; **in one additional social science**, a minimum of 9 elective credits in economics or geography or psychology or sociology; and EDU 497 (C&I 428). Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students are eligible for a teaching license in social studies broadfield. See the Department of Curriculum & Instruction for more information.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - History-Political Science; Track: Teaching Social Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students who complete the history/political science combined major are eligible for a teaching license in social studies broadfield. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Lower Division Core Courses

Rule: Must complete the following subcategories

28 Total Credits Required

Core Courses

Rule: Must complete all of the following courses:

	Course	Credits
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	HSTA 255 - Montana History	3 Credits
	HSTR 200 - Intro: Historical Methods	1 Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
	PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C-		16 Total Credits Required

American History Introductory Courses

Rule: Must complete 2 of the following courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
	HSTA 103H - Honors American History I	4 Credits
	HSTA 104H - Honors American History II	4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Western History Introductory Courses

Rule: Must complete 1 of the following courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

	Course	Credits
	HSTR 101H - Western Civilization I	4 Credits
	HSTR 102H - Western Civilization II	4 Credits
	HSTR 103H - Honors Western Civilization I	4 Credits
	HSTR 104H - Honors Western Civilization II	4 Credits

Upper Division History Elective

Rule: Must complete at least 3 credits of upper division HSTA or HSTA electives

Minimum Required Grade: C-

3 Total Credits Required

American History Elective

Rule: Choose at least 3 credits from the following courses

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, 392, 491, 492 and HSTA 391 and 491 may apply to this requirement depending on the course content.

Course	Credits
HSTA 311 - Early America	3 Credits
HSTA 314 - Nature, Knowledge & Empire	3 Credits
HSTA 315 - Early American Republic	3 Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 320 - Birth of Modern US	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTA 323 - U.S. in the 1950s	3 Credits
HSTA 324 - U.S. in the 1960s	3 Credits
HSTA 327 - Atlantic World Slavery	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTA 335 - Movie America	3 Credits
HSTA 342H - Afr Amer Hist to 1865	3 Credits
HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits

HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 415 - The Black Radical Tradition	3 Credits
HSTA 417 - Prayer & Civil Rights	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 420 - America Divided, 1848-1865	3 Credits
HSTA 422 - Research: U.S. After WWII	3 Credits
HSTA 455 - Indian, Bison, & Horse	3 Credits
HSTA 461 - Research in Montana History	3 Credits
HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
HSTA 469 - Atlantic America Research	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
HSTA 494 - Seminar	1 To 6 Credits
HSTR 364 - Environmental History	3 Credits
HSTR 367 - 19th Cent Amer West	3 Credits
HSTR 369 - 20th Cent Amer West	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

World History Elective

Rule: Choose at least 3 credits from the following courses

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 191, 291, 391, 392, 491, 492 may apply to this requirement depending on the course content.

Course	Credits
HSTR 146H - The Silk Road	3 Credits
HSTR 230H - Colonial Latin America	3 Credits
HSTR 231H - Modern Latin America	3 Credits
HSTR 240 - East Asian Civilizations	3 Credits
HSTR 241H - Central Asian Cult & Civ	3 Credits
HSTR 262H - Islamic Civil: Classical Age	3 Credits
HSTR 264 - Islamic Civ: Modrn Era	3 Credits
HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
HSTR 334 - Latin America: Reform and Revo	3 Credits
HSTR 345H - Modern China	3 Credits
HSTR 380H - Foreign Relations of the Great	3 Credits
HSTR 384 - Hist Internat Human Rights	3 Credits
HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
HSTR 437 - US-Latin America Relations	3 Credits
HSTR 449 - Revolution & Reform in China	3 Credits
HSTR 472 - Problems of Peace and Security	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

European History Elective

Rule: Choose at least 3 credits from the following courses

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, 392, 491, 492 may apply to this requirement depending on the course content.

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Course	Credits
HSTR 302 - Ancient Greece	3 Credits
HSTR 312 - Age of Absolut 1648-1789	3 Credits
HSTR 320 - Europ Social & Intellect Hist	3 Credits
HSTR 323 - Europ Social & Intellect Hist:	3 Credits
HSTR 348 - Britain 1485-1688	3 Credits
HSTR 349 - Britain from Rev - Reform 1688	3 Credits
HSTR 352 - France Revol 1789-1848	3 Credits
HSTR 353 - Modern France	3 Credits
HSTR 354 - Italy: 1300-1800	3 Credits
HSTR 355 - Italy: 1800-Present	3 Credits
HSTR 357 - Russia to 1881	3 Credits
HSTR 358 - Russia Since 1881	3 Credits
HSTR 361 - Germ:Augsburg-Bismarck	3 Credits
HSTR 363 - Eastern Europe	3 Credits
HSTR 418 - Britain 1500 - 1800	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

American Government/Public Law Electives

Rule: Must complete 9 credits in the following courses

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits

	PSCI 347 - U.S. Congress	3 Credits
	PSCI 348 - US Multicultural Politics	3 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
	PSCI 370 - Courts and Judicial Politics	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
	PSCI 444 - Am Political Participation	3 Credits
	PSCI 445 - Political Psychology	3 Credits
	PSCI 461 - Administrative Law	3 Credits
	PSCI 462 - Human Resource Management	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 471 - American Constitutional Law	3 Credits
	PSCI 474 - Civil Rights Seminar	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Comparative/International Relations Electives

Rule: Must complete 9 credits in the following courses

	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 326 - Politics of Africa	3 Credits

	PSCI 327 - Politics of Mexico	3 Credits
	PSCI 328 - Politics of China	3 Credits
	PSCI 329 - Politics of Japan	3 Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Additional Electives

Rule: Must complete 9 credits in 1 of the following fields

9 Total Credits Required

Economics

Rule: May complete 9 credits

Note: ECNS 191, 391, 392, 491, and 492 may apply to this requirement depending on the course content.

	Course	Credits
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ECNS 101S - Economic Way of Thinking	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
ECNS 202S - Principles of Macroeconomics	3 Credits
ECNS 217X - Issues in Economic Development	3 Credits
ECNS 301 - Intermediate Micro with Calc	3 Credits
ECNS 302 - Intermediate Macroeconomics	3 Credits
ECNS 310 - Intro Health Economics	3 Credits
ECNS 312 - Labor Economics	3 Credits
ECNS 313 - Money and Banking	3 Credits
ECNS 315 - History of Economic Thought	3 Credits
ECNS 320 - Public Finance	3 Credits
ECNS 374 - Comparative Economics	3 Credits
ECNS 403 - Introduction to Econometrics	4 Credits
ECNS 405 - Game Theory	3 Credits
ECNS 406 - Industrial Organization	3 Credits
ECNS 431 - International Trade	3 Credits
ECNS 433 - Economics of the Environment	3 Credits
ECNS 445 - Int Env Econ & Clim Change	3 Credits
ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
ECNS 486 - Economic Research Seminar	1 To 15 Credits
ECNS 488 - Res Meth & Thesis Design	2 Credits
Minimum Required Grade: C-	9 Total Credits Required

Geography

Rule: May complete 9 credits

Note: GPHY 391, 491, and 492 may apply to this requirement depending on the course content.

Course	Credits
GPHY 111N - Intro to Physical Geography	3 Credits
GPHY 112N - Intro to Phys Geography Lab	1 Credits
GPHY 121S - Human Geography	3 Credits
GPHY 141S - Geography of World Regions	3 Credits
GPHY 144 - Montana's Mountains	3 Credits
GPHY 241 - Montana	3 Credits
GPHY 243S - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
GPHY 284 - Intro to GIS and Cartography	3 Credits
GPHY 291 - Special Topics	1 To 6 Credits
GPHY 314 - Global Mountain Environments	3 Credits
GPHY 317 - Geomorphology	3 Credits
GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
GPHY 335 - Water Policy	3 Credits
GPHY 336 - Exploration & Discovery	3 Credits
GPHY 338 - Mountains and Society	3 Credits
GPHY 342 - North America	3 Credits
GPHY 344 - Crown of the Continent	3 Credits
GPHY 347 - Regional Geography (Mult Reg)	3 Credits
GPHY 348 - Field Studies in Geography	3 Credits
GPHY 378 - Preceptorship in Geography	1 To 3 Credits
GPHY 385 - Field Techniques	3 Credits
GPHY 421 - Sustainable Cities	3 Credits
GPHY 423 - Migration & Population Change	3 Credits

GPHY 432 - Human Role Environ Change	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
GPHY 434 - Food and Famine	3 Credits
GPHY 438 - Mountain Field Study	3 Credits
GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
GPHY 443 - Cultural & Global Competence	3 Credits
GPHY 444 - High Asia	3 Credits
GPHY 445 - Regional Geography	3 Credits
GPHY 465 - Planning Princ & Processes	3 Credits
GPHY 466 - Environmental Planning	3 Credits
GPHY 468 - Community & Regional Analysis	3 Credits
GPHY 469 - Planning & Analysis Laboratory	1 Credits
GPHY 481 - Advanced Cartographic Design	3 Credits
GPHY 482 - Spatial Analysis & GIS	3 Credits
GPHY 485 - Internet GIS	3 Credits
GPHY 486 - Transport, Planning & GIS	3 Credits
GPHY 487 - Remote Sensing/Raster GIS	3 Credits
GPHY 488 - Thematic Cartography & GIS	3 Credits
GPHY 489 - Cartography/GIS Laboratory	1 Credits
GPHY 497 - Workshop in Teaching Geography	2 To 3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Psychology

Rule: May complete 9 credits

Note: PSYX 191, 192, 290, 291, 292, 390, 391, 392, and 491 may apply to this requirement depending on the course content.

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Course	Credits
PSYX 100S - Intro to Psychology	4 Credits
PSYX 105 - Careers in Psychology	1 Credits
PSYX 107 - Intergroup Dialog	1 Credits
PSYX 120 - Research Methods I	3 Credits
PSYX 161S - Fund of Organizational Psych	3 Credits
PSYX 222 - Psychological Statistics	3 Credits
PSYX 230 - Developmental Psychology	3 Credits
PSYX 233 - Fund of Psychology of Aging	3 Credits
PSYX 238 - Adolescent Psychology	3 Credits
PSYX 240 - Fund of Abnormal Psychology	3 Credits
PSYX 250N - Fund of Biological Psychology	3 Credits
PSYX 270 - Fund Psychology of Learning	3 Credits
PSYX 280 - Fund of Memory and Cognition	3 Credits
PSYX 320 - Research Methods III	3 Credits
PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
PSYX 340 - Abnormal Psychology	3 Credits
PSYX 345 - Child & Adolescent Psych Dis	3 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
PSYX 352 - Comparative Psychology	3 Credits
PSYX 356 - Human Neuropsychology	3 Credits
PSYX 360 - Social Psychology	3 Credits
PSYX 362 - Multicultural Psychology	3 Credits
PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 377 - Personalized Student Instr	3 Credits

PSYX 378 - Intro to Clinical Psyc	3 Credits
PSYX 385 - Psychology of Personality	3 Credits
PSYX 400 - History & System in Psychology	3 Credits
PSYX 435 - Clinic Topic Rural Bioethics	3 Credits
PSYX 436 - Ethical Foundation Qual Impov	3 Credits
PSYX 437 - Intro Emp Research Bioethics	3 Credits
PSYX 438 - Bioethics Health Policy	3 Credits
PSYX 441 - Addiction Studies	3 Credits
PSYX 442 - Counseling Theories in Context	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Sociology

Rule: May complete 9 credits

Note: SOCI 191, 291, 391, 491, and 492 may apply to this requirement depending on the course content.

Course	Credits
SOCI 101S - Introduction to Sociology	3 Credits
SOCI 130S - Soc of Alternative Religions	3 Credits
SOCI 202 - Social Statistics	3 Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 212S - Social Issues Southeast Asia	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 221 - Criminal Justice System	3 Credits
SOCI 270 - Intro Development Sociology	3 Credits
SOCI 275S - Gender and Society	3 Credits
SOCI 306 - Sociology of Work	3 Credits

SOCI 308 - Soc of Education	3 Credits
SOCI 312 - Criminal Adjudication	3 Credits
SOCI 314 - Extraordinary Group Behavior	3 Credits
SOCI 318 - Sociological Research Methods	3 Credits
SOCI 325 - Social Stratification	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 335 - Juvenile Justice System	3 Credits
SOCI 342 - Urban/Metropolitan Soc	3 Credits
SOCI 345 - Sociology of Organizations	3 Credits
SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 362 - Sociology of Law Enforcement	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 382 - Soc Psych and Social Structure	3 Credits
SOCI 386 - Preceptorship in Sociology	2 To 3 Credits
SOCI 423 - Sociology of Corrections	3 Credits
SOCI 435 - Law and Society	3 Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits
SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
SOCI 442 - ISJ Service Learning	3 To 4 Credits
SOCI 443 - Sociology of Poverty	3 Credits
SOCI 444 - Issues in Inequality	3 Credits
SOCI 455 - Classical Sociological Theory	3 Credits

	SOCI 460 - Capstone: Rural and Env Change	3 Credits
	SOCI 470 - Environmental Sociology	3 Credits
	SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Education Methods

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Requirement

Rule: Must choose one of the following courses:

—	Course	Credits
	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTR 400 - Historical Research Seminar	3 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
		3 Total Credits Required

History B.A.

Bachelor of Arts - History

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Note: A minimum of 40 credits in History are required, 21 of which must be upper division credits. A maximum of 60 credits in History are allowed. Penalties will apply for more than 60 credits.

Lower Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

9 Total Credits Required

Methods

Rule: Must complete the following course

—	Course	Credits
	HSTR 200 - Intro: Historical Methods	1 Credits
	Minimum Required Grade: C-	1 Total Credits Required

Introductory History

Rule: Must complete 2 of the following courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

AP Policy: Those students scoring a "5" on either the American History or European History AP exam are excused from the above requirement. These students earn credit toward graduation but do not earn credit toward the history degree.

—	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
	HSTA 103H - Honors American History I	4 Credits
	HSTA 104H - Honors American History II	4 Credits
	HSTR 101H - Western Civilization I	4 Credits

HSTR 102H - Western Civilization II	4 Credits
HSTR 103H - Honors Western Civilization I	4 Credits
HSTR 104H - Honors Western Civilization II	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

American History Electives

Rule: Choose at least 9 credits from the following courses

Course	Credits
HSTA 141H - Intro to AfAm Studies	3 Credits
HSTA 191 - Special Topics	1 To 6 Credits
HSTA 198 - Internship	1 To 6 Credits
HSTA 255 - Montana History	3 Credits
HSTA 262 - Abolitionism	3 Credits
HSTA 291 - Special Topics	1 To 12 Credits
HSTA 311 - Early America	3 Credits
HSTA 314 - Nature, Knowledge & Empire	3 Credits
HSTA 315 - Early American Republic	3 Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 320 - Birth of Modern US	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTA 323 - U.S. in the 1950s	3 Credits
HSTA 324 - U.S. in the 1960s	3 Credits
HSTA 327 - Atlantic World Slavery	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTA 335 - Movie America	3 Credits

HSTA 342H - Afr Amer Hist to 1865	3 Credits
HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits
HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 391 - Special Topics	1 To 12 Credits
HSTA 415 - The Black Radical Tradition	3 Credits
HSTA 417 - Prayer & Civil Rights	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 420 - America Divided, 1848-1865	3 Credits
HSTA 422 - Research: U.S. After WWII	3 Credits
HSTA 455 - Indian, Bison, & Horse	3 Credits
HSTA 461 - Research in Montana History	3 Credits
HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
HSTA 469 - Atlantic America Research	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
HSTA 491 - Special topics	1 To 12 Credits

HSTA 494 - Seminar	1 To 6 Credits
HSTR 364 - Environmental History	3 Credits
HSTR 367 - 19th Cent Amer West	3 Credits
HSTR 369 - 20th Cent Amer West	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

World History Electives

Rule: Choose at least 9 credits from the following courses

Course	Credits
HSTR 146H - The Silk Road	3 Credits
HSTR 191 - Special Topics	1 To 6 Credits
HSTR 230H - Colonial Latin America	3 Credits
HSTR 231H - Modern Latin America	3 Credits
HSTR 240 - East Asian Civilizations	3 Credits
HSTR 241H - Central Asian Cult & Civ	3 Credits
HSTR 262H - Islamic Civil: Classical Age	3 Credits
HSTR 264 - Islamic Civ: Modrn Era	3 Credits
HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
HSTR 291 - Special Topics	1 To 12 Credits
HSTR 334 - Latin America: Reform and Revo	3 Credits
HSTR 345H - Modern China	3 Credits
HSTR 380H - Foreign Relations of the Great	3 Credits
HSTR 384 - Hist Internat Human Rights	3 Credits
HSTR 391 - Special Topics	1 To 12 Credits
HSTR 392 - Independent Study	1 To 12 Credits
HSTR 435 - Lat Am Human Rgts & Memory	3 Credits

	HSTR 437 - US-Latin America Relations	3 Credits
	HSTR 449 - Revolution & Reform in China	3 Credits
	HSTR 472 - Problems of Peace and Security	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C		9 Total Credits Required

European History Electives

Rule: Choose at least 9 credits from the following courses

Course	Credits
HSTR 302 - Ancient Greece	3 Credits
HSTR 312 - Age of Absolut 1648-1789	3 Credits
HSTR 320 - Europ Social & Intellect Hist	3 Credits
HSTR 323 - Europ Social & Intellect Hist:	3 Credits
HSTR 348 - Britain 1485-1688	3 Credits
HSTR 349 - Britain from Rev - Reform 1688	3 Credits
HSTR 352 - France Revol 1789-1848	3 Credits
HSTR 353 - Modern France	3 Credits
HSTR 354 - Italy: 1300-1800	3 Credits
HSTR 355 - Italy: 1800-Present	3 Credits
HSTR 357 - Russia to 1881	3 Credits
HSTR 358 - Russia Since 1881	3 Credits
HSTR 361 - Germ:Augsburg-Bismarck	3 Credits
HSTR 363 - Eastern Europe	3 Credits
HSTR 391 - Special Topics	1 To 12 Credits

	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-		9 Total Credits Required

History Upper Division Writing Requirement

Rule: Must choose one of the following courses:

	Course	Credits
	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTR 400 - Historical Research Seminar	3 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
		3 Total Credits Required

History Minor

Minor - History (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Note: A minimum of 20 credits in History are required of which 6 credits must be in American (AM) History, 6 must be in European (EU) History, and 6 in World (WRLD) History (Asian, Islamic, African, Latin American or international). History minors must complete at least 9 upper-division credits.

Introductory History Courses

Rule: Must complete 2 of the following courses

Note: Student must select either the regular or honors version of a course to apply to the requirement. These courses count toward the American, World, and European electives.

AP Policy: Those students scoring a "5" on either the American History or European History AP exam are excused from the above requirement. These students earn credit toward graduation but do not earn credit toward the history degree.

Course	Credits
HSTA 101H - American History I	4 Credits
HSTA 102H - American History II	4 Credits
HSTA 103H - Honors American History I	4 Credits
HSTA 104H - Honors American History II	4 Credits
HSTR 101H - Western Civilization I	4 Credits
HSTR 102H - Western Civilization II	4 Credits
HSTR 103H - Honors Western Civilization I	4 Credits
HSTR 104H - Honors Western Civilization II	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

American History Electives

Rule: Must choose 6 credits from the following

Course	Credits
HSTA 141H - Intro to AfAm Studies	3 Credits
HSTA 191 - Special Topics	1 To 6 Credits
HSTA 198 - Internship	1 To 6 Credits
HSTA 255 - Montana History	3 Credits
HSTA 262 - Abolitionism	3 Credits
HSTA 291 - Special Topics	1 To 12 Credits

HSTA 311 - Early America	3 Credits
HSTA 314 - Nature, Knowledge & Empire	3 Credits
HSTA 315 - Early American Republic	3 Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 320 - Birth of Modern US	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTA 323 - U.S. in the 1950s	3 Credits
HSTA 324 - U.S. in the 1960s	3 Credits
HSTA 327 - Atlantic World Slavery	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTA 335 - Movie America	3 Credits
HSTA 342H - Afr Amer Hist to 1865	3 Credits
HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits
HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 391 - Special Topics	1 To 12 Credits

	HSTA 415 - The Black Radical Tradition	3 Credits
	HSTA 417 - Prayer & Civil Rights	3 Credits
	HSTA 418 - Women and Slavery	3 Credits
	HSTA 419 - Southern Women	3 Credits
	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 422 - Research: U.S. After WWII	3 Credits
	HSTA 455 - Indian, Bison, & Horse	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTA 491 - Special topics	1 To 12 Credits
	HSTA 494 - Seminar	1 To 6 Credits
	HSTR 364 - Environmental History	3 Credits
	HSTR 367 - 19th Cent Amer West	3 Credits
	HSTR 369 - 20th Cent Amer West	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

World History Electives

Rule: Must choose 6 credits from the following

Course	Credits
HSTR 146H - The Silk Road	3 Credits
HSTR 191 - Special Topics	1 To 6 Credits
HSTR 230H - Colonial Latin America	3 Credits
HSTR 231H - Modern Latin America	3 Credits

	HSTR 240 - East Asian Civilizations	3 Credits
	HSTR 241H - Central Asian Cult & Civ	3 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits
	HSTR 264 - Islamic Civ: Modrn Era	3 Credits
	HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
	HSTR 291 - Special Topics	1 To 12 Credits
	HSTR 334 - Latin America: Reform and Revo	3 Credits
	HSTR 345H - Modern China	3 Credits
	HSTR 380H - Foreign Relations of the Great	3 Credits
	HSTR 384 - Hist Internat Human Rights	3 Credits
	HSTR 391 - Special Topics	1 To 12 Credits
	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
	HSTR 449 - Revolution & Reform in China	3 Credits
	HSTR 472 - Problems of Peace and Security	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C		6 Total Credits Required

European History Electives

Rule: Must choose 6 credits from the following

Course	Credits
HSTR 302 - Ancient Greece	3 Credits
HSTR 312 - Age of Absolut 1648-1789	3 Credits
HSTR 320 - Europ Social & Intellect Hist	3 Credits

HSTR 323 - Europ Social & Intellect Hist:	3 Credits
HSTR 348 - Britain 1485-1688	3 Credits
HSTR 349 - Britain from Rev - Reform 1688	3 Credits
HSTR 352 - France Revol 1789-1848	3 Credits
HSTR 353 - Modern France	3 Credits
HSTR 354 - Italy: 1300-1800	3 Credits
HSTR 355 - Italy: 1800-Present	3 Credits
HSTR 357 - Russia to 1881	3 Credits
HSTR 358 - Russia Since 1881	3 Credits
HSTR 361 - Germ:Augsburg-Bismarck	3 Credits
HSTR 363 - Eastern Europe	3 Credits
HSTR 391 - Special Topics	1 To 12 Credits
HSTR 392 - Independent Study	1 To 12 Credits
HSTR 418 - Britain 1500 - 1800	3 Credits
HSTR 491 - Special Topics	1 To 12 Credits
HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-	6 Total Credits Required

History Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Students may earn a teaching major in history by completing the requirements for the BA in history, to include the following: HSTA 101 or 102; HSTR 101 or 102; HSTR 200; HSTA 255; 9 credits in world history; 6 upper-division credits in American history; 6 upper-division credits in European history; 6 additional credits upper-division history electives; one HSTA/HSTR 400-level approved writing course; and EDU 497 (C&I 428). All requirements for the history major apply. Students with a teaching major in history must also complete a teaching major or minor in a second field. For the history teaching major, students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students may also earn a teaching minor in history. See the Department of Curriculum & Instruction for more information.

Bachelor of Arts - History; History Education Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Note: A maximum of 60 credits in History are allowed. Penalties will apply for more than 60 credits. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. Students who choose to complete a teaching major in history must also complete a teaching major or minor in a second field.

Lower Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

12 Total Credits Required

American History Introductory Course

Rule: Must complete 1 of the following courses

Note: AP Policy: Those students scoring a "5" on the American History AP exam can be excused from the survey course requirement. Another American history course must then be taken in place of the survey course. Please consult with the Humanities Advisor with questions.

—	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

European History Introductory Course

Rule: Must complete 1 of the following courses

Note: AP Policy: Those students scoring a "5" on the European History AP exam can be excused from the survey course requirement. Another European history course must then be taken in place of the survey course. Please consult with the Humanities Advisor with questions.

—	Course	Credits
	HSTR 101H - Western Civilization I	4 Credits
	HSTR 102H - Western Civilization II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Montana History

Rule: Complete the following course.

—	Course	Credits
	HSTA 255 - Montana History	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Historical Methods Course

Rule: Complete the following course.

—	Course	Credits
	HSTR 200 - Intro: Historical Methods	1 Credits
Minimum Required Grade: C-		1 Total Credits Required

American History Upper Division Electives

Rule: Choose at least 6 credits from the following courses

Note: null

—	Course	Credits
	HSTA 311 - Early America	3 Credits
	HSTA 314 - Nature, Knowledge & Empire	3 Credits
	HSTA 315 - Early American Republic	3 Credits
	HSTA 316 - American Civil War Era	3 Credits

HSTA 320 - Birth of Modern US	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTA 323 - U.S. in the 1950s	3 Credits
HSTA 324 - U.S. in the 1960s	3 Credits
HSTA 327 - Atlantic World Slavery	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTA 335 - Movie America	3 Credits
HSTA 342H - Afr Amer Hist to 1865	3 Credits
HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits
HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 391 - Special Topics	1 To 12 Credits
HSTA 415 - The Black Radical Tradition	3 Credits
HSTA 417 - Prayer & Civil Rights	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits

	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 422 - Research: U.S. After WWII	3 Credits
	HSTA 455 - Indian, Bison, & Horse	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTA 491 - Special topics	1 To 12 Credits
	HSTA 494 - Seminar	1 To 6 Credits
	HSTR 364 - Environmental History	3 Credits
	HSTR 367 - 19th Cent Amer West	3 Credits
	HSTR 369 - 20th Cent Amer West	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

World History Electives

Rule: Choose at least 9 credits from the following courses

—	Course	Credits
	HSTR 146H - The Silk Road	3 Credits
	HSTR 191 - Special Topics	1 To 6 Credits
	HSTR 230H - Colonial Latin America	3 Credits
	HSTR 231H - Modern Latin America	3 Credits
	HSTR 240 - East Asian Civilizations	3 Credits
	HSTR 241H - Central Asian Cult & Civ	3 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits
	HSTR 264 - Islamic Civ: Modrn Era	3 Credits

	HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
	HSTR 291 - Special Topics	1 To 12 Credits
	HSTR 334 - Latin America: Reform and Revo	3 Credits
	HSTR 345H - Modern China	3 Credits
	HSTR 380H - Foreign Relations of the Great	3 Credits
	HSTR 384 - Hist Internat Human Rights	3 Credits
	HSTR 391 - Special Topics	1 To 12 Credits
	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
	HSTR 449 - Revolution & Reform in China	3 Credits
	HSTR 472 - Problems of Peace and Security	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-		9 Total Credits Required

European Upper Division History Electives

Rule: Choose at least 6 credits from the following courses

Note: null

	Course	Credits
	HSTR 302 - Ancient Greece	3 Credits
	HSTR 312 - Age of Absolut 1648-1789	3 Credits
	HSTR 320 - Europ Social & Intellect Hist	3 Credits
	HSTR 323 - Europ Social & Intellect Hist:	3 Credits
	HSTR 348 - Britain 1485-1688	3 Credits
	HSTR 349 - Britain from Rev - Reform 1688	3 Credits

	HSTR 352 - France Revol 1789-1848	3 Credits
	HSTR 353 - Modern France	3 Credits
	HSTR 354 - Italy: 1300-1800	3 Credits
	HSTR 355 - Italy: 1800-Present	3 Credits
	HSTR 357 - Russia to 1881	3 Credits
	HSTR 358 - Russia Since 1881	3 Credits
	HSTR 361 - Germ:Augsburg-Bismarck	3 Credits
	HSTR 363 - Eastern Europe	3 Credits
	HSTR 391 - Special Topics	1 To 12 Credits
	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division History Electives

Rule: Complete two additional upper division history courses

Note: Courses can be selected from HSTA or HSTR 300-level and above.

Minimum Required Grade: C-

6 Total Credits Required

Teaching Methods Requirement

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

History Upper Division Writing Requirement

Rule: Must choose one of the following courses:

	Course	Credits
	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTR 400 - Historical Research Seminar	3 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching History Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - History (Minor); Track: Teaching History

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 31

Required Cumulative GPA: 2.0

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for

student teaching. Individuals completing a teaching minor must also complete a teaching major in another content area.

Lower Division American History Courses

Rule: Must complete all of the following courses

Note: null

Course	Credits
HSTA 101H - American History I	4 Credits
HSTA 102H - American History II	4 Credits
HSTA 255 - Montana History	3 Credits
Minimum Required Grade: C-	11 Total Credits Required

Lower Division European History Course

Rule: Complete one of the following courses.

Course	Credits
HSTR 101H - Western Civilization I	4 Credits
HSTR 102H - Western Civilization II	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Historical Methods

Rule: Complete the following course.

Course	Credits
HSTR 200 - Intro: Historical Methods	1 Credits
Minimum Required Grade: C-	1 Total Credits Required

American Upper Division History Electives

Rule: Must choose 3 credits from the following

Course	Credits
HSTA 311 - Early America	3 Credits
HSTA 314 - Nature, Knowledge & Empire	3 Credits

HSTA 315 - Early American Republic	3 Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 320 - Birth of Modern US	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTA 323 - U.S. in the 1950s	3 Credits
HSTA 324 - U.S. in the 1960s	3 Credits
HSTA 327 - Atlantic World Slavery	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTA 335 - Movie America	3 Credits
HSTA 342H - Afr Amer Hist to 1865	3 Credits
HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits
HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 391 - Special Topics	1 To 12 Credits
HSTA 415 - The Black Radical Tradition	3 Credits
HSTA 417 - Prayer & Civil Rights	3 Credits

	HSTA 418 - Women and Slavery	3 Credits
	HSTA 419 - Southern Women	3 Credits
	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 422 - Research: U.S. After WWII	3 Credits
	HSTA 455 - Indian, Bison, & Horse	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTA 491 - Special topics	1 To 12 Credits
	HSTA 494 - Seminar	1 To 6 Credits
	HSTR 364 - Environmental History	3 Credits
	HSTR 367 - 19th Cent Amer West	3 Credits
	HSTR 369 - 20th Cent Amer West	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

World History Electives

Rule: Must choose 6 credits from the following

—	Course	Credits
	HSTR 146H - The Silk Road	3 Credits
	HSTR 191 - Special Topics	1 To 6 Credits
	HSTR 230H - Colonial Latin America	3 Credits
	HSTR 231H - Modern Latin America	3 Credits
	HSTR 240 - East Asian Civilizations	3 Credits
	HSTR 241H - Central Asian Cult & Civ	3 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits

	HSTR 264 - Islamic Civ: Modrn Era	3 Credits
	HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
	HSTR 291 - Special Topics	1 To 12 Credits
	HSTR 334 - Latin America: Reform and Revo	3 Credits
	HSTR 345H - Modern China	3 Credits
	HSTR 380H - Foreign Relations of the Great	3 Credits
	HSTR 384 - Hist Internat Human Rights	3 Credits
	HSTR 391 - Special Topics	1 To 12 Credits
	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
	HSTR 449 - Revolution & Reform in China	3 Credits
	HSTR 472 - Problems of Peace and Security	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-		6 Total Credits Required

European Upper Division History Electives

Rule: Must choose 3 credits from the following

Course	Credits
HSTR 302 - Ancient Greece	3 Credits
HSTR 312 - Age of Absolut 1648-1789	3 Credits
HSTR 320 - Europ Social & Intellect Hist	3 Credits
HSTR 323 - Europ Social & Intellect Hist:	3 Credits
HSTR 348 - Britain 1485-1688	3 Credits
HSTR 349 - Britain from Rev - Reform 1688	3 Credits

	HSTR 352 - France Revol 1789-1848	3 Credits
	HSTR 353 - Modern France	3 Credits
	HSTR 354 - Italy: 1300-1800	3 Credits
	HSTR 355 - Italy: 1800-Present	3 Credits
	HSTR 357 - Russia to 1881	3 Credits
	HSTR 358 - Russia Since 1881	3 Credits
	HSTR 361 - Germ:Augsburg-Bismarck	3 Credits
	HSTR 363 - Eastern Europe	3 Credits
	HSTR 391 - Special Topics	1 To 12 Credits
	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 491 - Special Topics	1 To 12 Credits
	HSTR 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching Methods Requirement

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Liberal Studies

Stewart Justman, Director

The Liberal Studies Program offers students the opportunity to work in a combination of disciplines within the humanities, including literature, philosophy, and history. The Liberal Studies Program offers options in:

- General Humanities
- Asian Studies
- Religious Studies
- Women's and Gender Studies

In addition, the Program offers a minor in Liberal Studies and South and Southeast Asian Studies.

The Liberal Studies curriculum is designed for the student who seeks a liberal education with emphasis on the humanities. While allowing ample room for electives, the coursework for the LS major focuses on the literary and religious works, cultural records, and ideas that enrich our common inheritance. The aim of the program is to foster critical understanding and appreciation of our inheritance and world through the study and discussion of these texts and traditions. Emphasis in all cases is on critical thinking, close reading of primary sources, analytical writing, and historical understanding. Students who graduate from the program will be prepared to enter various fields in the private and public sectors, pursue further professional training, and be better prepared to meet the demands of citizenship. More information about the program is available at the Liberal Studies Program office in LA 101, (406) 243-2949, or online at www.cas.umt.edu/liberal. For advising assistance contact the humanities advisor in LA 145 or call (406) 243-6082.

Majors in Liberal Studies may not take any course work presented for the major for CR/NCR. Upper-level students transferring into this program should have at least a C average in all credits attempted. The upper-division writing expectation must be met by successfully completing an upper-division writing course from the approved list in the General University Requirements section of this catalog (such as LSH 484).

Department Faculty

Professors

Paul Dietrich, Professor of Religious Studies and Liberal Studies
Stewart Justman
Ruth Vanita, Professor

Associate Professors

Bradley Clough, Associate Professor of Liberal Studies (Asian Religions)
Nathaniel Levtow, Associate Professor (Religious Studies, Biblical Studies)

Adjunct Faculty

Beth Hubble, Adjunct Assistant Professor of Women's Studies

Lecturers

Mark Hanson, Lecturer of Liberal Studies

Course Descriptions

Liberal Studies

- **LS 105H - Intro to Russian Culture**
Credits: 3. Offered autumn. Same as RUSS 105HY and MCLG 105HY. A chronological survey of Russian culture from its beginnings to the contemporary period. **Course Attributes:**
Historical & Cultural Course American and European

- **LS 202X - Introduction to India**

Credits: 3. Offered alternate years. Same as SSEA 202X This course introduces students to the history, economy, political and legal system, society, culture, religions, and literary and artistic traditions of India, which is the world's largest secular democracy and the birthplace of four major world religions. **Course Attributes:** Indigenous and Global

- **LS 234X - Hindu Religious Traditions**

Credits: 3. Offered spring even-numbered years. Same as AS and LS 365. Critical exploration of selected aspects of Hindu thought, narrative and practice, both in contemporary and historical perspective. Focus primarily on India, but with consideration of Hinduism's transformation and impact beyond South Asia. **Course Attributes:** Indigenous and Global

- **LS 306 - Intro to Russian Literature I**

Credits: 3. Offered spring. Same as MCLG and RUSS 306. A survey of Russian poetry and prose from the mid-nineteenth century through the Symbolist period of the early 20th century. Included are the works of Gogol, Turgenyev, Dostoevsky, Tolstoy, and the Symbolists.

- **LS 308 - Russian Cinema and Culture**

Credits: 3. Offered alternate years. Same as RUSS 308, ENFM 308, and MCLG 308. Topically arranged introduction to the cinema of Russia and the former Soviet Union, with particular emphasis on contemporary Russian cinema. No knowledge of Russian is necessary.

- **LS 311 - Chinese Folktales**

Credits: 3. Offered intermittently. Same as MCLG 380. The study of the aspirations, desires, loves, fears, moral and aesthetic values of the Chinese people as expressed in their folk literature.

- **LS 315 - Major Hispanic Authors**

Credits: 3. Offered autumn. Same as MCLG 315. The intensive study of the life, times, and works of a major Hispanic author.

Liberal Studies & Humanities

- **LSH 102H - Intro to South & S East Asia**

Credits: 3. Offered intermittently. Same as ANTY 102H/SSEA 102H. An introduction to South and Southeast Asian regions, cultures, societies, and histories, with particular emphasis on artistic, religious and literary traditions from prehistory to the present. An overview approach with different materials and emphases. **Course Attributes:** Historical & Cultural Course
Indigenous and Global

- **LSH 151L - Humanities:Greeks,Bible,Roman**

Credits: 0 TO 4. Offered autumn. Prereq., eligibility for WRIT 101 (ENEX 101) based on writing placement examination. General survey of the field of Humanities in Western civilization contrasting the Greco-Roman with the Jewish and Christian traditions. **Course Attributes:**
Literary & Artistic Stds Crse Writing Course-Approved Writing Course-Intermediate

- **LSH 152L - Humanities: Medieval to Modern**

Credits: 0 TO 4. Offered spring. Prereq., eligibility for WRIT 101 (ENEX 101) based on writing placement examination. General survey of the field of Humanities in Western civilization, from the Middle Ages through modernity. **Course Attributes:** Literary & Artistic Stds Crse
Writing Course-Approved Writing Course-Intermediate

- **LSH 161H - Asian Humanities**

Credits: 3. Offered autumn. Coreq., LS 151L or consent of instr. Selective survey of classical South and East Asian perspectives on the humanities. Hinduism, Confucianism, Taoism and Buddhism are the primary traditions considered. **Course Attributes:** Historical & Cultural Course
Non-Western Course

- **LSH 291 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **LSH 292 - Independent Study**
Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.
- **LSH 294 - Seminar/Workshop**
Credits: 1 TO 6. (R-6) Offered intermittently. A review and discussion of current research. Topics vary.
- **LSH 326 - Stories East and West**
Credits: 3. Offered intermittently. A course tracing the influence of Arabic fiction on its western counterpart.
- **LSH 327L - Gender & Sexuality in Eng Fict**
Credits: 3. Offered alternate years. Same as WGS 379L & LIT 379L. Major 20th century novels and short stories written in English in different parts of the world and how these texts explore changing concepts of gender and sexuality.
- **LSH 328 - Love in Bombay Cinema**
Credits: 3. Offered intermittently. Examines the representation of romantic love in Bombay cinema, in the context of the representation of many types of love, familial, friendly and devotional.
- **LSH 329 - Fathers & Daughters in Lit**
Credits: 3. Same as WGS 329. Prereq., WRIT 101. Examines how relationships between fathers and daughters have been represented, celebrated and critiqued in literature in the Western world, from antiquity to the present.
- **LSH 342 - Topics Comparative Lit & Rel**
Credits: 3. Offered every second semester. Same as SSEA 342. These courses compare major traditions, texts and trends in two or more world civilizations or cultures. Works of literature and/or philosophy are examined in their historical contexts, and in relation to each other.
- **LSH 351L - Exploring the Humanities**
Credits: 3. (R-9) Offered intermittently. Intensive study of a specific historical period in Western humanities through its seminal literature, with an emphasis on intellectual and ethical paradigms.
Course Attributes: Literary & Artistic Stds Crse
- **LSH 368 - Shakespeare: Comedy & Tragedy**
Credits: 3. Offered yearly. An investigation of the differences, but also affinities, between the two fundamental Shakespearean genres.
- **LSH 389E - Placebos: The Power of Words**
Credits: 3. Situated at the crossroads of medicine and the humanities, this course looks into the changing reputation of the placebo effect, with special attention to the power of words to induce therapeutic—or counter-therapeutic—effects.
Course Attributes: Ethical & Human Values Course
- **LSH 390 - Undergraduate Research**
Credits: 1 TO 6. (R-6) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student.
Course Attributes: Research & Creative Schlrshp
- **LSH 391 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **LSH 392 - Independent Study**
Credits: 1 TO 12. (R-12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.
- **LSH 398 - Coop Education/Internship**
Credits: 1 TO 6. Offered intermittently. Prereq., consent of director. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.
Course Attributes: Internships/Practicums Internship graduation limit 6
- **LSH 415 - Same Sex Unions Literature**
Credits: 3. Offered intermittently. Examines the literary representation of same-sex unions in European and Indian literary traditions.
- **LSH 416 - The Bhagavad Gita**
Credits: 3. Offered once every 3 years. Close reading of the Bhagavad Gita in translation, examining its literary, philosophical and religious dimensions, and the way Indian and Western commentators have interpreted and used it.
- **LSH 484 - Novel Ancient and Modern**
Credits: 3. Offered yearly. Two antithetical models for the construction of a novel. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced
- **LSH 490 - Undergraduate Research**
Credits: 1 TO 6. (R-6) Offered intermittently. Directed individual research and study appropriate to the background and objectives of the student. **Course Attributes:** Research & Creative Schlrshp
- **LSH 491 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **LSH 492 - Independent Study**
Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.
- **LSH 494 - Seminar/Workshop**
Credits: 3. (R-9) Offered intermittently. Concentrated studies in specific genres and periods.
- **LSH 498 - Coop Education/Internship**
Credits: 1 TO 6. Offered intermittently. Prereq., consent of director. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.
Course Attributes: Internships/Practicums Internship graduation limit 6

Liberal Studies B.A.

Bachelor of Arts - Liberal Studies; General Liberal Studies Option

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: Advising closely with the Humanities Advisor and your assigned Liberal Studies advisor is imperative in Liberal Studies. There are substitutions that can occur in this program of study which need to be approved and documented with your faculty advisor.

General Humanities Lower Division Core

Rule: 18-20 credits

Minimum Required Grade: C-

18-20 Total Credits Required

Humanities

Rule: Take both of the following courses. (6-8 credits).

Note: Prerequisite or co-requisite: WRIT 101 or equivalent.

These courses are recommended to be taken early in the curriculum as they are foundational. LSH 152L can be taken prior to LSH 151L.

General Education fulfillment through the lower-division core: Both courses fulfill the "approved writing course" and "Literary & Artistic Studies".

—	Course	Credits
	LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
	LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
	Minimum Required Grade: C-	6-8 Total Credits Required

Literary Studies - European or American Literature

Rule: Take one approved 3 credit course.

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

—	Course	Credits
	LIT 210L - American Lit I	3 Credits
	LIT 211L - American Lit II	3 Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits

	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Historical Studies - European or American History

Rule: Take one approved course that is at least 3 credits.

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
	HSTA 103H - Honors American History I	4 Credits
	HSTA 104H - Honors American History II	4 Credits
	HSTA 141H - Intro to AfAm Studies	3 Credits
	HSTA 255 - Montana History	3 Credits
	HSTA 262 - Abolitionism	3 Credits
	HSTR 101H - Western Civilization I	4 Credits
	HSTR 102H - Western Civilization II	4 Credits
	HSTR 103H - Honors Western Civilization I	4 Credits
	HSTR 104H - Honors Western Civilization II	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Asian Studies

Rule: Take one approved 3 credit course.

	Course	Credits
	ANTY 141H - The Silk Road	3 Credits
	CHIN 211H - Chinese Culture and Civiliz	3 Credits

HSTR 240 - East Asian Civilizations	3 Credits
HSTR 262H - Islamic Civil: Classical Age	3 Credits
HSTR 264 - Islamic Civ: Modrn Era	3 Credits
JPNS 150H - Japanese Cult & Civiliz	3 Credits
SSEA 102H - Intro to South & S. East Asia	3 Credits
SSEA 195 - Special Topics	1 To 6 Credits
SSEA 202X - Introduction to India	3 Credits
SSEA 212S - Southeast Asian Cult & Civ	3 Credits
SSEA 232H - Buddhism	3 Credits
SSEA 234X - Hindu Religious Traditions	3 Credits
SSEA 295 - Special Topics	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

Religious Studies

Rule: Take one approved 3 credit course.

Course	Credits
RLST 191 - Special Topics	1 To 9 Credits
RLST 204H - Intro to the Hebrew Bible	3 Credits
RLST 205 - Introduction to New Testament	3 Credits
RLST 221 - Judaism	3 Credits
RLST 225 - Christianity	3 Credits
RLST 232H - Buddhism	3 Credits
RLST 233 - Tradtns of Buddhist Meditation	3 Credits
RLST 234X - Hindu Religious Traditions	3 Credits
RLST 236X - Chinese Religions	3 Credits

	RLST 238X - Japanese Religions	3 Credits
	RLST 281E - Comparative Ethics	3 Credits
	RLST 291 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-		3 Total Credits Required

General Humanities Upper Division Requirements

Rule: 24 credits.

Note: Please work closely with the Humanities Advisor and your faculty advisor in selecting and planning coursework.

Minimum Required Grade: C-

24 Total Credits Required

History

Rule: One course (3 credits) of approved coursework.

	Course	Credits
	HSTA 311 - Early America	3 Credits
	HSTA 314 - Nature, Knowledge & Empire	3 Credits
	HSTA 315 - Early American Republic	3 Credits
	HSTA 316 - American Civil War Era	3 Credits
	HSTA 320 - Birth of Modern US	3 Credits
	HSTA 321 - America in Crisis	3 Credits
	HSTA 322 - American History: WWII to Pres	3 Credits
	HSTA 323 - U.S. in the 1950s	3 Credits
	HSTA 324 - U.S. in the 1960s	3 Credits
	HSTA 327 - Atlantic World Slavery	3 Credits
	HSTA 333 - Key Events in American Militar	3 Credits
	HSTA 335 - Movie America	3 Credits
	HSTA 342H - Afr Amer Hist to 1865	3 Credits

HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits
HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 391 - Special Topics	1 To 12 Credits
HSTA 415 - The Black Radical Tradition	3 Credits
HSTA 417 - Prayer & Civil Rights	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 420 - America Divided, 1848-1865	3 Credits
HSTA 422 - Research: U.S. After WWII	3 Credits
HSTA 455 - Indian, Bison, & Horse	3 Credits
HSTA 461 - Research in Montana History	3 Credits
HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
HSTA 469 - Atlantic America Research	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
HSTA 491 - Special topics	1 To 12 Credits
HSTA 494 - Seminar	1 To 6 Credits

HSTR 302 - Ancient Greece	3 Credits
HSTR 306 - Medieval World: Barbarian West	3 Credits
HSTR 306H - Medieval World: Barbarian West	3 Credits
HSTR 307H - Medieval World: High Middle Ag	3 Credits
HSTR 312 - Age of Absolut 1648-1789	3 Credits
HSTR 315 - The Reformation	3 Credits
HSTR 317 - Renaissance & Reform	3 Credits
HSTR 320H - Europ Social & Intellect Hist	3 Credits
HSTR 323H - Europ Social & Intellect Hist:	3 Credits
HSTR 325H - Europ Social & Intellect Hist:	3 Credits
HSTR 326H - Contemporary Europe	3 Credits
HSTR 334 - Latin America: Reform and Revo	3 Credits
HSTR 335 - Lat Am Workers & Labor	3 Credits
HSTR 343H - Modern Japan	3 Credits
HSTR 345H - Modern China	3 Credits
HSTR 348 - Britain 1485-1688	3 Credits
HSTR 349 - Britain from Rev - Reform 1688	3 Credits
HSTR 350 - Modern Britain	3 Credits
HSTR 352 - France Revol 1789-1848	3 Credits
HSTR 353 - Modern France	3 Credits
HSTR 354 - Italy: 1300-1800	3 Credits
HSTR 355 - Italy: 1800-Present	3 Credits
HSTR 357 - Russia to 1881	3 Credits
HSTR 358 - Russia Since 1881	3 Credits
HSTR 361 - Germ:Augsburg-Bismarck	3 Credits

	HSTR 363 - Eastern Europe	3 Credits
	HSTR 364 - Environmental History	3 Credits
	HSTR 367 - 19th Cent Amer West	3 Credits
	HSTR 368 - Iran Betw Two Revol	3 Credits
	HSTR 369 - 20th Cent Amer West	3 Credits
	HSTR 374 - War, Peace, & Society	3 Credits
	HSTR 377H - European Internl Relat	3 Credits
	HSTR 378H - Global Dipl Cold War	3 Credits
	HSTR 380H - Foreign Relations of the Great	3 Credits
	HSTR 384 - Hist Internat Human Rights	3 Credits
	HSTR 386 - Nationalism in Mod Middle East	3 Credits
	HSTR 391 - Special Topics	1 To 12 Credits
	HSTR 392 - Independent Study	1 To 12 Credits
	HSTR 394 - Seminar	1 To 6 Credits
	HSTR 396 - Independent Study	1 To 12 Credits
	HSTR 400 - Historical Research Seminar	3 Credits
	HSTR 401 - The Great Historians	3 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
	HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
	HSTR 441 - Central Asia Seminar	3 Credits
	HSTR 442 - Cities/Landscps Central Asia	3 Credits
	HSTR 448 - Tradition & Reform in China	3 Credits
	HSTR 449 - Revolution & Reform in China	3 Credits

HSTR 455 - Public History	3 Credits
HSTR 457 - World of Anna Karenina	3 Credits
HSTR 458 - Russian Revolution 1900-1930	3 Credits
HSTR 459 - Artistic Trad Cent & SW Asia	3 Credits
HSTR 470 - Dynamics of Diplomacy	3 Credits
HSTR 472 - Problems of Peace and Security	3 Credits
HSTR 481 - Trad/Reform in China	3 Credits
HSTR 491 - Special Topics	1 To 12 Credits
HSTR 492 - Independent Study	1 To 12 Credits
HSTR 494 - Seminar	1 To 6 Credits
HSTR 495 - Special Topics	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

Philosophy or Political Theory

Rule: One course (3 credits) of approved coursework.

Course	Credits
HSTR 302 - Ancient Greece	3 Credits
NASX 475X - Tribal Sovereignty	3 Credits
PHL 363 - Ancient Greek and Roman Phil	3 Credits
PHL 391 - Special Topics	1 To 9 Credits
PHL 491 - Special Topics	1 To 9 Credits
PSCI 322H - Politics of Europe	3 Credits
PSCI 336 - European Union	3 Credits
PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
PSCI 352 - American Political Thought	3 Credits

PSCI 354 - Contemp Issues in Pol Theory	3 Credits
PSCI 355 - Theories of Civil Violence	3 Credits
PSCI 357 - Ancient & Medieval Pol Phil	3 Credits
PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
PSCI 451E - Ancient & Medieval Pol Phil	3 Credits
PSCI 452 - Utopianism and its Critics	3 Credits
PSCI 453E - Modern Political Theory	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Women's and Gender Studies, Native American Studies, or African-American Studies

Rule: One course (3 credits) of approved coursework.

Course	Credits
AAS 342H - Afr Amer Hist to 1865	3 Credits
AAS 343H - Afr Amer Hist Since 1865	3 Credits
AAS 347 - Voodoo, Muslim, Church	3 Credits
AAS 372 - African American Identity	3 Credits
AAS 395 - Special Topics	1 To 9 Credits
AAS 396 - Independent Study	1 To 9 Credits
AAS 415 - The Black Radical Tradition	3 Credits
AAS 417 - Prayer & Civil Rights	3 Credits
AAS 420 - America Divided, 1848-1865	3 Credits
AAS 495 - Special Topics	1 To 9 Credits
AAS 496 - Independent Study	1 To 9 Credits
ANTY 427 - Anthropology of Gender	3 Credits
ARTH 436 - The History of Women in Art	3 Credits

CLAS 320 - Women in Antiquity	3 Credits
COUN 485 - Counseling Theories	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 385 - Families & Children in America	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
LIT 378L - Gay and Lesbian Studies	3 Credits
LSH 327L - Gender & Sexuality in Eng Fict	3 Credits
LSH 329 - Fathers & Daughters in Lit	3 Credits
NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
NASX 304E - Native American Beliefs/Philos	3 Credits
NASX 306X - Contemp Global Iss Indg People	3 Credits
NASX 340 - Native American Lit	3 Credits
NASX 351 - Traditional Eco Knowledge	3 Credits
NASX 352 - Afr Amer Hist to 1865	3 Credits
NASX 354X - Indians of MT since Rsrvtn Era	3 Credits
NASX 360 - Native Amer and Cinema	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
NASX 391 - Special Topics	1 To 6 Credits
NASX 394 - Workshop/Seminar	1 To 6 Credits
NASX 403 - Contmp Tribal Resource Issues	3 Credits
NASX 405H - Gndr Iss in Native Amer Stdies	3 Credits
NASX 430 - American Indian Education	3 Credits

NASX 464X - Hist Amer Indian Affrs to 1776	3 Credits
NASX 465X - Hist Amer Indian Affrs 19 Cent	3 Credits
NASX 466X - Hist of Indian Affrs from 1890	3 Credits
NASX 475X - Tribal Sovereignty	3 Credits
NASX 481 - Native American Film	3 Credits
NASX 488 - Stds in Native Amer Autbio	3 Credits
NASX 491 - Independent Study	1 To 6 Credits
NASX 492 - Special Topics	1 To 6 Credits
NASX 494 - Seminar/Workshop	3 Credits
NASX 499 - Senior Capstone/Thesis	3 To 9 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
RLST 370 - Mysticism	3 Credits
WGS 336 - American Women Writers	3 Credits
WGSS 363 - Feminist Theory and Methods	3 Credits
WGSS 390 - Undergraduate Research	1 To 6 Credits
WGSS 391 - Special Topics	1 To 6 Credits
WGSS 392 - Independent Study	1 To 12 Credits
WGSS 398 - Coop Education/Internship	1 To 6 Credits
WGSS 463 - WGS Capstone	2 Credits
WGSS 490 - Undergraduate Research	1 To 6 Credits
WGSS 490H - Research	3 Credits
WGSS 491 - Special Topics	1 To 6 Credits
WGSS 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	3 Total Credits Required

Religious Studies

Rule: Two courses (6 credits) of approved coursework.

Course	Credits
AAS 347 - Voodoo, Muslim, Church	3 Credits
AAS 417 - Prayer & Civil Rights	3 Credits
NASX 304E - Native American Beliefs/Philos	3 Credits
RLST 300 - Theory & Method Study of Relig	3 Credits
RLST 310 - Topics in Biblical Studies	3 Credits
RLST 320 - Anct Judaism & Early Christnty	3 Credits
RLST 335 - Western Religious Thought I	3 Credits
RLST 336 - Western Religious Thought II	3 Credits
RLST 353 - Topics in South Asia Religions	3 Credits
RLST 354 - Topics in East Asia Religions	3 Credits
RLST 360 - Classcs of Buddhist Literature	3 Credits
RLST 366 - Tibetan Civilization	3 Credits
RLST 367 - Approaches to Study Zen Bddhsm	3 Credits
RLST 368 - Contem Buddhism in S & SE Asia	3 Credits
RLST 369 - Contemporary Tradtions of Asia	3 Credits
RLST 370 - Mysticism	3 Credits
RLST 376 - Contemporary Religious Thought	3 Credits
RLST 391 - Special Topics	1 To 12 Credits
RLST 392 - Independent Study	1 To 6 Credits
RLST 491 - Special Topics	1 To 12 Credits
RLST 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	6 Total Credits Required

Liberal Studies

Rule: Two courses (6 credits) of approved coursework.

Course	Credits
LSH 326 - Stories East and West	3 Credits
LSH 327L - Gender & Sexuality in Eng Fict	3 Credits
LSH 329 - Fathers & Daughters in Lit	3 Credits
LSH 342 - Topics Comparative Lit & Rel	3 Credits
LSH 351L - Exploring the Humanities	3 Credits
LSH 368 - Shakespeare: Comedy & Tragedy	3 Credits
LSH 390 - Undergraduate Research	1 To 6 Credits
LSH 391 - Special Topics	1 To 9 Credits
LSH 392 - Independent Study	1 To 12 Credits
LSH 484 - Novel Ancient and Modern	3 Credits
LSH 490 - Undergraduate Research	1 To 6 Credits
LSH 491 - Special Topics	1 To 9 Credits
LSH 492 - Independent Study	1 To 9 Credits
LSH 494 - Seminar/Workshop	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Senior Liberal Studies Capstone Seminar

Rule: One course (3 credits) of approved coursework.

Course	Credits
LSH 327L - Gender & Sexuality in Eng Fict	3 Credits
LSH 329 - Fathers & Daughters in Lit	3 Credits

LSH 484 - Novel Ancient and Modern	3 Credits
LSH 494 - Seminar/Workshop	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Modern and Classical Language Requirement

Note: Students must demonstrate fourth semester proficiency in a second language either by completing four semesters (recommended to be subsequent) with a grade of C- or better, or by receiving an equivalent score on a competence exam.

Note: Students must demonstrate fourth semester proficiency in a second language either by completing four semesters (recommended to be subsequent) with a grade of C- or better, or by receiving an equivalent score on a competence exam.

Asian Studies

Asian Studies Option, Professor Bradley Clough, Advisor:

The Asian Studies Option offers opportunities for those students who wish to focus on the diverse societies of the Asian continent through the study of literature, geography, history, peoples, religious and other cultural traditions, and languages.

Interested students must major in Liberal Studies with an option in Asian Studies. In addition to select Liberal Studies courses, students will choose from specified courses offered in many departments and areas in the College of Humanities and Sciences, such as History, Japanese Studies, Chinese Studies, Anthropology, Sociology, Geography, and Religious Studies.

Students who choose the Asian Studies option must meet with the Asian studies faculty advisor.

Bachelor of Arts - Liberal Studies; Asian Studies Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 41

Required Cumulative GPA: 2.0

Note: Two years (or equivalent proficiency) in an Asian language appropriate to the student's academic goals and approved by the academic advisor. Students who plan to pursue graduate work are strongly advised to complete three years, including at least one study abroad in Asia experience.

Asian Studies Option Lower Division Core

Rule: 20 credits.

Note: Please see academic advisor for questions regarding course availability or course substitutions.

Minimum Required Grade: C-

20 Total Credits Required

Introduction to the Humanities

Rule: Take both of the following courses (8 credits).

Note: WRIT 101 is a pre-requisite or co-requisite. General Education fulfillment: LSH 151L and 152L satisfy both the "approved writing course" and "Literary & Artistic Studies".

—	Course	Credits
	LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
	LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-		8 Total Credits Required

Introductory Asian Studies

Rule: Choose 1 of the following courses.

—	Course	Credits
	LSH 102H - Intro to South & S East Asia	3 Credits
	LSH 161H - Asian Humanities	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Asian Civilization Courses

Rule: Choose 2 of the following courses

—	Course	Credits
	CHIN 211H - Chinese Culture and Civiliz	3 Credits
	HSTR 240 - East Asian Civilizations	3 Credits
	JPNS 150H - Japanese Cult & Civiliz	3 Credits
	SOCI 212S - Social Issues Southeast Asia	3 Credits
	SSEA 202X - Introduction to India	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Asian Religion and Cultural Studies

Rule: Choose one course from the following. 3 credits.

Course	Credits
RLST 232H - Buddhism	3 Credits
RLST 233 - Tradtns of Buddhist Meditation	3 Credits
RLST 234X - Hindu Religious Traditions	3 Credits
RLST 236X - Chinese Religions	3 Credits
RLST 238X - Japanese Religions	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Asian Studies Upper-Division Requirements

Rule: Choose 7 courses from among the following. 21 credits.

Course	Credits
CHIN 313L - Chinese Poetry in Translat	3 Credits
CHIN 314L - Tradit Chinese Literature	3 Credits
GPHY 444 - High Asia	3 Credits
HSTR 343H - Modern Japan	3 Credits
HSTR 345H - Modern China	3 Credits
HSTR 448 - Tradition & Reform in China	3 Credits
HSTR 449 - Revolution & Reform in China	3 Credits
JPNS 311 - Jpns Clasc Lit Engl Trans	3 Credits
JPNS 312 - Jpns Lit Medieval to Mod	3 Credits
JPNS 386 - Hist of Japanese Lang	3 Credits
JPNS 391 - Special Topics	1 To 12 Credits
JPNS 411 - Mod Jpns Wrtrs/Thinkers	3 Credits
JPNS 431L - Post-War Japanese Literature	3 Credits
PSCI 329 - Politics of Japan	3 Credits

	RLST 353 - Topics in South Asia Religions	3 Credits
	RLST 354 - Topics in East Asia Religions	3 Credits
	RLST 360 - Classics of Buddhist Literature	3 Credits
	RLST 366 - Tibetan Civilization	3 Credits
	RLST 367 - Approaches to Study Zen Buddhism	3 Credits
	RLST 368 - Contemporary Buddhism in S & SE Asia	3 Credits
	RLST 369 - Contemporary Traditions of Asia	3 Credits
Minimum Required Grade: C-		21 Total Credits Required

Asian Language Requirement

Rule: Student must reach proficiency at the 202 level (fourth semester) in either Chinese or Japanese.

Note: Two years (or equivalent proficiency) in an Asian language appropriate to the student's academic goals and approved by the academic advisor. Students who plan to pursue graduate work are strongly advised to complete three years, including at least one study abroad in Asia experience.

Course	Credits
CHIN 101 - Elementary Chinese I	5 Credits
CHIN 102 - Elementary Chinese II	5 Credits
CHIN 201 - Intermediate Chinese I	5 Credits
CHIN 202 - Intermediate Chinese II	5 Credits
JPNS 101 - Elementary Japanese I	5 Credits
JPNS 102 - Elementary Japanese II	5 Credits
JPNS 201 - Intermediate Japanese I	5 Credits
JPNS 202 - Intermediate Japanese II	5 Credits
Minimum Required Grade: C-	0-20 Total Credits Required

Religious Studies

Religious Studies Option, Professor Paul Dietrich, Advisor:

Religion has been taught as an academic discipline at the University of Montana since 1924. Located within the Liberal Studies Program, the study of religion is pursued in the University in an interdisciplinary setting that offers opportunities for exploration and discovery in many areas of the humanities, art, and sciences. Our Religious Studies courses emphasize the scholarly analysis and interpretation of the history, literature, beliefs, myths, symbols, rituals, ethical and legal codes, and communities and institutions of the world's religious traditions.

We investigate how the world's religions address enduring human questions and influence responses to daily problems, and we explore how religious traditions shape lives and societies, from the emergence of the earliest civilizations to 21st-century global conflicts. Our students engage ideas about the good life and death, suffering and happiness, war and peace, revelation and salvation, God, mysticism, and religious experience. The curriculum is designed to provide students with a broad and deep understanding of religion as a field of human activity and inquiry. Students acquire the skills necessary to investigate specific religious traditions in historical depth and to understand the forms, expressions, and roles of religion in the world today.

Bachelor of Arts - Liberal Studies; Religious Studies Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Religious Studies Lower-Division Requirements

Rule: 20 credits.

Minimum Required Grade: C-

20 Total Credits Required

Introduction to the Humanities

Rule: Take the following 2 courses. 8 credits.

Note: WRIT 101 is a pre-requisite or co-requisite. General Education fulfillment: LSH 151L and 152L satisfy both the "approved writing course" and "Literary & Artistic Studies".

Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Introduction to Asian Humanities

Rule: Take the following course. 3 credits.

—	Course	Credits
	LSH 161H - Asian Humanities	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Near Eastern/Mediterranean courses

Rule: Choose one of the following courses. 3 credits.

—	Course	Credits
	RLST 204H - Intro to the Hebrew Bible	3 Credits
	RLST 205 - Introduction to New Testament	3 Credits
	RLST 221 - Judaism	3 Credits
	RLST 225 - Christianity	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

South or East Asian courses

Rule: Choose one of the following courses. 3 credits.

—	Course	Credits
	RLST 232H - Buddhism	3 Credits
	RLST 234X - Hindu Religious Traditions	3 Credits
	RLST 236X - Chinese Religions	3 Credits
	RLST 238X - Japanese Religions	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Religious Studies Upper-Division Requirements

Rule: 24 credits.

Minimum Required Grade: C-

24 Total Credits Required

Theory & Method in the Study of Religion

Rule: Take the following course. 3 credits.

Note: Please see a Liberal Studies advisor for possible course substitution approval.

Course	Credits
RLST 300 - Theory & Method Study of Relig	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Religious Studies Courses

Rule: Choose 5 of the following courses. 15 credits.

Course	Credits
AAS 347 - Voodoo, Muslim, Church	3 Credits
AAS 417 - Prayer & Civil Rights	3 Credits
NASX 304E - Native American Beliefs/Philos	3 Credits
RLST 281E - Comparative Ethics	3 Credits
RLST 310 - Topics in Biblical Studies	3 Credits
RLST 320 - Anct Judaism & Early Christnty	3 Credits
RLST 335 - Western Religious Thought I	3 Credits
RLST 336 - Western Religious Thought II	3 Credits
RLST 353 - Topics in South Asia Religions	3 Credits
RLST 354 - Topics in East Asia Religions	3 Credits
RLST 360 - Classcs of Buddhist Literature	3 Credits
RLST 366 - Tibetan Civilization	3 Credits
RLST 367 - Approaches to Study Zen Bddhsm	3 Credits
RLST 368 - Contem Buddhism in S & SE Asia	3 Credits
RLST 369 - Contemporary Tradtions of Asia	3 Credits
RLST 370 - Mysticism	3 Credits
RLST 376 - Contemporary Religious Thought	3 Credits

RLST 391 - Special Topics	1 To 12 Credits
RLST 392 - Independent Study	1 To 6 Credits
RLST 491 - Special Topics	1 To 12 Credits
RLST 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	15 Total Credits Required

Liberal Studies courses with Religious Studies content

Rule: Choose two Liberal Studies courses from the following. 6 credits.

Course	Credits
LSH 326 - Stories East and West	3 Credits
LSH 329 - Fathers & Daughters in Lit	3 Credits
LSH 342 - Topics Comparative Lit & Rel	3 Credits
LSH 368 - Shakespeare: Comedy & Tragedy	3 Credits
LSH 391 - Special Topics	1 To 9 Credits
LSH 392 - Independent Study	1 To 12 Credits
LSH 484 - Novel Ancient and Modern	3 Credits
LSH 491 - Special Topics	1 To 9 Credits
LSH 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	6 Total Credits Required

Modern and Classical Language Requirement

Note: Students must demonstrate fourth semester proficiency in a second language either by completing four semesters (recommended to be subsequent) with a grade of C- or better, or by receiving an equivalent score on a competence exam.

Note: Students must demonstrate fourth semester proficiency in a second language either by completing four semesters (recommended to be subsequent) with a grade of C- or better, or by receiving an equivalent score on a competence exam.

Liberal Studies Minor

Minor - Liberal Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 23

Required Cumulative GPA: 2.5

Lower Division Core

Rule: Must complete all of the following courses:

Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
LSH 161H - Asian Humanities	3 Credits
Minimum Required Grade: C-	11 Total Credits Required

Upper Division Electives I

Rule: Must complete 6 credits from the following courses:

Course	Credits
LS 428 - Renaissance Debate-Women	3 Credits
LSH 326 - Stories East and West	3 Credits
LSH 327L - Gender & Sexuality in Eng Fict	3 Credits
LSH 368 - Shakespeare: Comedy & Tragedy	3 Credits
LSH 484 - Novel Ancient and Modern	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Upper Division Electives II

Rule: Must complete 6 credits from the following courses

Course	Credits
RLST 300 - Theory & Method Study of Relig	3 Credits
RLST 310 - Topics in Biblical Studies	3 Credits
RLST 320 - Anct Judaism & Early Christnty	3 Credits
RLST 335 - Western Religious Thought I	3 Credits
RLST 336 - Western Religious Thought II	3 Credits
RLST 353 - Topics in South Asia Religions	3 Credits
RLST 354 - Topics in East Asia Religions	3 Credits
RLST 360 - Classcs of Buddhist Literature	3 Credits
RLST 366 - Tibetan Civilization	3 Credits
RLST 367 - Approaches to Study Zen Bddhsm	3 Credits
RLST 368 - Contem Buddhism in S & SE Asia	3 Credits
RLST 369 - Contemporary Tradtions of Asia	3 Credits
RLST 370 - Mysticism	3 Credits
RLST 376 - Contemporary Religious Thought	3 Credits
RLST 391 - Special Topics	1 To 12 Credits
RLST 392 - Independent Study	1 To 6 Credits
RLST 491 - Special Topics	1 To 12 Credits
RLST 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	6 Total Credits Required

Women's and Gender Studies B.A.

Women's and Gender Studies Option, Professor Elizabeth Hubble and Professor Ione Crummy, Co-Directors of the Women's and Gender Studies Program:

Students who choose the Women's and Gender Studies (WGS) option must register with the WGS advisor, who will supervise their program. The following requirements must be met to complete the WGS option within the liberal studies major.

Bachelor of Arts - Liberal Studies; Women's and Gender Studies Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: Working closely with a faculty advisor is imperative in Liberal Studies as the programs are unique and substitutions can be approved to meet the student's individual interests.

Women's and Gender Studies Lower Division Core

Rule: 18-20 credits

Minimum Required Grade: C-

18-20 Total Credits Required

Humanities

Rule: Take both of the following courses. (6-8 credits).

Note: Prerequisite or co-requisite: WRIT 101 or equivalent.

These courses are recommended to be taken early in the curriculum as they are foundational. LSH 152L can be taken prior to LSH 151L.

General Education fulfillment through the lower-division core: Both courses fulfill the "approved writing course" and "Literary & Artistic Studies".

—	Course	Credits
	LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
	LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-		6-8 Total Credits Required

Literary Studies - European or American Literature

Rule: Take one approved 3 credit course.

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

—	Course	Credits
	LIT 210L - American Lit I	3 Credits

	LIT 211L - American Lit II	3 Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
	RUSS 105H - Intro to Russian Culture	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Historical Studies - European or American History

Rule: Take one approved course that is at least 3 credits.

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

Course	Credits
HSTA 101H - American History I	4 Credits
HSTA 102H - American History II	4 Credits
HSTA 103H - Honors American History I	4 Credits
HSTA 104H - Honors American History II	4 Credits
HSTA 141H - Intro to AfAm Studies	3 Credits
HSTA 255 - Montana History	3 Credits
HSTA 262 - Abolitionism	3 Credits
HSTR 101H - Western Civilization I	4 Credits
HSTR 102H - Western Civilization II	4 Credits
HSTR 103H - Honors Western Civilization I	4 Credits
HSTR 104H - Honors Western Civilization II	4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Asian Studies

Rule: Take one approved 3 credit course.

—	Course	Credits
	ANTY 141H - The Silk Road	3 Credits
	CHIN 211H - Chinese Culture and Civiliz	3 Credits
	HSTR 240 - East Asian Civilizations	3 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits
	HSTR 264 - Islamic Civ: Modrn Era	3 Credits
	JPNS 150H - Japanese Cult & Civiliz	3 Credits
	SSEA 102H - Intro to South & S. East Asia	3 Credits
	SSEA 195 - Special Topics	1 To 6 Credits
	SSEA 202X - Introduction to India	3 Credits
	SSEA 212S - Southeast Asian Cult & Civ	3 Credits
	SSEA 232H - Buddhism	3 Credits
	SSEA 234X - Hindu Religious Traditions	3 Credits
	SSEA 295 - Special Topics	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

Religious Studies

Rule: Take one approved 3 credit course.

—	Course	Credits
	RLST 191 - Special Topics	1 To 9 Credits
	RLST 204H - Intro to the Hebrew Bible	3 Credits
	RLST 205 - Introduction to New Testament	3 Credits
	RLST 221 - Judaism	3 Credits
	RLST 225 - Christianity	3 Credits

RLST 232H - Buddhism	3 Credits
RLST 233 - Tradtns of Buddhist Meditation	3 Credits
RLST 234X - Hindu Religious Traditions	3 Credits
RLST 236X - Chinese Religions	3 Credits
RLST 238X - Japanese Religions	3 Credits
RLST 281E - Comparative Ethics	3 Credits
RLST 291 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper-Division WGSS Coursework

Rule: 21 credits.

Note: Please see WGSS office for course substitution possibilities. LA 138A

Course	Credits
ANTY 427 - Anthropology of Gender	3 Credits
ARTH 436 - The History of Women in Art	3 Credits
CLAS 320 - Women in Antiquity	3 Credits
COMX 380 - Gender and Communication	3 Credits
COMX 449 - Rhetoric of Women's Activism	3 Credits
COUN 485 - Counseling Theories	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
LSH 327L - Gender & Sexuality in Eng Fict	3 Credits
LSH 329 - Fathers & Daughters in Lit	3 Credits

PSYX 348 - Psychology of Family Violence	3 Credits
RLST 370 - Mysticism	3 Credits
S W 323 - Women & Soc Action Amer	3 Credits
S W 324 - Gender and Welfare	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
SOCI 545 - Sem in Inequality & Soc Justic	3 Credits
WGS 336 - American Women Writers	3 Credits
WGSS 363 - Feminist Theory and Methods	3 Credits
WGSS 390 - Undergraduate Research	1 To 6 Credits
WGSS 391 - Special Topics	1 To 6 Credits
WGSS 392 - Independent Study	1 To 12 Credits
WGSS 398 - Coop Education/Internship	1 To 6 Credits
WGSS 463 - WGS Capstone	2 Credits
WGSS 490 - Undergraduate Research	1 To 6 Credits
WGSS 490H - Research	3 Credits
WGSS 491 - Special Topics	1 To 6 Credits
WGSS 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	21 Total Credits Required

Modern and Classical Language Requirement

Note: Students must demonstrate fourth semester proficiency in a second language either by completing four semesters (recommended to be subsequent) with a grade of C- or better, or by receiving an equivalent score on a competence exam.

WGSS Introductory Course Requirement

Rule: Take the following 3 credit course.

Note: Take this course as early in your education as possible.

Course	Credits
WGSS 163L - Hist/Lit Persp Women	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Mathematical Sciences Department

Leonid Kalachev, Chair

Mathematics is studied both as a tool and for its own sake. Its usefulness in the sciences - physical, biological, social, behavioral, and environmental - and in decision-making processes is so established that it is an indispensable part of many curricula.

Mathematics is chosen as a major area of study by individuals who find it challenging, fascinating, and beautiful. It is also appreciated by many who seek primarily to use mathematics as a tool.

A career in mathematics, except for teaching at the secondary level, generally requires a graduate degree as preparation. Careers include teaching, research, and the application of mathematics to diverse problems in institutions of higher learning, business, industry, and government.

The Bachelor of Arts, Master of Arts, and Doctor of Philosophy degrees are offered as well as a Bachelor of Science in Mathematical Sciences–Computer Science.

High School Preparation: For studying mathematics at the University level, it is recommended that the high school course work consist of four years of college-preparatory mathematics, including geometry, trigonometry, and college algebra or precalculus. A course in calculus or statistics is helpful, but not necessary. It is unusual to complete an undergraduate degree in mathematics in four years without the necessary background to take Calculus I (M 171) during the freshman year (preferably during the first semester at the university).

Department Faculty

Professors

Johnathan Bardsley, Professor
Jonathan Graham, Professor
Leonid Kalachev, Professor
Mark Kayll, Professor
Jenny McNulty, Associate Dean / Professor
David Patterson, Professor
Bharath Sriraman, Professor
Brian Steele, Professor
Emily Stone, Department Chair, Professor
Karel Stroethoff, Professor
Nikolaus Vonessen, Professor, and Associate Chair - Undergraduate Program

Associate Professors

Jennifer Brooks, Associate Professor
Eric Chesebro, Associate Professor
Kelly McKinnie, Associate Professor

Gregory St. George, Associate Professor
Ke Wu, Associate Professor

Assistant Professors

Cory Palmer, Assistant Professor and Associate Chair - Graduate Program
Frederick Peck, Assistant Professor
Matthew Roscoe, Assistant Professor

Adjunct Faculty

John Duffield, Adjunct Research Professor
Solomon Harrar, Adjunct Research Professor
Daniel Johnston, Visiting Assistant Professor
Richard Lane, Adjunct Instructor
N'Djekornom Dara Laobeul, Adjunct Instructor
Louis Lutz, Adjunct Instructor
Justin Lynd, Visiting Assistant Professor
Michael Olear, Adjunct Instructor
Joyce Schlieter, Adjunct Instructor
Mickey Smith, Lecturer
Grant Swicegood, Postdoctoral Lecturer

Lecturers

Lauren Fern, Lecturer
Cindy Leary, Lecturer
Regina Souza, Lecturer

Emeritus Professors

Richard Billstein, Emeritus
James Hirstein, Professor Emeritus
George McRae, Professor Emeritus

Course Descriptions

Mathematics

- **M 104 - Numbers as News**

Credits: 3. Offered spring. Prereq., M 090 with a grade of B- or better, or M 095, or ALEKS placement ≥ 3 . An exploration of mathematics and statistics as used in the popular media. For students in the School of Journalism only.

- **M 105 - Contemporary Mathematics**

Credits: 3. Offered every term. Prereq., M 090 with a grade of B- or better, or M 095, or ALEKS placement ≥ 3 . An introduction to mathematical ideas and their impact on society. Intended for students wishing to satisfy the general education mathematics requirement.

- **M 115 - Probability and Linear Mathematics**

Credits: 3. Offered every term. Prereq., M 090 with a grade of B- or better, or M 095, or ALEKS placement ≥ 3 . Systems of linear equations and matrix algebra. Introduction to probability with emphasis on models and probabilistic reasoning. Examples of applications of the material in many fields. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **M 118 - 118 Mathematics for Music Enthusiasts**
 Credits: 3. Offered autumn and/or spring. Prereq. M 090 with a grade of B- or better, or M 095, or ALEKS placement ≥ 3 ; and elementary music background. An introduction to the interplay between mathematics and music. Course intended for Music majors/minors, and others with musical backgrounds/interests, who wish to satisfy the general education mathematics requirement.
- **M 121 - College Algebra**
 Credits: 3. Offered autumn and spring. Prereq., M 095 or ALEKS placement ≥ 4 . Intended to strengthen algebra skills. The study of functions and their inverses; polynomial, rational, exponential, and logarithmic functions. Credit not allowed for both M 121, and M 151. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt
- **M 122 - College Trigonometry**
 Credits: 3. Offered autumn and spring. Prereq., M 121 or ALEKS placement ≥ 4 . Preparation for calculus based on college algebra. Review of functions and their inverses. Trigonometric functions and identities, polar coordinates and an optional topic such as complex numbers, vectors or parametric equations. Credit not allowed for both M 122 and M 151.
- **M 132 - Numbers and Operations for Elementary School Teachers**
 Credits: 3. Offered autumn and spring. Prereq., M 095 or M 115, or ALEKS placement ≥ 4 . The study of number and operations for prospective elementary and middle school teachers, including whole numbers, decimals, fractions, percent, integers, operations, numeration systems, and problem solving.
- **M 133 - Geometry and Measurement for Elementary School Teachers**
 Credits: 3. Offered autumn and spring. Prereq., M 132. The study of geometry and geometric measurement for prospective elementary and middle school teachers, including synthetic, transformational, and coordinate geometry, constructions, congruence and similarity, 2-dimensional and 3-dimensional measurement, and problem solving.
- **M 135 - Mathematics for K-8 Teachers I**
 Credits: 5. Offered autumn and spring. Prereq., M 095, M 115, or ALEKS placement ≥ 4 . Open only to elementary education majors. Topics include problem-solving, sets and logic, functions, whole numbers, integers, rational numbers, real numbers, number theory, probability and statistics.
- **M 136 - Mathematics for K-8 Teachers II**
 Credits: 4. Offered autumn and spring. Prereq., M 135. Topics include introductory geometry, geometric constructions, congruence, similarity, measurement, coordinate geometry and an introduction to computer geometry.
- **M 151 - Precalculus**
 Credits: 4. Offered autumn and spring. Prereq., ALEKS placement ≥ 4 . A one semester preparation for calculus (as an alternative to M 121-122). Functions of one real variable are introduced in general and then applied to the usual elementary functions, namely polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, and miscellaneous others. Inverse functions, polar coordinates and trigonometric identities are included. Credit not allowed for both M 151 and M 121 or 122. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt
- **M 162 - Applied Calculus**
 Credits: 4. Offered autumn and spring. Prereq., ALEKS placement ≥ 5 or one of M 121, 122 or 151. Introductory course surveying the principal ideas of differential and integral calculus with emphasis on applications and computer software. Mathematical modeling in discrete and continuous settings. Intended primarily for students who do not plan to take higher calculus.
- **M 171 - Calculus I**
 Credits: 4. Offered autumn and spring. Prereq., M 122 or 151 or ALEKS placement ≥ 5 . Differential

calculus, including limits, continuous functions, Intermediate Value Theorem, tangents, linear approximation, inverse functions, implicit differentiation, extreme values and the Mean Value Theorem. Integral Calculus including antiderivatives, definite integrals, and the Fundamental Theorem of Calculus. **Course Attributes:** Practical Nursing Prog Rqrmnt
Registered Nursing Prog Rqrmnt

- **M 172 - Calculus II**
Credits: 4. Offered autumn and spring. Prereq., M 171 or 181. Techniques of Integration. Area computations. Improper integrals. Infinite series and various convergence tests. Power series. Taylor's Formula. Polar coordinates. Parametric curves.
- **M 181 - Honors Calculus I**
Credits: 4. Offered autumn. Prereq., consent of instr. Coreq., Honors Calculus Seminar, a section of M 294. Honors version of M 171. **Course Attributes:** Honors Course
- **M 182 - Honors Calculus II**
Credits: 4. Offered spring. Prereq., M 181 or consent of instr. Coreq., Honors Calculus Seminar, a section of M 294. Honors version of M 172. **Course Attributes:** Honors Course
- **M 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **M 192 - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.
- **M 210 - Introduction to Mathematical Software**
Credits: 3. Offered spring. Prereq., one of M 162, 171, or 181, or consent of instr. Software packages useful for doing and writing mathematics. Introduction to a computer algebra system (such as Maple or Mathematica), a numerical package (such as MATLAB or R), and elementary programming. Writing and communicating mathematics using the mathematical typesetting system LaTeX.
- **M 221 - Introduction to Linear Algebra**
Credits: 4. Offered autumn and spring. Prereq., M 172 or 182. Vectors in the plane and space, systems of linear equations and Gauss-Jordan elimination, matrices, determinants, eigenvalues and eigenvectors, vector spaces, linear transformations. Calculators and/or computers used where appropriate.
- **M 225 - Introduction to Discrete Mathematics**
Credits: 3. Offered autumn. Prereq., one of M 162, 171, or 181 or consent of instr. Mathematical concepts used in computer science with an emphasis on mathematical reasoning and proof techniques. Elementary logic, sets, functions and relations, combinatorics, mathematical induction, recursion and algorithms. Mathematics majors should take M 307 instead of 225.
- **M 231 - Topics in Geometry**
Credits: 3. Offered intermittently. Prereq., M 136 or consent of instr. Geometry topics for teaching grades 6-12 mathematics. Intended primarily for students in elementary education who plan to teach middle school mathematics.
- **M 234 - Higher Mathematics for Elementary School Teachers**
Credits: 3. Offered autumn and spring. Prereq., M 132. The study of algebra, number theory, probability and statistics for prospective elementary and middle school teachers, including proportional reasoning, functions, elementary number theory, statistical modeling and inference, and elementary probability theory.

- **M 273 - Multivariable Calculus**
Credits: 4. Offered autumn and spring. Prereq., M 172 or 182. Calculus of functions of several variables; differentiation and elementary integration. Vectors in the plane and space.
- **M 274 - Introduction to Differential Equations**
Credits: 3. Offered spring. Prereq., one of M 162, 171 or 181 and knowledge of basic trigonometry. Solution of ordinary differential equations and systems with emphasis on applications, numerical methods and computer software.
- **M 291 - Special Topics**
Credits: 1 TO 3. (R-9) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **M 292 - Independent Study**
Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Guidance of an individual student in doing independent study on material not offered in a regular course.
- **M 294 - Seminar**
Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr.
- **M 300 - Undergraduate Mathematics Seminar**
Credits: 1. (R-6) Offered every semester. Prereq., M 171 or 181. Discussion seminar focused on topics and issues of interest to students in the mathematical sciences.
- **M 301 - Mathematics Technology for Teachers**
Credits: 3. Offered autumn. Prereq., M 221. Discrete and continuous mathematical models from a variety of disciplines using appropriate technology.
- **M 307 - Introduction to Abstract Mathematics**
Credits: 3. Offered autumn and spring. Prereq., M 172 or 182. Designed to prepare students for upper-division proof-based mathematics courses. Topics include proof techniques, logic, sets, relations, functions and axiomatic methods. Students planning to take both M 221 and 307 are encouraged to take M 221 first.
- **M 311 - Ordinary Differential Equations and Systems**
Credits: 3. Offered autumn. Prereq., M 273. Ordinary differential equations. Systems of linear differential equations from a matrix viewpoint. Series solutions. Existence and uniqueness for initial value problems. Numerical methods. Stability and selected topics. M 317 computer lab recommended.
- **M 317 - Ordinary Differential Equations Computer Lab**
Credits: 1. Offered autumn. Coreq., M 311 or consent of instr. Intended primarily for student in M 311.
- **M 325 - Discrete Mathematics**
Credits: 3. Offered spring. Prereq., M 171 and 225 or 307. Continuation of 225 and topics from graph theory, Boolean algebras, automata theory, coding theory, computability and formal languages.
- **M 326 - Number Theory**
Credits: 3. Offered spring. Prereq., M 225 or 307. Congruences, Diophantine equations, properties of primes, quadratic residues, continued fractions, algebraic numbers.
- **M 361 - Discrete Optimization**
Credits: 3. Offered spring. Prereq., one of M 162, 172 or 182 (221 or 225 recommended). Intended for non-mathematics majors as well as mathematics majors. Introduction to discrete optimization and modeling techniques with applications. Topics from combinatorics and graph theory, including

enumeration, graph algorithms, matching problems and networks.

- **M 362 - Linear Optimization**

Credits: 3. Offered autumn. Prereq., one of M 162, 172 or 182 (221 recommended). Coreq., M 363 recommended. Intended for non-mathematics majors as well as majors. Introduction to linear programming and modeling techniques with applications. Topics include the simplex method, duality, sensitivity analysis and network models.

- **M 363 - Linear Optimization Laboratory**

Credits: 1. Offered autumn. Coreq., M 362. Introduction to linear optimization software.

- **M 381 - Advanced Calculus I**

Credits: 3. Offered autumn. Prereq., M 307. Rigorous development of single-variable calculus with formal proof. Functions, sequences, limits, continuity, differentiation, and integration.

- **M 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **M 392 - Independent Study**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Guidance of an individual student in doing independent study on material not offered in a regular course.

- **M 394 - Seminar**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr.

- **M 398 - Internship**

Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.
Course Attributes: Internships/Practicums Internship graduation limit 6

- **M 412 - Partial Differential Equations**

Credits: 3. Offered spring. Prereq., M 311. Fourier series, Sturm-Liouville and boundary value problems. Partial differential equations: Cauchy problems and the method of characteristics, separation of variables and Laplace transform methods. Numerical methods and selected topics. M 418 computer lab recommended.

- **M 414 - Deterministic Models**

Credits: 3. Offered autumn or spring. Prereq., M 274 or 311 or consent of instr. Linear and nonlinear difference and differential equations: stability, phase-plane analysis, oscillatory behavior, limit cycles, and chaos. Eigenvalues and eigenfunctions. Emphasis on models in biology.

- **M 418 - Partial Differential Equations Computer Lab**

Credits: 1. Offered spring. Coreq., M 412 or consent of instr. Intended primarily for students in M 412.

- **M 429 - History of Mathematics**

Credits: 3. Offered spring. Prereq., M307. Historical study of the development of mathematics from the Egyptian and Babylonian eras to the 20th century. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **M 431 - Abstract Algebra I**

Credits: 4. Offered autumn. Prereq., M 221 and 307 or consent of instr. An introduction to modern ideas of algebra through the study of groups, rings, and fields.

- **M 432 - Abstract Algebra II**
 Credits: 4. Offered spring. Prereq., M 431. Continues the investigation of groups, rings, and fields begun in M 431. Further topics include vector spaces and field extensions.
- **M 439 - Euclidean and Non-Euclidean Geometry**
 Credits: 3. Offered autumn. Prereq., M 307; M 231 recommended. Euclidean geometry from a rigorous, axiomatic viewpoint and Non-Euclidean geometries chosen from Lobachevskian, projective, finite and Riemannian.
- **M 440 - Numerical Analysis**
 Credits: 4. Offered intermittently. Prereq., M 307, 311, one computer language. Error analysis; approximation and interpolation, numerical solution of linear and non-linear equations, numerical integration of ordinary and partial differential equations.
- **M 445 - Statistical, Dynamical, and Computational Modeling**
 Credits: 4. Offered autumn odd-numbered years. Prereq., consent of instr. An interdisciplinary course on the integration of statistical and dynamical models with applications to biological problems. Linear and nonlinear models, estimation, systems of ordinary differential equations, numerical integration, bootstrapping, MCMC methods. Intended both for students in mathematics and the natural sciences.
- **M 461 - Practical Big Data Analytics**
 Credits: 3. Offered autumn. Prereq., STAT 341, and one of M 221 or M 273, or consent of instructor. This is a methods course supporting the Big Data Certificate Program. The course provides the students with the essential tools for the analysis of big data. The content consists of map reduce and canonical information methods for analyzing massively large data sets, windowing methods for the analysis of streaming data, an introduction to predictive analytics, and an introduction to data visualization methods.
- **M 462 - Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms**
 Credits: 3. Offered spring. Prereq., M 221 and two other Mathematics / Statistics classes at the 200-level or above, or consent of instr. The main goal of this course is to provide students with a unique opportunity to acquire conceptual knowledge and theoretical background behind mathematical tools applicable to Big Data Analytics and Real Time Computations. Specific challenges of Big Data Analytics, e.g., problems of extracting, unifying, updating, and merging information, and processing of highly parallel and distributed data, will be reviewed. The tools for Big Data Analytics, such as regression analysis, linear estimation, calibration problems, real time processing of incoming (potentially infinite) data, will be studied in more detail. It will be shown how these approaches can be transformed to conform to the Big Data demands.
- **M 467 - Big Data Analytic Projects**
 Credits: 3. Offered spring. Prereq., two courses chosen from STAT 341, M 221 and M 273, and one of M 461 or M 462, or consent of instructor. This course is a practicum course aimed at developing skills needed to solve big data problems facing industry and academics. Problems are brought to the class by local technology-oriented businesses and university researchers. Lecture topics include project management, interacting with clients, and written and oral presentation of results. Additional lecture topics will be selected to address the specific problems brought to the class and may cover data reduction methods, algorithm design and predictive analytics.
- **M 472 - Introduction to Complex Analysis**
 Credits: 4. Offered spring. Prereq., M 273, M 307. Analytic functions, complex integration, singularities and application to contour integration, harmonic functions, spaces of analytic functions.
- **M 473 - Introduction to Real Analysis**
 Credits: 4. Offered autumn odd-numbered years. Prereq., M 273, M 307. Theory of metric spaces and point set topology, Riemann-Stieltjes integral, sequences and series of functions. Stone-

Weierstrass theorem, theorem of Arzela-Ascoli, introduction to Lebesgue integration.

- **M 485 - Graph Theory**

Credits: 3. Offered autumn. Prereq., M 325, or M 307 and M 361, or consent of instr. Theory and applications of graphs. Topics chosen from trees, matchings, connectivity, coloring, planarity, Ramsey theory, random graphs, combinatorial designs and matroid theory.

- **M 490 - Undergraduate Research**

Credits: 1 TO 4. (R-12) Offered every term. Prereq., consent of instr. Undergraduate research in the mathematical sciences under the direction of a faculty member. Graded credit/no credit.

- **M 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **M 492 - Independent Study**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Guidance of an individual student in doing independent study on material not offered in a regular course

- **M 494 - Seminar**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr.

- **M 498 - Internship**

Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.
Course Attributes: Internships/Practicums Internship graduation limit 6

- **M 499 - Senior Thesis**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Senior thesis for mathematics majors and/or Watkins Scholars. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **M 500 - Current Mathematical Curricula**

Credits: 3. Offered intermittently. Prereq., teacher certification or consent of instructor. Analysis of contemporary materials for secondary school mathematics: the goals, the mathematical content, alternative methodologies, and curriculum evaluation. Level: Graduate

- **M 501 - Technology in Mathematics for Teachers**

Credits: 3. Offered intermittently. Prereq., teacher certification or consent of instructor. Technology usage when it is appropriate and when it is not. Experience is provided with scientific calculators, graphing utilities, computers, and identification of exemplary software. Level: Graduate

- **M 504 - Topics in Math Education**

Credits: 1 TO 12. (R-12) Offered intermittently. Prereq., teacher certification. Topics of current interest which may include calculus, number theory, probability and statistics, geometry, or algebra, at a level suitable for teachers. Level: Graduate

- **M 510 - Problem Solving for Teachers**

Credits: 3. Offered intermittently. Prereq., teacher certification or consent of instructor. Strategies for problem solving, problem posing in a variety of situations, modeling and applications. Problems are selected from various areas of mathematics. Level: Graduate

- **M 511 - Advanced Mathematical Methods I**

Credits: 3. Offered autumn odd-numbered years. Prereq., M 311, and 412 or 414. Methods in applied mathematics related to the qualitative and quantitative solution of nonlinear and

differential integral equations, dynamical systems, and perturbation methods. Applications of these methods to other sciences. Level: Graduate

- **M 512 - Advanced Mathematical Methods II**

Credits: 3. Offered spring even-numbered years. Prereq., M 511. Continuation of M 511. Level: Graduate

- **M 514 - Topics in Applied Mathematics**

Credits: 1 TO 12. (R-12) Offered autumn even-numbered years. Prereq., consent of instr. or M 511-512. Topics of current interest in applied mathematics, mathematical modeling, dynamic modeling, and optimal management in stochastic or deterministic environments. Level: Graduate

- **M 521 - Advanced Algebra I**

Credits: 3. Offered alternate years. Prereq., M 432 or consent of instr. Topics covered include group theory, field theory and Galois theory. Level: Graduate

- **M 522 - Advanced Algebra II**

Credits: 3. Offered alternate years. Prereq., M 521 or consent of instr. Continuation of 521; rings, modules, commutative algebra, and further topics. Level: Graduate

- **M 524 - Topics in Algebra**

Credits: 3. (R-12) Offered alternate years in fall and spring. Prereq., consent of instr. Topics chosen from algebra and related areas, for example from commutative algebra, algebraic geometry, linear algebra, group theory, ring theory, or number theory. Level: Graduate

- **M 530 - Geometries for Teachers**

Credits: 3. Offered intermittently in summer. Prereq., M 439 or equiv. Comparison of synthetic, analytic, vector, and transformational approaches to geometry. Includes classification of geometries, geometric representations, axiomatics, and the applications of modern geometries. Level: Graduate

- **M 531 - Topology**

Credits: 3. Offered autumn even-numbered years. Prereq., M 473 or consent of instr. Set theory, topological spaces, metrizable, continuous mappings and selected topics. Level: Graduate

- **M 532 - Algebraic Topology**

Credits: 3. Offered spring alternate years. Prereq., M 431 and M 531 or consent of instr. Introduction to algebraic topology through one or more topics chosen from the fundamental group and higher homotopy groups, singular homology, and simplicial homology. Level: Graduate

- **M 551 - Real Analysis**

Credits: 3. Offered spring even-numbered years. Prereq., M 473 or 472 or consent of instr. Measure theory, abstract integration theory, theory of L_p -spaces. Level: Graduate

- **M 555 - Functional Analysis**

Credits: 3. Offered spring odd-numbered years. Prereq., M 473 or 472 or consent of instr. Normed linear spaces, linear functionals, separation theorems, topological linear spaces, weak topologies, dualities. Level: Graduate

- **M 564 - Topics in Analysis**

Credits: 3. (R-12) Offered autumn odd-numbered years. Prereq., consent of instr. Research projects or topics in analysis. May include but not restricted to Banach algebras, Fourier analysis, Harmonic analysis, Hilbert space theory, integral equations, or operator theory. Level: Graduate

- **M 570 - Calculus for Middle School Teachers**

Credits: 3. Offered online in full-year format. Prereq., teacher certification or consent of instr. A first course in differential and integral calculus. Concepts, definitions, properties, and elementary applications of the calculus of single-valued real variables. Level: Graduate

- **M 572 - Algebra for Middle School Teachers**
 Credits: 3. Offered intermittently in summer. Prereq., teacher certification or consent of instr. Topics include algebraic number fields, linear algebra topics, polynomials, and applications appropriate for teachers of middle school mathematics. Level: Graduate
- **M 573 - Geometry for Middle School Teachers**
 Credits: 3. Offered intermittently in summer. Prereq., teacher certification or consent of instr. Introduction to synthetic, analytic, vector, and transformational approaches to geometry. Includes topics in 2- and 3-dimensional geometry and measurement appropriate for teachers of middle school mathematics. Level: Graduate
- **M 574 - Probability and Statistics for Middle School Teachers**
 Credits: 3. Offered intermittently in summer. Prereq., teacher certification or consent of instr. A survey of topics in probability and statistics appropriate for teachers of middle school mathematics. Level: Graduate
- **M 578 - Discrete Mathematics for Middle School Teachers**
 Credits: 3. Offered intermittently. Prereq., teacher certification or consent of instr. Elements and operations of finite structures, combinatorics, recursion, graphs, matrices, and finite models appropriate for teachers of middle school mathematics. Level: Graduate
- **M 581 - Combinatorics**
 Credits: 3. Offered autumn odd-numbered years. Prereq., consent of instr. Theory and applications of discrete mathematics. Topics chosen from enumeration, combinatorial analysis, and graph theory. Level: Graduate
- **M 582 - Optimization**
 Credits: 3. Offered autumn even-numbered years. Prereq., consent of instr. Theory and applications of optimization. Topics chosen from linear, non-linear, and discrete optimization, including duality theory, convexity and networks. Level: Graduate
- **M 584 - Topics in Combinatorics and Optimization**
 Credits: 3. (R-12) Offered spring odd-numbered years. Prereq., consent of instr. Topics chosen from the areas of combinatorics and optimization. May include classical problems, current trends, research interests or other topics chosen by the instructor. Level: Graduate
- **M 593 - Professional Project**
 Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of advisor. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
Course Attributes: Faculty-Led Study Abroad
- **M 595 - Special Topics**
 Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums
- **M 596 - Independent Study**
 Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
Course Attributes: Service Learning/Volunteer
- **M 597 - Research**
 Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
- **M 598 - Internship**
 Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during

placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

- **M 599 - Thesis**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

- **M 600 - Mathematics Colloquium**

Credits: 1 TO 3. (R-3) Offered autumn and spring. Prereq., consent of advisor. Presentations of research topics in mathematics and related fields. Level: Graduate

- **M 602 - Teaching College Mathematics**

Credits: 3. Prereq., second year standing in graduate school. Topics include publishing, grant writing, writing in mathematics classes, media use in mathematics, evaluation and assessment of curricular materials and programs, instructional methods in university mathematics courses, and other selected topics. Level: Graduate

- **M 605 - Learning Theories in Mathematics**

Credits: 3. Prereq., graduate status. How children learn mathematical content and processes. Models of mental development, concept formation, problem solving, reasoning, and creative thinking. Level: Graduate

- **M 606 - Current Topics in the History of Mathematics**

Credits: 3. Examination of mathematical history topics from the latter part of the 20th century. Discussions may focus on the impact of Hilbert's Problems. Research on current mathematics. Level: Graduate

- **M 609 - Research Methods in Mathematics Education**

Credits: 3. Prereq., Consent of instr. Resources for learning of reported research, critical reviews of research, quantitative and qualitative processes. Level: Graduate

- **M 610 - Graduate Seminar in Applied Mathematics**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

- **M 620 - Graduate Seminar in Algebra**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

- **M 630 - Graduate Seminar in Geometry/Topology**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

- **M 650 - Graduate Seminar in Analysis**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

- **M 680 - Graduate Seminar in Combinatorics and Optimization**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

- **M 690 - Supervised Internship**

Credits: 1 TO 12. (R-6) Offered autumn and spring. Prereq., consent of department. Supervised Teaching Internship. Level: Graduate **Course Attributes:** Research & Creative Schlrshp

- **M 691 - Practicum**

Credits: 3. Prereq., consent of instr. Resources for learning of reported research, critical reviews of research, quantitative and qualitative processes. Level: Graduate

- **M 694 - Seminar**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate
- **M 699 - Dissertation**
Credits: 1 TO 9. (R-9) Offered autumn and spring. Level: Graduate

Mathematics-Statistics

- **STAT 216 - Introduction to Statistics**
Credits: 4. Offered autumn and spring. Prereq., M 115 (preferred), or one of M 121, 135, 151, 162 or 171, or ALEKS placement ≥ 4 . Introduction to major ideas of statistical inference. Emphasis is on statistical reasoning and uses of statistics.
- **STAT 341 - Introduction to Probability and Statistics**
Credits: 3. Offered autumn and spring. Prereq., one of M 162, 172 or 182. Probability, probability models and simulation, random variables, density functions, special distributions, and a brief survey of estimation and hypothesis testing. Computer use integrated throughout.
- **STAT 421 - Probability Theory**
Credits: 3. Offered autumn. Prereq., M 273 and STAT 341 or consent of instr. An introduction to probability, random variables and their probability distributions, estimation and hypothesis testing. This course is the foundation on which more advanced statistics courses build.
- **STAT 422 - Mathematical Statistics**
Credits: 3. Offered spring. Prereq., STAT 421. Continuation of 421.
- **STAT 451 - Statistical Methods I**
Credits: 3. Offered autumn. Prereq., one year of college mathematics including M 115 or equiv. course in probability or consent of instr. May not be counted toward a major in mathematics. Intended primarily for non-mathematics majors who will be analyzing data. Graphical and numerical summaries of data, elementary sampling, designing experiments, probability as a model for random phenomena and as a tool for making statistical inferences, random variables, basic ideas of inference and hypothesis testing.
- **STAT 452 - Statistical Methods II**
Credits: 3. Offered spring. Prereq., STAT 451. Continuation of STAT 451. May not be counted toward a major in mathematics. Multiple regression, experimental design, analysis of variance, other statistical models.
- **STAT 457 - Computer Data Analysis I**
Credits: 1. Offered autumn. Coreq., STAT 451 or consent of instr. An introduction to software for doing statistical analyses. Intended primarily for students in STAT 451.
- **STAT 458 - Computer Data Analysis II**
Credits: 1. Offered spring. Coreq., STAT 452 or consent of instr. Continuation of STAT 457. Intended primarily for students in STAT 452.
- **STAT 491 - Special Topics**
Credits: 1 TO 9. (R 9) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **STAT 540 - Probability and Statistics for Teachers**
Credits: 3. Offered intermittently in summer. Prereq., STAT 341 or equiv. A survey of modern topics in probability and statistics. Emphasis will be on applications of statistics in real situations. Level: Graduate

- **STAT 541 - Advanced Mathematical Statistics**
Credits: 3. Offered intermittently. Prereq., STAT 422. Advanced theory of estimation and hypothesis testing including large sample theory. Level: Graduate
- **STAT 542 - Applied Linear Models**
Credits: 3. Offered autumn even-numbered years. Prereq., STAT 422 or consent of instr. Numerical and graphical data summaries, simple linear and multiple regression and analysis of variance, including estimation, hypothesis testing, residual analysis, diagnostics, and model-building strategies. Use of the computer and real data sets integrated throughout. Level: Graduate
- **STAT 543 - Applied Multivariate Statistical Analysis**
Credits: 4. Offered spring even-numbered years. Prereq., STAT 452 or 422, or consent of instr. Introduction to multivariate statistical methods and applications. Includes appropriate linear algebra, random vectors, multivariate normal distribution, multivariate ANOVA, principal components, clustering, discriminant analysis, and related topics. Use of the computer and real data sets integrated throughout. Intended for students in mathematics and in other fields. Level: Graduate
- **STAT 544 - Topics in Probability and Statistics**
Credits: 3. (R-12) Offered intermittently. Prereq., STAT 422 and consent of instr. May include theory of nonparametric statistics, generalized linear models, stochastic processes or other topics chosen by the instructor. Level: Graduate
- **STAT 545 - Theory of Linear Models**
Credits: 3. Offered autumn odd-numbered years. Prereq., STAT 422. Multivariate normal distribution, distribution of quadratic forms, estimation and hypothesis testing in the full rank and less than full rank general linear models. Level: Graduate
- **STAT 547 - Applied Nonparametric Statistics**
Credits: 3. Offered autumn odd-numbered years. Prereq., STAT 421 or 452 or consent of instr. Statistical estimation and inference based on ranks and elementary counting methods. Applications to a variety of situations including one- and two-sample, correlation, regression, analysis of variance, and goodness-of-fit problems. Use of the computer and real data sets integrated throughout. Intended for students in mathematics and in other fields. Level: Graduate
- **STAT 549 - Applied Sampling**
Credits: 3. Offered autumn even-numbered years. Theory and application of methods for selecting samples from populations in order to efficiently estimate parameters of interest. Includes simple random, systematic, cluster, stratified, multistage, line transect, distance and adaptive sampling. Use of the computer and real data sets integrated throughout. Intended for students in mathematics and in other fields. Level: Graduate
- **STAT 640 - Graduate Seminar in Probability and Statistics**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

Applied Mathematics

This degree option differs from the BA in Mathematics without an option only in the Option Requirements.

Bachelor of Arts - Mathematics; Applied Mathematics Option

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject): 42 credits for students completing a second major, and 46 credits for students completing a minor.

Mathematics Core Courses

Minimum Required Grade: C-

23 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Other Mathematics Core Courses

Rule: Take all of the following courses.

—	Course	Credits
	M 210 - Intro to Mathematical Software	3 Credits

M 221 - Introduction to Linear Algebra	4 Credits
M 273 - Multivariable Calculus	4 Credits
M 300 - Undergraduate Mathematics Sem	1 Credits
M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Upper-Division Mathematics Requirement

Rule: Take 23 credits in this category.

Note: (1) Students completing a minor (in another subject) need take only 20 credits.

(2) Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Rule: Take 7 courses from the following list; at least 3 of them must be at the 400 level.

Note: (1) Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).

(2) Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).

(3) Note that STAT 451 does not count toward this requirement.

Course	Credits
M 301 - Math Technology for Teachers	3 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 361 - Discrete Optimization	3 Credits
M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 429 - History of Mathematics	3 Credits

M 431 - Abstract Algebra I	4 Credits
M 432 - Abstract Algebra II	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits
M 485 - Graph Theory	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	21 or more Total Credits Required

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken, they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course	Credits
M 317 - ODE Computer Lab	1 Credits
M 363 - Linear Optimization Lab	1 Credits
M 418 - PDE Computer Lab	1 Credits
STAT 457 - Computer Data Analysis I	1 Credits
STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-	0-5 Total Credits Required

Science Requirement

Rule: Take 18 credits in at most 3 sciences selected from astronomy, biology, chemistry, computer science, economics, forestry, geosciences, and physics.

Note: (1) Students completing a minor (in another subject) or a second major are exempt from this requirement. (2) Note that 'biology' includes courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOO.

Minimum Required Grade: C-

18 Total Credits Required

Upper-Division Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved General Education upper-division writing course.

Course	Credits
M 429 - History of Mathematics	3 Credits
M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

GPA Requirement

Note: (1) A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.

(2) In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Course	Credits
CSCI 100 - Intro to Programming	3 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Requirements for the Applied Mathematics Option

Rule: Complete the following subcategories

Minimum Required Grade: C-

13 Total Credits Required

Applied Mathematics Option: Core Courses

Rule: Take all of the following courses.

Course	Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Applied Mathematics Option: Elective Courses

Rule: Take 1 of the following 2 courses.

Note: In addition, M 381 and 485 are also recommended.

Course	Credits
M 440 - Numerical Analysis	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Mathematics Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - Mathematics; Mathematics Education Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 53

Required Cumulative GPA: 2.5

Note: (1) The number of degree specific credits required is significantly higher if one also counts the additional course work required by the Teacher Education Program.

(2) Note that the Teacher Education Program requires in addition an overall cumulative GPA of at least 2.75.

Mathematical Sciences Courses Required for the Mathematics Education Option

Rule: The courses in this category must be completed with a cumulative GPA of at least 2.75.

Minimum Required Grade: C-

41-42 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Other Mathematical Sciences Core Courses for the Mathematics Education Option

Rule: Take all of the following courses.

Note: (1) Residency Requirement: At least 4 of the upper-division courses in this category must be taken at UM-Missoula (only 3 if the Elective Course is an upper-division course taken at UM-Missoula).

(2) Note that taking M 429 satisfies the Upper-Division Writing Requirement for this degree.

—	Course	Credits
	M 221 - Introduction to Linear Algebra	4 Credits

M 301 - Math Technology for Teachers	3 Credits
M 307 - Intro to Abstract Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 429 - History of Mathematics	3 Credits
M 431 - Abstract Algebra I	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-	26 Total Credits Required

Elective Course

Rule: Take one of the following:

Course	Credits
M 273 - Multivariable Calculus	4 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 361 - Discrete Optimization	3 Credits
M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 432 - Abstract Algebra II	4 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits

M 485 - Graph Theory	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Mathematics Teaching Methods Course

Rule: Take the following course.

Note: The course number EDU 497 covers many different teaching methods courses. The section of EDU 497 entitled "Methods: 5 - 12 Mathematics" is required for the Mathematics Education option.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Science Requirement for the Mathematics Education Option

Rule: Take 12 credits in at most two sciences selected from astronomy, biology, chemistry, computer science, geosciences and physics.

Note: (1) Students completing a teaching minor (in another subject) or a second major are exempt from this requirement.

(2) Note that 'biology' includes all courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOD.

Minimum Required Grade: C-

12 Total Credits Required

Secondary Teaching Licensure

Note: For licensure to teach mathematics, a student must also gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education and Human Sciences).

Mathematics Minor

A handout with detailed advice for Math minors, including suggested curricula, is available on the Math Department's home page.

Minor - Mathematics

Catalog Year: 2014-2015

Degree Specific Credits: 23

Required Cumulative GPA: 2.0

Note: null

Calculus Requirement for a Minor in Mathematics

Rule: Take one of the following three courses:

Note: M 172 or 182 are recommended since they are prerequisites for many upper-division mathematics courses.

Course	Credits
M 162 - Applied Calculus	4 Credits
M 172 - Calculus II	4 Credits
M 182 - Honors Calculus II	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Elective Courses for a Minor in Mathematics

Rule: Take 23 credits in M or STAT courses offered at UM-Missoula. M courses must be numbered 115 or higher (excluding M 118). Courses must include at least three 3- or 4-credit courses at the 300 level or above.

Note: (1) The required Calculus course (M 162, 172, or 182) counts toward the 23 credits, as well as its prerequisite courses at the 100-level (e.g., M 171 or 121).

(2) Notice to Transfer Students: Mathematical Sciences courses that are not equivalent to courses taught at UM-Missoula can often be counted toward a Minor in Mathematics. This is determined on an individual basis; please contact the Department of Mathematical Sciences for details.

Minimum Required Grade: C-

23 Total Credits Required

Mathematics Education Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 31

Required Cumulative GPA: 2.75

Mathematical Sciences Courses for the Teaching Minor in Mathematics Education

Rule: Take all of the following courses.

Minimum Required Grade: C-

27 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Other Mathematical Sciences Courses

Rule: Take all of the following courses.

Course	Credits
M 221 - Introduction to Linear Algebra	4 Credits
M 301 - Math Technology for Teachers	3 Credits
M 307 - Intro to Abstract Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-	19 Total Credits Required

Mathematics Teaching Methods Course

Rule: Take the following course.

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Mathematics" is required for the Teaching Minor in Mathematics Education.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Secondary Teaching Licensure

Note: For licensure to teach mathematics, a student must also gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education and Human Sciences).

Note: For licensure to teach mathematics, a student must also gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education and Human Sciences).

Combinatorics and Optimization

This degree option differs from the BA in Mathematics without an option only in the Option Requirements.

Bachelor of Arts - Mathematics; Combinatorics & Optimization Option

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject): 41 credits for students completing a second major, and 46 credits for students completing a minor.

Mathematics Core Courses

Minimum Required Grade: C-

23 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Other Mathematics Core Courses

Rule: Take all of the following courses.

—	Course	Credits
	M 210 - Intro to Mathematical Software	3 Credits

M 221 - Introduction to Linear Algebra	4 Credits
M 273 - Multivariable Calculus	4 Credits
M 300 - Undergraduate Mathematics Sem	1 Credits
M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Upper-Division Mathematics Requirement

Rule: Take 23 credits in this category.

Note: (1) Students completing a minor (in another subject) need take only 20 credits.

(2) Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Rule: Take 7 courses from the following list; at least 3 of them must be at the 400 level.

Note: (1) Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).

(2) Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).

(3) Note that STAT 451 does not count toward this requirement.

Course	Credits
M 301 - Math Technology for Teachers	3 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 361 - Discrete Optimization	3 Credits
M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 429 - History of Mathematics	3 Credits

M 431 - Abstract Algebra I	4 Credits
M 432 - Abstract Algebra II	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits
M 485 - Graph Theory	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	21 or more Total Credits Required

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken, they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course	Credits
M 317 - ODE Computer Lab	1 Credits
M 363 - Linear Optimization Lab	1 Credits
M 418 - PDE Computer Lab	1 Credits
STAT 457 - Computer Data Analysis I	1 Credits
STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-	0-5 Total Credits Required

Science Requirement

Rule: Take 18 credits in at most 3 sciences selected from astronomy, biology, chemistry, computer science, economics, forestry, geosciences, and physics.

Note: (1) Students completing a minor (in another subject) or a second major are exempt from this requirement. (2) Note that 'biology' includes courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOC.

Minimum Required Grade: C-

18 Total Credits Required

Upper-Division Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved General Education upper-division writing course.

Course	Credits
M 429 - History of Mathematics	3 Credits
M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

GPA Requirement

Note: (1) A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.

(2) In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Course	Credits
CSCI 100 - Intro to Programming	3 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Requirements for the Combinatorics & Optimization Option

Minimum Required Grade: C-

12-13 Total Credits Required

| *Combinatorics & Optimization Option: Core Courses*

Rule: Take all of the following courses.

—	Course	Credits
	M 361 - Discrete Optimization	3 Credits
	M 362 - Linear Optimization	3 Credits
	M 485 - Graph Theory	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Combinatorics & Optimization Option: Elective Courses

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	CSCI 332 - Design/Analysis of Algorithms	3 Credits
	M 414 - Deterministic Models	3 Credits
	M 440 - Numerical Analysis	4 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Pure Mathematics

This degree option differs from the BA in Mathematics without an option only in the Option Requirements.

Bachelor of Arts - Mathematics; Pure Mathematics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 68

Required Cumulative GPA: 2.0

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject): 44 credits for students completing a second major, and 47 credits for students completing a minor.

Mathematics Core Courses

Minimum Required Grade: C-

23 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Other Mathematics Core Courses

Rule: Take all of the following courses.

—	Course	Credits
	M 210 - Intro to Mathematical Software	3 Credits
	M 221 - Introduction to Linear Algebra	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 300 - Undergraduate Mathematics Sem	1 Credits
	M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Upper-Division Mathematics Requirement

Rule: Take 23 credits in this category.

Note: (1) Students completing a minor (in another subject) need take only 20 credits.
(2) Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Rule: Take 7 courses from the following list; at least 3 of them must be at the 400 level.

Note: (1) Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).

(2) Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).

(3) Note that STAT 451 does not count toward this requirement.

Course	Credits
M 301 - Math Technology for Teachers	3 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 361 - Discrete Optimization	3 Credits
M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 429 - History of Mathematics	3 Credits
M 431 - Abstract Algebra I	4 Credits
M 432 - Abstract Algebra II	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits

	M 472 - Intro to Complex Analysis	4 Credits
	M 473 - Introduction to Real Analysis	4 Credits
	M 485 - Graph Theory	3 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits
	STAT 421 - Probability Theory	3 Credits
	STAT 422 - Mathematical Statistics	3 Credits
	STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-		21 or more Total Credits Required

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken, they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

—	Course	Credits
	M 317 - ODE Computer Lab	1 Credits
	M 363 - Linear Optimization Lab	1 Credits
	M 418 - PDE Computer Lab	1 Credits
	STAT 457 - Computer Data Analysis I	1 Credits
	STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-		0-5 Total Credits Required

Science Requirement

Rule: Take 18 credits in at most 3 sciences selected from astronomy, biology, chemistry, computer science, economics, forestry, geosciences, and physics.

Note: (1) Students completing a minor (in another subject) or a second major are exempt from this requirement. (2) Note that 'biology' includes courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOO.

Minimum Required Grade: C-

18 Total Credits Required

Upper-Division Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved General Education upper-division writing course.

—	Course	Credits
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	M 429 - History of Mathematics	3 Credits
	M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

GPA Requirement

Note: (1) A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.
(2) In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

—	Course	Credits
	CSCI 100 - Intro to Programming	3 Credits
	CSCI 135 - Fund of Computer Science I	3 Credits
	CSCI 136 - Fund of Computer Science II	3 Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Requirements for the Pure Mathematics Option

Rule: Take 4 of the following courses.

—	Course	Credits
	M 381 - Advanced Calculus I	3 Credits
	M 431 - Abstract Algebra I	4 Credits
	M 432 - Abstract Algebra II	4 Credits
	M 472 - Intro to Complex Analysis	4 Credits
	M 473 - Introduction to Real Analysis	4 Credits
Minimum Required Grade: C-		15-16 Total Credits Required

Statistics

This degree option differs from the BA in Mathematics without an option only in the Option Requirements.

Bachelor of Arts - Mathematics; Statistics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject): 41 credits for students completing a second major, and 46 credits for students completing a minor.

Mathematics Core Courses

Minimum Required Grade: C-

23 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits

Minimum Required Grade: C-

4 Total Credits Required

Other Mathematics Core Courses

Rule: Take all of the following courses.

Course	Credits
M 210 - Intro to Mathematical Software	3 Credits
M 221 - Introduction to Linear Algebra	4 Credits
M 273 - Multivariable Calculus	4 Credits
M 300 - Undergraduate Mathematics Sem	1 Credits
M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Upper-Division Mathematics Requirement

Rule: Take 23 credits in this category.

Note: (1) Students completing a minor (in another subject) need take only 20 credits.

(2) Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Rule: Take 7 courses from the following list; at least 3 of them must be at the 400 level.

Note: (1) Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).

(2) Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).

(3) Note that STAT 451 does not count toward this requirement.

Course	Credits
M 301 - Math Technology for Teachers	3 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 361 - Discrete Optimization	3 Credits

M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 429 - History of Mathematics	3 Credits
M 431 - Abstract Algebra I	4 Credits
M 432 - Abstract Algebra II	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits
M 485 - Graph Theory	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	21 or more Total Credits Required

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken, they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course	Credits
M 317 - ODE Computer Lab	1 Credits
M 363 - Linear Optimization Lab	1 Credits
M 418 - PDE Computer Lab	1 Credits

	STAT 457 - Computer Data Analysis I	1 Credits
	STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-		0-5 Total Credits Required

Science Requirement

Rule: Take 18 credits in at most 3 sciences selected from astronomy, biology, chemistry, computer science, economics, forestry, geosciences, and physics.

Note: (1) Students completing a minor (in another subject) or a second major are exempt from this requirement. (2) Note that 'biology' includes courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOO.

Minimum Required Grade: C-

18 Total Credits Required

Upper-Division Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved General Education upper-division writing course.

—	Course	Credits
	M 429 - History of Mathematics	3 Credits
	M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

GPA Requirement

Note: (1) A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.

(2) In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

—	Course	Credits
	CSCI 100 - Intro to Programming	3 Credits
	CSCI 135 - Fund of Computer Science I	3 Credits
	CSCI 136 - Fund of Computer Science II	3 Credits
	CSCI 250 - Computer Mdlng/Science Majors	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Requirements for the Statistics Option

Rule: Take the following courses.

Note: Additional mathematics and statistics courses chosen with advisor.

Course	Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Mathematical Sciences-Computer Science (Combined Major)

The purpose of the combined program is to provide a thorough background in both allied disciplines and to inculcate a deeper understanding of their goals and methods. A student must complete 60 credits in the two disciplines: 30 of these credits in Computer Science courses and 30 of these credits in Mathematical Sciences courses. Each student plans a program in consultation with both a Computer Science and a Mathematical Sciences advisor. Students planning to attend graduate school in computer science or the mathematical sciences should consult with their respective advisors.

Bachelor of Science - Mathematical Sci-Computer Sci

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Mathematical Sciences

Rule: Complete the following subcategories.

31 Total Credits Required

Mathematical Sciences Core

Rule: Complete all of the following courses.

Note: The following substitutions are allowed: M 181 for M 171, M 182 for M 172, and M 225 for M 307.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 221 - Introduction to Linear Algebra	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-		19 Total Credits Required

Mathematical Sciences Electives

Rule: Complete 12 credits from the following courses.

Note: The combined nine credits of Computer Science Electives and twelve credits of Mathematical Sciences Electives must include at least three 3- or 4-credit courses numbered 400 or above, with at least one chosen from each department (not including M 429 and STAT 451, 452).

—	Course	Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
	M 325 - Discrete Mathematics	3 Credits
	M 326 - Number Theory	3 Credits
	M 361 - Discrete Optimization	3 Credits
	M 362 - Linear Optimization	3 Credits
	M 381 - Advanced Calculus I	3 Credits
	M 412 - Partial Differential Equations	3 Credits
	M 414 - Deterministic Models	3 Credits
	M 429 - History of Mathematics	3 Credits
	M 431 - Abstract Algebra I	4 Credits
	M 432 - Abstract Algebra II	4 Credits

M 439 - Euclidean & Non-Euclidean Geo	3 Credits
M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits
M 485 - Graph Theory	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 451 - Statistical Methods I	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Computer Science

Rule: Complete the following subcategories.

30 Total Credits Required

Computer Science Core

Rule: Complete all of the following courses.

Course	Credits
CSCI 106 - Careers in Computer Science	1 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 205 - Programming Languages w/ C/C++	4 Credits
CSCI 232 - Data Structures and Algorithms	4 Credits
CSCI 332 - Design/Analysis of Algorithms	3 Credits

CSCI 361 - Computer Architecture	3 Credits
Minimum Required Grade: C-	21 Total Credits Required

Computer Science Electives

Rule: Complete 9 credits from the following courses.

Note: (1) A total of at most three of the nine credits of Computer Science Electives may be in CSCI 398 or 498.

(2) The combined nine credits of Computer Science Electives and twelve credits of Mathematical Sciences Electives must include at least three 3- or 4-credit courses numbered 400 or above, with at least one chosen from each department (not including M 429 and STAT 451, 452).

Course	Credits
CSCI 315E - Computers, Ethics, and Society	3 Credits
CSCI 323 - Software Science	3 Credits
CSCI 340 - Database Design	3 Credits
CSCI 390 - Research	1 To 6 Credits
CSCI 391 - Special Topics	1 To 6 Credits
CSCI 392 - Independent Study	1 To 6 Credits
CSCI 394 - Seminar	1 To 6 Credits
CSCI 398 - Internship	1 To 3 Credits
CSCI 411 - Advanced Web Programming	3 Credits
CSCI 412 - Game and Mobile App	3 Credits
CSCI 426 - Adv Prgrmg Theory/Practice I	3 Credits
CSCI 427 - Adv Prgrmg Theory/Practice II	3 Credits
CSCI 438 - Theory of Computation	3 Credits
CSCI 441 - Computer Graphics Programming	3 Credits
CSCI 443 - User Interface Design	3 Credits
CSCI 444 - Data Visualization	3 Credits
CSCI 446 - Artificial Intelligence	3 Credits

CSCI 447 - Machine Learning	3 Credits
CSCI 448 - Pattern Recognition	3 Credits
CSCI 451 - Computational Biology	3 Credits
CSCI 460 - Operating Systems	3 Credits
CSCI 466 - Networks	3 Credits
CSCI 473 - Cryptography	3 Credits
CSCI 477 - Simulation	3 Credits
CSCI 478 - Multimedia Data Processing	3 Credits
CSCI 490 - Research	1 To 6 Credits
CSCI 491 - Special Topics	1 To 6 Credits
CSCI 492 - Independent Study	1 To 6 Credits
CSCI 494 - Seminar	1 To 6 Credits
CSCI 498 - Internship	1 To 3 Credits
CSCI 499 - Senior Thesis/Capstone	1 To 6 Credits
Minimum Required Grade: C-	9 Total Credits Required

Science Requirement

Rule: Complete the course work from 1 of the following subcategories.

9-10 Total Credits Required

Biology

Rule: If you choose biology, complete all of the following courses.

Course	Credits
BIOB 160N - Principles of Living Systems	4 Credits
BIOB 170N - Princpls Biological Diversity	3 Credits
BIOB 171N - Princpls Biological Dvrsty Lab	2 Credits

Minimum Required Grade: C-

9 Total Credits Required

Chemistry

Rule: If you choose chemistry, complete all of the following courses.

Course	Credits
CHMY 141N - College Chemistry I	5 Credits
CHMY 143N - College Chemistry II	5 Credits
Minimum Required Grade: C-	10 Total Credits Required

Physics

Rule: If you choose physics, complete all of the following courses.

Course	Credits
PHSX 215N - Fund of Physics w/Calc I	4 Credits
PHSX 216N - Physics Laboratory I w/Calc	1 Credits
PHSX 217N - Fund of Physics w/Calc II	4 Credits
PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Public Speaking Requirement

Rule: Complete 1 of the following courses.

Course	Credits
COMX 111A - Intro to Public Speaking	3 Credits
COMX 242 - Argumentation	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper-Division Writing Requirement

Rule: Complete 1 of the following courses.

Note: Any other approved General Education upper-division writing course will also fulfill this requirement.

Course	Credits
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	CSCI 315E - Computers, Ethics, and Society	3 Credits
	CSCI 499 - Senior Thesis/Capstone	1 To 6 Credits
	M 429 - History of Mathematics	3 Credits
	M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

Suggested Curricula

Note: Students are encouraged to choose their Computer Science and Mathematical Sciences Electives according to one of the following curricula; these tracks are suggestions only and, as such, optional.

Applied Math–Scientific Programming: M 311, 412, 414, and one course chosen from M 381, 440, 472, 473 and STAT 341. Three courses chosen from CSCI 441, 444, 460, 477.

Combinatorics and Optimization–Artificial Intelligence: M 361, 362, and two courses chosen from M 325, 414, 485 and STAT 341; and CSCI 446, 447, and 460.

Statistics–Machine Learning: STAT 341, 421, and two courses chosen from M 325, 362, 485 and STAT 422. Three courses chosen from CSCI 340, 444, 446, 447, and 451.

Algebra–Analysis: M 381, 431, and two courses chosen from M 326, 432, 472, 473; CSCI 426, 460, and one other course.

Mathematics B.A.

This degree is the BA in Mathematics without an option. Students can add one or more of the options in Applied Mathematics, Combinatorics & Optimization, Pure Mathematics, or Statistics to this degree by fulfilling the respective Option Requirements (achieved by taking specific Upper-Division Elective Courses). Typically, students declare one of these four options during their sophomore or junior year. Note that the requirements for the Mathematics Education option are extensive and differ substantially from the requirements for the other options. Students interested in Mathematics Education are encouraged to declare this option as early as possible, preferably during their first year at UM.

Bachelor of Arts - Mathematics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject): 41 credits for students completing a second major, and 46 credits for students completing a minor.

Mathematics Core Courses

Minimum Required Grade: C-

23 Total Credits Required

Calculus I

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 181 - Honors Calculus I	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Calculus II

Rule: Take 1 of the following 2 courses.

—	Course	Credits
	M 172 - Calculus II	4 Credits
	M 182 - Honors Calculus II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Other Mathematics Core Courses

Rule: Take all of the following courses.

—	Course	Credits
	M 210 - Intro to Mathematical Software	3 Credits
	M 221 - Introduction to Linear Algebra	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 300 - Undergraduate Mathematics Sem	1 Credits

M 307 - Intro to Abstract Mathematics	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Upper-Division Mathematics Requirement

Rule: Take 23 credits in this category.

Note: (1) Students completing a minor (in another subject) need take only 20 credits.
(2) Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Rule: Take 7 courses from the following list; at least 3 of them must be at the 400 level.

Note: (1) Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).

(2) Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).

(3) Note that STAT 451 does not count toward this requirement.

Course	Credits
M 301 - Math Technology for Teachers	3 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
M 326 - Number Theory	3 Credits
M 361 - Discrete Optimization	3 Credits
M 362 - Linear Optimization	3 Credits
M 381 - Advanced Calculus I	3 Credits
M 412 - Partial Differential Equations	3 Credits
M 414 - Deterministic Models	3 Credits
M 429 - History of Mathematics	3 Credits
M 431 - Abstract Algebra I	4 Credits
M 432 - Abstract Algebra II	4 Credits
M 439 - Euclidean & Non-Euclidean Geo	3 Credits

M 440 - Numerical Analysis	4 Credits
M 445 - Stat/Math/Comp Modeling	4 Credits
M 472 - Intro to Complex Analysis	4 Credits
M 473 - Introduction to Real Analysis	4 Credits
M 485 - Graph Theory	3 Credits
STAT 341 - Intro to Probability and Stat	3 Credits
STAT 421 - Probability Theory	3 Credits
STAT 422 - Mathematical Statistics	3 Credits
STAT 452 - Statistical Methods II	3 Credits
Minimum Required Grade: C-	21 or more Total Credits Required

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken, they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course	Credits
M 317 - ODE Computer Lab	1 Credits
M 363 - Linear Optimization Lab	1 Credits
M 418 - PDE Computer Lab	1 Credits
STAT 457 - Computer Data Analysis I	1 Credits
STAT 458 - Computer Data Analysis II	1 Credits
Minimum Required Grade: C-	0-5 Total Credits Required

Science Requirement

Rule: Take 18 credits in at most 3 sciences selected from astronomy, biology, chemistry, computer science, economics, forestry, geosciences, and physics.

Note: (1) Students completing a minor (in another subject) or a second major are exempt from this requirement. (2) Note that 'biology' includes courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOO.

Minimum Required Grade: C-

18 Total Credits Required

Upper-Division Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved General Education upper-division writing course.

Course	Credits
M 429 - History of Mathematics	3 Credits
M 499 - Senior Thesis	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

GPA Requirement

Note: (1) A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.

(2) In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Course	Credits
CSCI 100 - Intro to Programming	3 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 250 - Computer Mdlng/Science Majors	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Military Science

Reserve Officers Training Corps, Chad Carlson, Chair

Army ROTC (Reserve Officers' Training Corps) offers college students the opportunity to serve as commissioned officers in the U.S. Army, the Army National Guard, or the U.S. Army Reserve upon graduation. ROTC enhances a student's education by providing unique leadership and management training along with practical leadership experience. Students develop many of the qualities basic to success while earning a college degree and an officer's commission at the same time.

The Margin of Difference. Army ROTC cadets learn to be leaders and receive hands-on experience in managing physical, financial, and human resources. They develop self-confidence and superior decision-making skills. Employers value these leadership qualities and recognize the associated potential in ROTC graduates.

Four-Year Program. The four-year Army ROTC program consists of two parts: the Basic Course and the Advanced Course.

Basic Course. The basic course is normally taken during the first two years of college and may be taken without incurring any military obligation. This course covers such subjects as management principles, national defense, military history, and leadership development. Basic course classes include adventure training such as squad tactics and small arms marksmanship. Additional opportunities are also available to conduct small unit training exercises throughout Western Montana. In addition, a variety of outside social and professional enrichment activities are available. All necessary ROTC textbooks, uniforms, and other essential materials for the basic course are furnished to students at no cost. After completing the basic course, students who have demonstrated the potential to become officers and who have met the physical and scholastic standards are eligible to enroll in the Advanced Course. Compression of the Basic Course into two semesters may be arranged for those students who did not take military science courses during their Freshman year.

Advanced Course. The Advanced Course is usually taken during the final two years of college. Instruction includes organization and management, tactics, ethics, critical thinking, creative problem solving and further leadership development. Uniforms and equipment in the Advanced Course are furnished to students at no cost. During the summer between their junior and senior years of college, Advanced Course cadets attend Cadet Summer Training (CST), a fully paid four-week leadership practicum. LDAC gives cadets the chance to apply what they have learned in the classroom and introduces them to Army life while also receiving academic credit. Completion of the Advanced Course requires two years of study. Each cadet in the Advanced Course receives a subsistence allowance of up to \$4,500 for each year of attendance.

Two-Year Program. The two-year program applies to incoming juniors and community college graduates, students at four-year colleges who did not take ROTC during their first two years of school, and students entering a two-year postgraduate course of study. To enter the two-year program, students must attend a fully paid four-week Leader's Training Course (LTC), normally held during the summer between their sophomore and junior years of college. At LTC, students learn to challenge themselves physically and mentally, and to build their confidence and leadership skills. After successfully completing LTC, students who meet all the necessary enrollment requirements may participate in the Advanced Course.

Scholarships and Financial Assistance. Army ROTC scholarships are offered for four, three and two years and are awarded on a competitive basis. Each scholarship pays 100% of student's tuition and fees, \$1200 a year for textbooks and supplies, and a monthly stipend totaling up to \$4,500 per year while the scholarship is in effect. Four-year scholarships are awarded to students who will be entering college as freshmen. Two and three-year scholarships are awarded to students already enrolled in college and to Army enlisted personnel on active duty. Additionally, students who attend LTC (see two-year program) may compete for two-year scholarships while at the course. Scholarship recipients can pursue degrees in any accredited four year program at the University of Montana. Students who receive scholarships are required to attain undergraduate degrees in the fields in which their scholarships were awarded.

Veterans. Veterans may apply their military experience as credit toward the ROTC Basic Course. If eligible, a veteran may enroll directly into the Advanced Course.

Simultaneous Membership Program. This program allows students to be members of the Army National Guard or the Army Reserve and to enroll in Army ROTC at the same time. Students participating in the Simultaneous Membership Program receive up to \$4,000 per year in tuition assistance, \$4,500 per year in monthly stipends and an additional \$20,000 per year in other benefits. There are also scholarships available for students participating in the Simultaneous Membership Program that are interested in staying in the Army National Guard or the Army Reserve upon graduation that pay up to \$8,500 per year for living expenses and \$1,200 per year for textbooks, supplies and other equipment. These scholarships are in addition to many of the current benefits students receive as part of the Simultaneous Membership Program.

Service Obligation. There is no military service obligation for basic course students, unless on scholarship. Advanced course and scholarship (contracted) students incur an obligation to serve in the active Army, Army Reserve or National Guard.

Commission Requirements. In order to earn a commission as a Second Lieutenant in the United States Army, each student must:

1. Complete all required Military Science instruction while attending college as a full-time student, and obtain a baccalaureate or higher degree.
2. Complete a PMS approved US History course.

3. Meet medical and physical fitness standards.
4. Be a U.S. citizen.
5. Successfully complete Cadet Summer Training.
6. Be recommended by the Professor of Military Science.

Department Faculty

Professors

Chad Carlson, Lieutenant Colonel

Assistant Professors

CPT Patrick Beckwith, Assistant Operation Officer
MSG Travis Hambrick, Senior Military Science Advisor & MS III Advisor
CPT Tracy Mitchell, Instructor/ROTC Recruiter
CPT Kris Pyette, Operation Officer & MSII Advisor
CPT Sean Thornton
SFC Bradley Watson

Affiliates

Richard Reeves, Supplies manager

Course Descriptions

Military Science Leadership

- **MSL 101 - Leadership and Personal Dev**
Credits: 3. Offered autumn. The Constitutional role of the military, military tradition, current defense posture, service roles and missions. An introduction to issues and competencies that are central to a commissioned officer's responsibilities. Establishes framework for understanding officership, leadership and army values. **Course Attributes:** ROTC Course
- **MSL 102 - Intro to Tactical Leadership**
Credits: 3. Offered spring. Establishes foundation of basic leadership fundamentals such as problem-solving, communications, goal setting and improving listening techniques. Introduction to the principles of military leadership and organizational values through discussion, observation and practice exercises. **Course Attributes:** ROTC Course
- **MSL 106 - Army Physical Fitness**
Credits: 1. (R-4) Offered autumn and spring. The study and application of military drill and ceremony: formation, ceremonies, and marching; the study of the fundamentals of the military physical conditioning program, and the practical application of skills learned. Physical education activity course; a maximum of four credits of activity courses may be counted toward graduation. **Course Attributes:** ROTC Course
- **MSL 195 - Special Topics**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** ROTC Course
- **MSL 201 - Innovative Team Leadership**

Credits: 3. Offered autumn. Demonstration and practice of individual military leadership skills with emphasis on communication and observation through experiential learning exercises. Establishes framework for understanding of "life skills" such as physical fitness and time management. Examination and practical application of tasks training and military style briefings. **Course Attributes:** ROTC Course

- **MSL 202 - Found of Tactical Leadership**

Credits: 3. Offered spring. Building successful teams through influencing actions and effective communication in setting and achieving goals. Use of creativity in the problem solving process. Introduction of individual and team aspects of military tactics in small unit operations. Practical exercises in techniques for training others as an aspect of continued leadership development. **Course Attributes:** ROTC Course

- **MSL 203 - Ranger Challenge**

Credits: 2. (R-4) Offered autumn. Practical hands-on training in one rope bridge, land navigation, military weapons assembly/disassembly and physical conditioning. A team selected from this class will represent the University in competition against four other colleges and universities within the Big Sky Task Force. Students may include up to, but not more than, four credits earned in the HHP 100-179 and DANC 325 activity courses and MSL 203 and 315 in the total number of credits required for graduation. Students must be physically qualified and enrolled in an additional MSL academic class. **Course Attributes:** ROTC Course

- **MSL 204 - Leader's Training Course**

Credits: 3. (R-4) Offered autumn and spring. Prereq., consent of instr. Intensive supervised study in applied leadership and management development in an organizational setting. **Course Attributes:** ROTC Course

- **MSL 295 - Special Topics**

Credits: 1 TO 6. (R-6) Offered spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** ROTC Course

- **MSL 296 - Leadership Practicum**

Credits: 1 TO 4. (R-4) Offered autumn and spring. Prereq., consent of instr. Intensive supervised study in applied leadership and management development in an organizational setting. **Course Attributes:** Service Learning/Volunteer ROTC Course

- **MSL 301 - Adaptive Team Leadership**

Credits: 3. Offered autumn. Prereq., consent of instr. Coreq., MSL 303. Developing personal leadership principles through the learning and application of various small unit leadership procedures. Fundamentals of leadership development, land navigation, troop leading, small units tactics, rappelling, rifle marksmanship and physical fitness. Study of the organization and operation of the U.S. Army as a profession. Students are required to attend one weekend field exercise during the semester. Restricted to contracted Military Science students. **Course Attributes:** ROTC Course

- **MSL 302 - Applied Team Leadership**

Credits: 3. Offered spring. Prereq., consent of instr. Coreq., MSL 303. Continuation of the study and application of small unit leadership tasks. Advanced leadership skills taught including medical evacuation procedures, radio procedures, and increased involvement in planning and executing military operations in preparation for attendance at the Leader Development and Assessment Course at Fort Lewis, Washington. Students participate in rifle marksmanship instruction including qualification with the M16A2 rifle, rappelling, and attend one weekend exercise with students from regional universities in the area and the Montana Army National Guard. Restricted to contracted Military Science students. **Course Attributes:** ROTC Course

- **MSL 303 - Leadership Laboratory**

Credits: 1. (R-4) Offered autumn and spring. Prereq., consent of instr. Coreq., MSL 301, 302, 401, or

402. Practical application of skills learned in the classroom. **Course Attributes:** ROTC Course

- **MSL 305 - Leadership Development and Assessment Course**

Credits: 3. Offered every term. Prereq., consent of instr. Required study and internship in military tactics, leadership and organizational behavior. Supervised by active duty military officers. Participants attend course of study at Fort Knox, KY for four weeks of intense evaluation and training to assess their ability to serve as a 2nd LT in the US Army, US Army Reserves, or the National Guard.

- **MSL 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** ROTC Course

- **MSL 401 - Adaptive Leadership**

Credits: 3. Offered autumn. Prereq., consent of instr.; coreq., MSL 303. The application of leadership principles and techniques involved in leading young men and women in today's Army. Students explore training management. methods of effective staff collaboration and developmental counseling techniques. Develops student proficiency in planning and executing complex operations, functioning as a member of a staff and mentoring subordinates. Restricted to contracted Military Science students. **Course Attributes:** ROTC Course

- **MSL 402 - Leadership in a Complex World**

Credits: 3. Offered spring. Prereq., consent of instr., coreq., MSL 303. Study includes case study of military law and practical exercises on establishing an ethical command climate. Examines the role communications, values and ethics play in effective leadership. Students complete a semester long Senior Leadership Project that requires them to plan, organize, collaborate, analyze and demonstrate their leadership skills. Restricted to contracted Military Science students. **Course Attributes:** ROTC Course

- **MSL 492 - Coop Education/Internship**

Credits: 1 TO 4. (R-4) Offered every term. Prereq., consent of instr. Required study and internship in military tactics, leadership and organizational behavior. Supervised by active duty military officers. **Course Attributes:** ROTC Course

Military Studies Minor

Minor - Military Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 33

Required Cumulative GPA: 2.5

Note: A total of 24 credits of MSL (Military Science Leadership) courses are allowed toward the bachelor degree for contracted students. A total of 12 credits are allowed toward the bachelor degree for non-contracted students. Obtain a grade of "C" or better in all courses used toward the minor, and a cumulative GPA of 2.5 for Military Science courses.

Lower Core Courses

Rule: Must complete all of the following:

Note: The department may waive the Basic Course requirements for following situation courses: prior military service, Advanced Individual Training (AIT), Leader's Training Course (LTC) or Accelerated Cadet Commissioning Training (ACCT).

Course	Credits
MSL 101 - Leadership and Personal Dev	3 Credits
MSL 102 - Intro to Tactical Leadership	3 Credits
MSL 201 - Innovative Team Leadership	3 Credits
MSL 202 - Found of Tactical Leadership	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Upper Core Courses

Rule: Must complete all of the following:

Course	Credits
MSL 301 - Adaptive Team Leadership	3 Credits
MSL 302 - Applied Team Leadership	3 Credits
MSL 401 - Adaptive Leadership	3 Credits
MSL 402 - Officership and Ethics	3 Credits
Minimum Required Grade: C	12 Total Credits Required

War History Requirement

Rule: Must complete 1 of the following

Course	Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
Minimum Required Grade: C	3 Total Credits Required

History/Political Science Requirement

Rule: Must complete six credits from the following:

Note: Students must complete at least 3 credits from each discipline with at least 3 credits of upper division coursework in addition to the required history course. Student can also take HSTR 301-Political Ancient Greek Social History or HSTR 304- Ancient Rome to satisfy the History requirement.

Course	Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
HSTR 374 - War, Peace, & Society	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 335 - American Foreign Policy	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Modern and Classical Languages Literatures Department

Elizabeth Ametsbichler and Jannine Montauban, Co-Chairs

Instruction is offered in the following languages and literatures: Arabic, Chinese, French, German, Classical Greek, Italian, Japanese, Latin, Russian and Spanish, as well as in linguistics, foreign literatures in English translation, film, and the study of foreign cultures. Undergraduate courses have been planned to meet the needs of students who began studying a language in high school as well as those who undertake such study for the first time at the University.

The courses are intended to serve several purposes: (1) Contribute to the general education of students by giving them an opportunity to gain insight into patterns of living and thinking which are different from their own; (2) Enable students to gain proficiency in the language; (3) Prepare candidates for careers in research and college teaching by providing a solid basis for graduate studies in the various languages; (4) Prepare future teachers of foreign languages; (5) Provide language training requisite to careers in government, foreign commerce, and library work; (6) Enable students to read foreign publications and to meet graduate foreign language requirements in their field.

The Department of Modern and Classical Languages and Literatures offers undergraduate majors in Classics (Greek and Latin), French, German, Japanese, Russian, and Spanish. Within Classics, it is possible to elect options in Classical Languages (Latin and Greek), Classical Civilization, and Latin. There are undergraduate minors in Arabic and Chinese. The Master of Arts degree in Modern Languages and Literatures is offered with options in French, German, and Spanish. A master's degree with a concentration in any of the languages in which we offer a major may be obtained by means of the Master of Interdisciplinary Studies program.

High School Preparation: Credit is automatically granted for Advanced Placement scores of 3, 4, or 5. At each UM Orientation, the department offers a computerized placement/assessment examination in French, German, and Spanish. Students also can arrange individually to take the CLEP exam, administered by Testing Services in French, German, or Spanish.

These exams are not required, but serve one or more of three purposes:

1. **Exemption from the General Education Competency Requirement in Foreign Language:** if

the student achieves a score that indicates a competence equivalent to the completion of French, German, or Spanish 102 (second semester). (See the General Education Requirements section of this catalog.)

2. **Placement for further study in the language:** the score achieved on this test is an accurate indicator of the course level at which language study should be resumed at the University (e.g. 102, 201, 202).
3. **Credit by examination:** A student with extensive language study may score high enough on the placement exam to qualify for University credits if she or he places into 202 or 301. By taking the course into which she or he placed (202 or 301) and receiving a B (3.00) or better, the student may then receive four by-pass credits (Pass grade only) for the preceding course (201 or 202).

Students who elect not to take this exam may:

1. Satisfy the General Education Competency Requirement in Foreign Language by successfully completing a University foreign language 102 (second semester) course.
2. Estimate their placement level for further study by the approximate equating of one year of high school study to one semester of university study. Students should consult with the department in making this estimate.

Foreign Study Programs. The Department of Modern and Classical Languages and Literatures offers programs of accredited study in Austria, China, Germany, Italy, Spain, Mexico, and Russia. Each program is supervised by a departmental faculty member, and is open to any student who meets the respective foreign language prerequisites. (There is no language prerequisite for the Study Abroad in Italy, but Italian is recommended.) Details concerning individual programs are available from the Department of Modern and Classical Languages and Literatures. The department also sponsors student exchanges with universities in France as well as work/study internships abroad for students in Japanese.

Department Faculty

Professors

Elizabeth Ametsbichler, Professor / MCLL Co-Chair
Hiltrud Arens, Professor
Hayden Ausland, Professor
Maria Jose Bustos-Fernandez, Professor / Director Latin American Studies
Eduardo Chirinos, Professor
M. Ione Crummy, Professor
Clary Loisel, Professor
Jannine Montauban, Professor / MCLL Co-Chair
Michel Valentin, Professor

Associate Professors

Benedicte Boisseron, Associate Professor
Mladen Kozul, Associate Professor
Marton Marko, Associate Professor
Ona Renner-Fahey, Associate Professor
Matthew Semanoff, Associate Professor
Clint Walker, Associate Professor
Barbara Weinlich, Visiting Associate Professor

Assistant Professors

Brian Dowdle, Assistant Professor
Khaled Huthaily, Assistant Professor: Arabic & Linguistics
Janice Kanemitsu, Visiting Assistant Professor
Pablo Requena, Ph.D.
Robert Tuck, Assistant Professor

Adjunct Faculty

Evelina Badery-Anderson, Adjunct Instructor
Seth Barnes-Smith, Teaching Assistant - French
Martina Baum-Acker, Adjunct Instructor
Chandra Brown
Diego Burgos, Teacher Assistant
Micaela Downey, Adjunct Instructor
Philippe Fournier-Murphy, Teaching Assistant - French
Anne Graham, Adjunct Instructor
Alice Harris, Adjunct Instructor
Judith Hinterberger, Fulbright Scholar - Austria
Anna Lokowich, ELI Instructor
Manolita Lopez-Connor, Adjunct Instructor
Georg Wieger, Fulbright Scholar - Austria

Lecturers

Linda Bailey, Lecturer, Spanish
Samir Bitar, Lecturer
Zhen Cao, Senior Lecturer
Alicia Gignoux, Lecturer
Kelly Noe, Lecturer

Affiliates

Julie Cahill, Associate Director, International Recruitment
Suhan Chen, Assistant Director, Executive Director of the Confucius Institute
Jennifer Corbin, Adjunct Faculty
Nathan Domitrovich, Undergraduate Academic Advisor
Effie Koehn
Mizuki Miyashita, Associate Professor
Brock Tessman, Dean, Davidson Honors College
Marja Unkuri-Chaudhry, Director of Study Abroad, Student Exchanges, & Institutional Partnerships

Emeritus Professors

Robert Acker, Professor Emeritus / Chair Emeritus
Christopher Anderson, Professor Emeritus
Tony Beltramo, Professor Emeritus
Timothy R. Bradstock, Professor Emeritus
Ray Corro, Professor Emeritus
Gerald Fetz, Professor Emeritus / Dean Emeritus
Linda Gillison, Professor Emeritus
Judith N Rabinovitch, Karashima Tsukasa Prof Emerita of Japanese Lang and Culture
Stanley Rose, Professor Emeritus
James Scott, Professor Emeritus

Course Descriptions

Arabic

- **ARAB 101 - Elementary Modern Arabic I**
Credits: 5. Offered autumn. Active skills in elementary modern standard Arabic: listening, speaking, reading, and writing, plus basic cultural study. **Course Attributes:**

Foreign Language Requirement

- **ARAB 102 - Elementary Modern Arabic II**
Credits: 5. Offered spring. Continuation of ARAB 101. Active skills in elementary modern standard Arabic: listening, speaking, reading, and writing, plus basic cultural study. **Course Attributes:**
Foreign Language Requirement
- **ARAB 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ARAB 201 - Intermediate Modern Arabic I**
Credits: 4. Offered autumn. Prereq., ARAB 102 or equiv. Expansion of active skills: Listening, speaking, reading, writing, plus further cultural analysis.
- **ARAB 202 - Intermediate Modern Arabic II**
Credits: 4. Offered spring. Prereq., ARAB 201 or equiv. Continuation of ARAB 201.
- **ARAB 291 - Special Topics**
Credits: 1 TO 8. (R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ARAB 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **ARAB 301 - Adv Modern Standard Arabic I**
Credits: 3. Offered autumn. Prereq., ARAB 202 or equiv. Improves and builds upon oral and written expression in modern standard Arabic and accelerates the use of vocabulary and the Arabic root system.
- **ARAB 302 - Adv Modern Standard Arabic II**
Credits: 3. Offered spring. Prereq., ARAB 301 or equiv. Continuation of ARAB 301.
- **ARAB 305 - The Arab World**
Credits: 3. Offered Autumn Semester. Students explore the Arabic-speaking countries through in-depth discussions of their history, geography, peoples, economy, political systems, educational systems, and cultural components, such as music, cuisine, tradition, customs, gender relations, etc.
- **ARAB 307 - Model Arab League Delegates**
Credits: 3. Offered spring. Students explore the Arabic Speaking countries, from North Africa, the Middle East and the Peninsula through discussions of political, economic, environmental, and social issues affecting the progress of the Arab world and its development.
- **ARAB 317 - Model Arab League Staff**
Credits: 3. Offered spring. As staff members students will solidify their knowledge of the history, cultures, issues, and politics of the Middle East, as well as parliamentary procedures to a level which enables them to effectively assess, lead, and guide discussion related to their assigned countries and committee topics towards positive ends.
- **ARAB 391 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ARAB 392 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

Chinese

- **CHIN 101 - Elementary Chinese I**
Credits: 5. Offered autumn. Emphasis on speaking, reading and writing elementary Mandarin.
Course Attributes: Foreign Language Requirement
- **CHIN 102 - Elementary Chinese II**
Credits: 5. Prereq., CHIN 101. Offered spring. Continuation of 101. **Course Attributes:** Foreign Language Requirement
- **CHIN 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **CHIN 201 - Intermediate Chinese I**
Credits: 5. Offered autumn. Prereq., CHIN 102 or equiv. Emphasis on oral communication, with continuing development in all major skill areas: listening, speaking, reading and writing.
- **CHIN 202 - Intermediate Chinese II**
Credits: 5. Offered spring. Prereq., CHIN 201 or equiv. Continuation of 201.
- **CHIN 211H - Chinese Culture and Civiliz**
Credits: 3. Offered intermittently. Same as AS and LS 211H. An introduction to the historical, intellectual, political, literary and social developments of China from early times to the present.
Course Attributes: Historical & Cultural Course
- **CHIN 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **CHIN 301 - Advanced Chinese I**
Credits: 3. Offered autumn. Prereq., CHIN 202 or consent of instr. Advanced Chinese, with emphasis on literary style, advanced grammar, and oral expression.
- **CHIN 302 - Advanced Chinese II**
Credits: 3. Offered spring. Prereq., CHIN 301 or consent of instr. Advanced Chinese, with emphasis on literary style, advanced grammar, and oral expression.
- **CHIN 313L - Chinese Poetry in Translat**
Credits: 3. Offered intermittently. Same as AS, MCLG, and LS 313L. The works of major Chinese poets to 1300 A.D. **Course Attributes:** Literary & Artistic Stds Crse Non-Western Course Writing Course-Upper-Division
- **CHIN 314L - Tradit Chinese Literature**
Credits: 3. Offered intermittently. Same as AS, MCLG, and LS 314L. Highlights of Chinese literature to 1800; includes philosophy, poetry, prose, and fiction. **Course Attributes:** Literary & Artistic Stds Crse Non-Western Course Writing Course-Upper-Division
- **CHIN 380 - Chinese Folktales**
Credits: 3. Same as LS 311. Offered intermittently. The study of the aspirations, desires, loves, moral and aesthetic values of the Chinese people as expressed in their folk literature.
- **CHIN 388 - Readings Classical Chinese**
Credits: 3. Prereq., CHIN 102 or approved equivalent. Introduces the basic grammar, syntax, and vocabulary of Classical Chinese through the reading of selected short representative texts from the formative and mature periods of the language's history.

- **CHIN 391 - Special Topics**
Credits: 1 TO 12. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **CHIN 392 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **CHIN 492 - Independent Study**
Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

Classics

- **CLAS 155L - Survey of Greek and Roman Lit**
Credits: 3. Offered every autumn. An introduction to the literature of classical Greece and Rome. Readings in English translations of ancient works by Homer, Sophocles, Herodotus, Plato, Cicero, Vergil, Livy, and Ovid (and/or similar authors). **Course Attributes:**
Literary & Artistic Stds Crse
- **CLAS 160L - Classical Mythology**
Credits: 3. Offered every spring and intermittently in summer. Deities and myths of the Greeks and Romans, with emphasis on those of most importance to Western literature and art. **Course Attributes:**
Literary & Artistic Stds Crse
- **CLAS 170 - Myth Seminar: Honors**
Credits: 1. Offered every spring. Coreq., CLAS 160L. Research, writing, and discussion about the mythologies of the Greeks and Romans in a small group setting. **Course Attributes:**
Honors Course
- **CLAS 180H - Env & Nat in Classical World**
Credits: 3. An interdisciplinary survey of Greek and Roman attitudes towards the environment. The course examines the intellectual and literary history of Classical environmental thought through literature as well as geography, anthropology, archaeology, art history. Topics covered include cosmogony, deforestation, evolution, famine, pre-industrial peasant economy, and human interaction with the landscape through engineering and agriculture. Offered Intermittently. **Course Attributes:**
Historical & Cultural Course Writing Course-Intermediate
- **CLAS 191 - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one time offerings of current topics. **Course Attributes:**
Writing Course-Intermediate
- **CLAS 191H - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one time offerings of current topics. **Course Attributes:**
Historical & Cultural Course Writing Course-Intermediate
- **CLAS 192 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring.
- **CLAS 198 - Internship**
Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:**
Internships/Practicums Internship graduation limit 6

- **CLAS 251L - The Epic**
Credits: 3. (R-6) Offered intermittently. Reading, study and discussion of epic poems. Selections will vary from Western and non-Western traditions. **Course Attributes:**
Literary & Artistic Stds Crse Writing Course-Approved Writing Course-Intermediate
- **CLAS 252L - Greek Drama: Politics on Stage**
Credits: 3. (R-6) Offered intermittently. A study of the literary, artistic and political dimensions of Greek Tragedy and Comedy. Selections will vary. **Course Attributes:**
Literary & Artistic Stds Crse Writing Course-Approved Writing Course-Intermediate
- **CLAS 291 - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.
- **CLAS 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring.
- **CLAS 320 - Women in Antiquity**
Credits: 3. Offered intermittently. Prereq., any one MCLG course in Classical Civilization or LATN 102 or GRK 102 or consent of instructor. Examination of varied sources from Ancient Greece, the Hellenistic World, and republican and imperial Rome to clarify the place of women in communities. Women's contribution to community and the mechanisms by which communities attempted to socialize female populations.
- **CLAS 360H - Ancient Greek Civ and Culture**
Credits: 3. Offered intermittently. Prereq., ARTH 250 or consent of instr. Slide-lecture course. Ancient Greek works of art and architecture, related to and explained by contemporary ideas and values of Greek society. **Course Attributes:** Historical & Cultural Course
- **CLAS 365E - The Roots of Western Ethics**
Credits: 3. Offered intermittently. Studies of the origins of Western ethical thinking in the writings of Greek writers and their application to current situations. **Course Attributes:**
Ethical & Human Values Course
- **CLAS 391 - Special Topics**
Credits: 1 TO 9. (R 9) Offered intermittently. Experimental offering of visiting professors, experimental offerings of new courses or one time offerings of current topics.
- **CLAS 392 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring.
- **CLAS 594 - Graduate Seminar**
Credits: 1 TO 6. (R 6) Offered intermittently. Level: Graduate
- **CLAS 596 - Independent Study**
Credits: 1 TO 6. (R 6) Offered intermittently. Level: Graduate **Course Attributes:**
Service Learning/Volunteer
- **CLAS 598 - Internship**
Credits: 1 TO 9. (R 9) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

Film

- **FILM 308 - Russian Cinema and Culture**

Credits: 3. Offered intermittently. Topically arranged introduction to the cinema of Russia and the former Soviet Union, with particular emphasis on contemporary Russian cinema. Screening preceded by brief cultural and historical background lectures and followed by group and paired discussion. All films screened with English subtitles. No knowledge of Russian is necessary.

French

- **FRCH 101 - Elementary French I**
Credits: 5. Offered autumn. Active skills: listening, speaking, reading and writing plus basic cultural analysis. **Course Attributes:** Foreign Language Requirement
- **FRCH 102 - Elementary French II**
Credits: 5. Prereq., FRCH 101. Offered spring. Continuation of 101. **Course Attributes:** Foreign Language Requirement
- **FRCH 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **FRCH 201 - Intermediate French I**
Credits: 4. Offered autumn. Prereq., FRCH 102 or equiv. Expansion of active skills: listening, speaking, reading, writing plus further cultural analysis.
- **FRCH 202 - Intermediate French II**
Credits: 4. Offered spring. Continuation of 201.
- **FRCH 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **FRCH 294 - Seminar/Workshop**
Credits: 1 TO 10. (R-10) Offered intermittently. University omnibus option for independent work. See index. **Course Attributes:** Omnibus Course
- **FRCH 300 - Intro to Literature in French**
Credits: 3. Offered intermittently. Prereq., FRCH 201, or consent of instruct. Introduction to literature on special current topics with a focus on reading and written skills in French.
- **FRCH 301 - Adv Grammar/Oral Writ Exprsn**
Credits: 3. (R-6) Prereq. 202 or equivalent. Advanced grammar review including literary tenses; developmental and written skills in French.
- **FRCH 303 - Intro to Lit**
Credits: 3. Introduction to Literature in French, 3 credits, prerequisite FRCH 301 or consent of instruct., offered intermittently, introduction to literature on special current topics with a focus on reading and written skills in French.
- **FRCH 310 - Fr. Lit. Cult. Mid. Age Renass**
Credits: 3. Offered autumn. Prereq., FRCH 202 or equiv. French literature of the Middle Ages and Renaissance with a focus on cultural identity.
- **FRCH 311 - Fr. Lit. Cult. 17th 18th Cent.**
Credits: 3. Offered spring. Prereq., FRCH 301 or consent of instr. French literature of the 17th and 18th centuries within its cultural context.
- **FRCH 312 - Fr. Lit. Cult. Long 19th Cent.**
Credits: 3. Offered autumn. Prereq., FRCH 301 or consent of instr. French literature from the French

Revolution to the First World War within its cultural context.

- **FRCH 313 - Literature and Culture III**

Credits: 3. Offered spring. Prereq. FRCH 301 or consent of instr. Survey of literature and culture of 20th Century France and Francophone countries, with a focus on the significance of plural cultural identities.

- **FRCH 338 - The French Cinema**

Credits: 3. (R-6) Offered intermittently. Same as MCLG and LS 338. An historical, aesthetic, and critical survey of the French cinema, from its beginnings in 1895 through the contemporary cinema (Muet, classical, Realism, Nouvelle Vogue, etc.) With an introduction to contemporary film criticism. Students taking the course for French credits are required to do research, reading, and writing in the French language.

- **FRCH 339 - Surv African Cinema**

Credits: 3. Offered intermittently. A diachronic survey of African cinema accompanied by interpretation and evaluation of textual dimensions of films through filmic critical theory.

- **FRCH 350 - French Civ & Culture**

Credits: 3. (R-6) Offered spring. Prereq., FRCH 301 or consent of instr. Chronological/topical study of French culture.

- **FRCH 355 - Spec Topcs:Fren Lang,Lit,Cultr**

Credits: 1 TO 3. (R-9) Offered intermittently. To be taken in conjunction with the French Study Abroad Program.

- **FRCH 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FRCH 392 - Independent Study**

Credits: 1 TO 3. (R-3) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **FRCH 400 - French: Applied Linguistics**

Credits: 3. Offered intermittently. Prereq., FRCH 301 and LING 270 or consent of instr. Contrastive phonology (including phonetics), morphology and syntax.

- **FRCH 420 - Studies in French Prose**

Credits: 3. Offered intermittently. Prereq., FRCH 311 or 312. Evolution of textuality from the Renaissance to the 20th century: the novel.

- **FRCH 421 - Adv Stylistics & Oral Arg**

Credits: 3. (R-6) Prereq. FRCH 301, 311, 312 or 313 or consent of instr. Intensive analysis of usage and style in written and oral argumentation at various linguistic levels.

- **FRCH 430 - Studies in French Drama**

Credits: 3. Offered intermittently. Prereq., FRCH 311 and 312. Evolution of theatre from the Renaissance to the 20th century or performance of a French play in French.

- **FRCH 440 - Studies in French Poetry**

Credits: 3. Offered intermittently. Prereq., FRCH 311 and 312. Evolution of textuality from the Renaissance to the 20th century: poetry and essays.

- **FRCH 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **FRCH 492 - Independent Study**
Credits: 1 TO 9. (R-9) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **FRCH 494 - Seminar/Workshop**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., FRCH 311L, 312L, and 313L or consent of instr. Studies in major authors, periods, genres, and/or cultural studies.
- **FRCH 594 - Graduate Seminar**
Credits: 3. (R-6) Offered autumn and spring. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate
- **FRCH 595 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums
- **FRCH 596 - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:** Service Learning/Volunteer
- **FRCH 599 - Professional Paper**
Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
- **FRCH 699 - Thesis**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., graduate standing. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Greek

- **GRK 101 - Elementary Greek I**
Credits: 5. Offered autumn. Introduction to Classical Greek is the first courses of a two-semester sequence, designed to enable the student to read Greek authors in the original Greek as soon as possible. Based upon selected texts from Tragedians, Plato, Xenophon, Menander, New Testament, and other major authors. **Course Attributes:** Foreign Language Requirement
- **GRK 102 - Elementary Greek II**
Credits: 5. Offered spring. Prereq., GRK 101 or equivalent. Continuation of 101. Greek grammar, vocabulary, readings of ancient Greek writings with the aid of a lexicon. **Course Attributes:** Foreign Language Requirement
- **GRK 191 - Special Topics**
Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **GRK 201 - Intermediate Greek I**
Credits: 3. Offered autumn. Prereq., GRK 102 or equiv. Attic prose and poetry Plato, Thucydides, Euripides.
- **GRK 202 - Intermediate Greek II**
Credits: 3. Offered spring. Prereq., GRK 201 (211) or equiv. Readings from Homer's Iliad and/or Odyssey.
- **GRK 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **GRK 300 - Major Greek Writers**

Credits: 3. (R-12) Offered autumn and spring. Prereq., GRK 202 (212) or equivalent. Homer, lyric poets, Aeschylus, Sophocles, Euripides, Aristophanes, Herodotus, Thucydides, Xenophon, Plato, Aristotle, Hellenistic philosophers, New Testament, etc. Selection to fit students' interests and programs.

- **GRK 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GRK 392 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **GRK 492 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

German

- **GRMN 101 - Elementary German I**

Credits: 5. Offered autumn. Emphasis on oral communication, with development in all major skill areas: listening, speaking, reading, and writing. **Course Attributes:**
Foreign Language Requirement

- **GRMN 102 - Elementary German II**

Credits: 5. Offered spring. Prereq., GRMN 101. Emphasis on oral communication, with continuing development in all major skill areas: listening, speaking, reading, and writing. **Course Attributes:**
Foreign Language Requirement

- **GRMN 106H - Intro Germ Cult Civ**

Credits: 3. This course provides an introductory overview of major developments, ideas, and influences involving German-speaking culture from its documented origins in the Roman era to today. Students will become familiar with the chronology and significance of key historical events in Central Europe as well as with major figures in such areas as politics, literature, art, and philosophy. Attention will also be given to important contributions that German-speaking culture has made globally. **Course Attributes:** Historical & Cultural Course

- **GRMN 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GRMN 201 - Intermediate German I**

Credits: 4. Offered autumn. Prereq., GRMN 102 or equiv. Continuation of active skills approach to German listening, speaking, reading, and writing.

- **GRMN 202 - Intermediate German II**

Credits: 4. Offered spring. Prereq., GRMN 201 or equiv. Continuation of 201.

- **GRMN 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GRMN 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **GRMN 301 - German: Oral and Written Exp**

Credits: 3. Offered autumn. Prereq., GRMN 202 or equiv. Native or near-native speakers of German may not apply credit for this course toward a German major or minor.

- **GRMN 302 - German Oral & Written Expr II**

Credits: 3. Offered spring. Prereq., GRMN 301 or equiv. Native or near-native speakers of German may not apply credit for this course toward a German major or minor.

- **GRMN 305 - Practicum in Germ Lang**

Credits: 4. Offered spring. Prereq., consent of instr. Offered as part of the Study Abroad program in Germany and Austria. Concentration on grammar topics and advanced language usage.

- **GRMN 311 - Intro German Lit: Prose**

Credits: 3. Offered autumn. Prereq., GRMN 202 or equiv. Reading and discussion of selected, well-known German prose. Instruction in the fundamentals of textual analysis and terminology with a focus on twentieth-century German-language works. Taught primarily in German.

- **GRMN 312 - Intro German Lit: Dram/Poetry**

Credits: 3. Offered spring. Prereq., GRMN 202. Reading and discussion of selected, well-known German-language plays and poems. Instruction in the fundamentals of textual analysis, including terminology of various genres, and in German literary history. Practice in literary interpretation. Taught primarily in German.

- **GRMN 317L - Intro Multicultural Lit German**

Credits: 3. Offered intermittently. Introduction to multicultural literature created during recent decades in Germany. Study topics include immigration, citizenship, multilingualism, identity; significant literary and cultural movements and selected writers in contemporary Germany. **Course Attributes:** Literary & Artistic Stds Crse

- **GRMN 318 - Intro to Germ & Aust Theat**

Credits: 3. Offered spring. Prereq., consent of instr. Offered as part of the Study Abroad program in Germany and Austria. Introduction to the basics of German-speaking theater. Students read, discuss, and analyze plays before seeing them performed on stage.

- **GRMN 321 - German: Adv Conversations**

Credits: 3. Offered intermittently. Offered in the study program in Germany and Austria. Development of conversational skills.

- **GRMN 322L - Survey of German Cinema**

Credits: 3. Offered intermittently. The development of the German film from its beginnings in the late 19th century to the present. Topics include Expressionism, New Objectivity, the Nazi film, the German contribution to Hollywood, the post-war film in East and West Germany, and film in unified Germany. **Course Attributes:** Literary & Artistic Stds Crse

- **GRMN 340L - Nature Environ German Lit Film**

Credits: 3. An examination of the historical role of nature and the environment in the German literary and cinematic traditions. Course begins with the Roman Germanic periods and covers literary and cinematic works in cultural and historical context up until the present day. Attention given to the role of environmentalism in Central European culture today in light of themes of nature and the environment in German literature and film historically. **Course Attributes:** Literary & Artistic Stds Crse American and European

- **GRMN 350 - German Culture & Civilization**

Credits: 3. Offered spring. Prereq., consent of instr. Offered as part of the Study Abroad program in Germany and Austria. Introduction to cultural topics, current events, and historical topics of

Germany and Austria. Course content supplemented with on-site visits.

- **GRMN 351H - German Culture: Beginnings to Romanticism**

Credits: 3. Offered intermittently in spring. Overview of major events and currents in German culture to 1900 with emphasis on the arts, literature, and intellectual movements. Lectures in English. **Course Attributes:** Historical & Cultural Course Writing Course-Upper-Division Writing Course-Advanced American and European

- **GRMN 352H - Germ Cult 1900-Pres**

Credits: 3. Offered intermittently in spring. Overview of major events and trends in culture of German-speaking world from 1900 to the present with emphasis on the arts, literature, film, intellectual movements, and social and political developments. Lectures in English. Credit not allowed for both MCLG 331H and GRMN 352H. **Course Attributes:** Historical & Cultural Course American and European Writing Course-Upper-Division Writing Course-Advanced

- **GRMN 362 - Germanic Mythology and Culture**

Credits: 3. Offered intermittently. Germanic culture and mythology from 200 B.C. to 1200 A.D. Topics include the Germanic pantheon, Germanic religious practices, Germanic migrations and major literary masterpieces.

- **GRMN 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., GRMN 202 or equiv. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GRMN 392 - Independent Study**

Credits: 1 TO 12. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **GRMN 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **GRMN 400 - Intro Linguistics of German**

Credits: 3. Offered autumn odd-numbered years. Same as LING 403. Specific problems in contrastive analysis of German phonology, morphology and syntax.

- **GRMN 431 - Germ Lit 1760 to 1832**

Credits: 3. Offered autumn. Prereq., GRMN 311 and 312 or consent of instr. Readings, study, and discussion of writers, texts, and contexts in German literature from 1760 to 1832, including Enlightenment, Storm and Stress, Romanticism, and Classicism.

- **GRMN 441 - 19th Century German Literature**

Credits: 3. Offered autumn. Prereq., GRMN 311 and 312 or consent of instr. Readings, study, and discussion of writers, texts, and contexts in German literature from 1832 to 1900.

- **GRMN 451 - 20th Cent German Lit to 1945**

Credits: 3. Offered spring. Prereq., GRMN 311 and 312 or consent of instr.

- **GRMN 491 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **GRMN 492 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and

objectives of the individual student.

- **GRMN 494 - Seminar in German Studies**

Credits: 1 TO 12. (R-12) Offered autumn. Prereq., GRMN 311 and 312. Advanced studies in major topics in German literature and culture.

- **GRMN 594 - Graduate Seminar**

Credits: 3. (R-6) Offered intermittently. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate

- **GRMN 595 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **GRMN 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Out-of-class independent work of a research nature which involves intensive use of the University or other libraries; also, research carried on in another country under the direction of a University professor. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **GRMN 599 - Professional Paper**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

- **GRMN 696 - Independent Study**

Credits: 1 TO 6. (R 6) Offered intermittently. Prereq., graduate standing. Out of class independent work of a research nature which involves intensive use of the University or other libraries; also, research carried on in another country under the direction of a University professor. Level: Graduate

- **GRMN 699 - Thesis**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., graduate standing. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Italian

- **ITAL 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Italian

- **ITLN 101 - Elementary Italian I**

Credits: 5. Offered autumn. An introduction to Italian language and culture, with emphasis on the skills of reading, writing, comprehension, and speaking. **Course Attributes:** Foreign Language Requirement

- **ITLN 201 - Intermediate Italian I**

Credits: 4. Offered autumn. Prereq., ITAL 102 or equiv. Expansion of active skills? listening, speaking, reading, writing, plus further cultural analysis.

- **ITLN 391 - Special Topics**

Credits: 1 TO 3. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Japanese

- **JPNS 101 - Elementary Japanese I**

Credits: 5. Offered autumn. Understanding of grammar and basic sentence structures are taught as a foundation for oral comprehension. The students will learn Hiragana and Katakana, two syllabic writing systems, and approximately 400 Kanji ideographs. **Course Attributes:**
Foreign Language Requirement

- **JPNS 102 - Elementary Japanese II**

Credits: 5. Offered spring. Prereq., JPNS 101. Continuation of 101. **Course Attributes:**
Foreign Language Requirement

- **JPNS 150H - Japanese Cult & Civiliz**

Credits: 3. Offered intermittently. Same as AS and LS 210H. The historical, religious, artistic, literary and social developments in Japan from earliest times to the present. **Course Attributes:**
Autumn Semester Historical & Cultural Course Indigenous and Global

- **JPNS 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **JPNS 201 - Intermediate Japanese I**

Credits: 5. Offered autumn. Prereq., JPNS 102 or equiv. Reading and writing kanji; building oral/aural fluency.

- **JPNS 202 - Intermediate Japanese II**

Credits: 5. Offered spring. Prereq., JPNS 201 or equiv. Continuation of JPNS 201.

- **JPNS 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **JPNS 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **JPNS 301 - Advanced Japanese**

Credits: 4. Offered autumn. Prereq., JPNS 202 or equiv. Development of greater reading and speaking proficiency. Vocabulary enhancement and kanji (Chinese characters) are emphasized.

- **JPNS 302 - Advanced Japanese**

Credits: 4. Offered spring. Prereq., JPNS 301 or equiv. Continuation of 301.

- **JPNS 306 - Japanese for Business/Tour**

Credits: 3. Offered intermittently. Prereq., JPNS 202 or equiv. Vocabulary and idiom of oral and written communication in business and tourism. Professional, ethical practices and special etiquette.

- **JPNS 311 - Jpns Clasc Lit Engl Trans**

Credits: 3. Offered autumn alternate years. Prereq., Composition course WRIT 101 or 201 (or transfer equiv.) with a grade of C- or better; and one approved Gen Ed writing course or WRIT 201, with a C- or better. Introduction to the classical literature of the Japanese court, ca. 7th to 14th century. Kojiki, Man'yoshu, Kokinshu, Genji Monogatari, and other major classics of the period. **Course Attributes:**
Literary & Artistic Stds Crse Non-Western Course
Writing Course-Upper-Division Writing Course-Advanced

- **JPNS 312 - Jpns Lit Medieval to Mod**

Credits: 3. Offered spring alternate years. Prereq., Composition course WRIT 101 or 201 (or transfer equiv.) with a grade of C- or better; and one approved Gen Ed writing course or WRIT 201, with a C- or better. Introduction to the literature of Japan from the 15th to the 20th century. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Upper-Division Writing Course-Advanced

- **JPNS 371 - Japanese Film and Anime**

Credits: 3. This course introduces students to salient events in the hundred-year history of Japanese cinema, including the age of silent film, the golden age of film directors, the New Wave, and contemporary Japanese cinema. Students will learn about Japanese cinema as the artistic expression of individual directors; they will gain a better understanding of the history of Japanese society and popular culture; and they will appreciate some of the reasons for the long-standing interest in Japan in the history of Western film studies.

- **JPNS 386 - Hist of Japanese Lang**

Credits: 3. Offered intermittently. Prereq., JPNS 202. Overview of Japanese language history from earliest times to the modern day. Topics include the development of writing systems, changes in phonology, and issues concerning orthography and lexicon.

- **JPNS 390 - Supervised Internship**

Credits: 1 TO 12. Offered intermittently. Paid work experience in Japan, combined with language/culture course work by correspondence directed by UM department staff. **Course Attributes:** Internships/Practicums Research & Creative Schlrshp

- **JPNS 391 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **JPNS 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **JPNS 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **JPNS 411 - Mod Jpns Wrtrs/Thinkers**

Credits: 3. (R-6) Offered autumn or spring. Prereq., JPNS 302. Introduction to the important writers, thinkers, and poets of the 20th century. Readings include a wide range of topics in the humanities, including literature, philosophy, and the arts.

- **JPNS 412 - Intro Classical Japanese**

Credits: 3. Offered spring. Prereq., JPNS 302. Introduction to the language of the Japanese court, ca. 7th to 14th century. Essential features of grammar, sentence structure, vocabulary, and orthography.

- **JPNS 415 - Adv Jpns for Professionals**

Credits: 3. Offered spring even-numbered years. Prereq., JPNS 302. A high-level professional language course covering all coordinated reading, writing, and speaking skills. Intended for majors hoping to enter the Japanese job market and prepare for professional testing in Japan.

- **JPNS 431 - Post-War Japanese Lit**

Credits: 3. Offered spring odd-numbered years. Introduction to issues, literature, and criticism of Japanese literature from the postwar (1945) through the contemporary period, using texts in English translation. **Course Attributes:** Writing Course-Upper-Division

- **JPNS 491 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **JPNS 492 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **JPNS 500 - Readings in Japanese**
Credits: 1 TO 3. (R-3) Offered intermittently. Prereq., undergraduate major in Japanese or equiv. Guided readings in a selected research field. Level: Graduate

Latin

- **LATN 101 - Elementary Latin I**
Credits: 5. Offered autumn. Latin I is the first course of a two-semester sequence, designed to enable the student to read authors in the original Latin as soon as possible. Based upon selected texts from Plautus, Vergil, Catullus, Livy, Ovid, Tacitus, and other major authors. **Course Attributes:** Foreign Language Requirement
- **LATN 102 - Elementary Latin II**
Credits: 5. Offered spring. Prereq., LATN 101. Continuation of 101. Latin grammar, vocabulary, readings. **Course Attributes:** Foreign Language Requirement
- **LATN 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **LATN 201 - Intermediate Latin I**
Credits: 4. Offered autumn. Prereq., LATN 102 or equiv. Selections of Latin prose from the classical period, with complementary exercises in elementary composition.
- **LATN 202 - Intermediate Latin II**
Credits: 3. Offered spring. Prereq., LATN 201 or equiv. Latin epic poetry: Vergil's Aeneid.
- **LATN 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **LATN 311 - Major Latin Authors**
Credits: 3. (R-18) Offered autumn and spring. Prereq., LATN 202 or equiv. Plautus, Terence, Lucretius, Livy, Cicero, Vergil, Horace, Ovid, Tacitus, Juvenal, Pliny, Martial, etc.; also, Early Church fathers, Medieval and Renaissance Latin. Selection to suit students' needs and interests.
- **LATN 391 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **LATN 392 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **LATN 402 - Advanced Prose Composition**
Credits: 3. Offered intermittently. Prereq., LATN 202 or equiv. Latin prose composition, based on the best classical models.
- **LATN 492 - Independent Study**

Credits: 1 TO 12. (R-12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **LATN 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:**
Service Learning/Volunteer

Mod & Class Literature-General

- **MCLG 100H - Intro Latin American Studies**

Credits: 3. Offered autumn or spring. Same as ANTY 103H. Multi-disciplinary survey and introduction to Latin America from pre-Columbian times to the present. **Course Attributes:**
Historical & Cultural Course Indigenous and Global

- **MCLG 105H - Intro to Russian Culture**

Credits: 3. Offered autumn. Fulfills both the Historical and Cultural (H) and American and European (y) General Education Perspectives. Same as RUSS 105H and LS 105H. A chronological survey of Russian culture from its beginnings to the contemporary period. **Course Attributes:**
Historical & Cultural Course American and European

- **MCLG 113 - Paris is Always a Good Idea**

Credits: 3. This is an introductory course on Paris conducted in English. The course is designed to increase our understanding of French culture—its artists, architecture, literature, revolutions, neighborhoods, and multiculturalism—through a cultural and historical exploration of the City of Lights. Students will be invited to explore the myths and ideas that frame 'Paris' during any given period through analyses of texts, films, songs, and iconography.

- **MCLG 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MCLG 193 - Orientation for Russia**

Credits: 1. Offered intermittently. This orientation course is intended to prepare students for a three-week study abroad program in Russia. It is required for all participants in the study abroad program. **Course Attributes:** Omnibus Course

- **MCLG 195 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics.

- **MCLG 210H - Japanese Cult & Civiliz**

Credits: 3. Offered intermittently. Same as AS, JPNS and LS 210H. The historical religious, artistic, literary and social developments in Japan from earliest times to the present. **Course Attributes:**
Historical & Cultural Course Non-Western Course Writing Course-Lower-Division
Indigenous and Global

- **MCLG 295 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MCLG 306 - Intro to Russian Literature I**

Credits: 3. Offered alternate years. Same as RUSS and LS 306. A survey of 19th-century Russian literature in translation. May include the works of Dostoevsky, Tolstoy, and Chekhov. No knowledge of Russian is necessary.

- **MCLG 308 - Russian Cinema and Culture**

Credits: 3. Offered alternate years. Same as RUSS 308, LS 308, FILM 308 . Topically arranged introduction to the cinema of Russia and the former Soviet Union, with particular emphasis on contemporary Russian cinema. All films screened with English subtitles. No knowledge of Russian is necessary.

- **MCLG 311 - Jpns Clasc Lit Engl Trans**

Credits: 3. Offered autumn alternate years. Prereq., Composition course WRIT 101 or 201 (or transfer equiv.) with a grade of C- or better; and one approved Gen Ed writing course or WRIT 201, with a C- or better. Introduction to the classical literature of the Japanese court, ca. 7th to 14th century. Kojiki, Man'yoshu, Kokinshu, Genji Monogatari, and other major classics of the period. **Course Attributes:** Writing Course-Upper-Division

- **MCLG 315 - Major Hispanic Authors**

Credits: 3. Offered autumn. The intensive study of the life times, and works of a major Hispanic author. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **MCLG 331H - German Cult 1900 to Pres**

Credits: 3. Offered spring alternate years. Same as LS 322H and GRMN 352H. Overview of major events and currents in German culture from 1900 to the present with emphasis on the arts, literature, and intellectual movements. Credit not allowed for MCLG 331H and GRMN 352H. **Course Attributes:** Historical & Cultural Course Writing Course-Upper-Division

- **MCLG 332L - Intro Multicultural Lit German**

Credits: 3. Introduction to multicultural literature created during recent decades in Germany. Study topics include immigration, citizenship, multilingualism, identity; significant literary and cultural movements and selected writers in contemporary Germany. **Course Attributes:** Literary & Artistic Stds Crse

- **MCLG 338 - The French Cinema**

Credits: 3. (R-6) Offered intermittently. Same as FRCH and LS 338. An historical, aesthetic, and critical survey of the French cinema, from its beginnings in 1895 through the contemporary cinema (Muet, classical, Realism, Nouvelle Vogue, etc.) with an introduction to contemporary film criticism. Students taking the course for French credits are required to do research, reading, and writing in the French language.

- **MCLG 339 - Surv African Cinema**

Credits: 3. A diachronic survey of primarily Francophone African cinema accompanied by interpretation and evaluation of films through filmic critical theory. Students taking the course for French credit must read and write in French.

- **MCLG 358 - Lat Amer Civ Thru Lit/Film**

Credits: 3. Offered spring. The development of the traditional society of Latin American civilization through the interaction of European, Indian and African elements. Credit not allowed for both LS/MCLG 358 and 359.

- **MCLG 393 - The Russian Experience**

Credits: 3. Offered intermittently during summer or winter sessions. Prereq., MCLG 193, Students spend three weeks in Russia on a faculty-led study-abroad program. They participate in daily cultural excursions and study Russian culture and literature with the program director. **Course Attributes:** Omnibus Course

- **MCLG 395 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offering of visiting professors, experimental offerings of new courses or one-time offerings of current topics.

- **MCLG 396 - Independent Study**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **MCLG 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Course Attributes: Internship graduation limit 6

- **MCLG 410 - Methods Tchg For Lang**

Credits: 3. Offered spring. Prereq., Ling 270S; one of FRCH 400, LATN 311, RUSS 350, or SPNS 400. Coreq. C&I 301 or 302. Fundamental concepts, objectives and techniques in the teaching of foreign languages.

- **MCLG 431 - Post-War Japanese Lit**

Credits: 3. Offered spring odd-numbered years. Same as JPNS 431. Introduction to issues, literature, and criticism of Japanese literature from the postwar (1945) through the contemporary period, using texts in English translation. **Course Attributes:** Writing Course-Upper-Division

- **MCLG 440 - Stds in Comparative Lit**

Credits: 3. (R-9) Offered intermittently. Prereq., consent of instr. Same as LIT 430 and LS 455. The study of important literary ideas, genres, trends and movements. Credit not allowed for the same topic in more than one course numbered 440, 494, LIT 430 or LS 455.

- **MCLG 494 - Sem in Foreign Literatures**

Credits: 1 TO 3. (R-9) Offered Spring. Same as RUSS 494. The topic of the seminar alternates between 1.) The Russian Novel and 2.) Dostoevsky and 3.) Women and Gender in Russian Culture. May be taken for honors credit through the Davidson Honors College. No knowledge of Russian is necessary, but Russian majors will be required to do selected readings in the original Russian. Fulfills the Upper-Division Writing Expectation for Russian majors. **Course Attributes:**

Writing Course-Upper-Division Writing Course-Advanced

- **MCLG 495 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics.

- **MCLG 496 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **MCLG 501 - Research Methods**

Credits: 3. Offered intermittently. Prereq., graduate standing in an M.A. program. Study of technical terms and overview of literary theory. Intensive analysis of research tools, materials and methods in literature, linguistics and pedagogy. Guided work in writing components of a research paper or thesis. Required of both thesis and non-thesis candidates for an advanced degree in Modern Languages and Literatures with an option in French, German, Spanish, or Interdisciplinary Studies which includes Classics. Level: Graduate

- **MCLG 522 - Sem in Comparative Lit**

Credits: 3. (R-9) Offered intermittently. Prereq., graduate standing. Same as LIT 522. Topics will vary. Level: Graduate

- **MCLG 594 - Graduate Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

Mod & Class Lang-Linguistics

- **MCLX 395 - Special Topics**

Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **MCLX 495 - Special Topics**

Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

Russian

- **RUSS 101 - Elementary Russian I**

Credits: 5. Offered autumn. Emphasis on oral communication, with development in all major skill areas: listening, speaking, reading, and writing. **Course Attributes:**
Foreign Language Requirement

- **RUSS 102 - Elementary Russian II**

Credits: 5. Offered spring. Prereq., RUSS 101 or equiv. Continuation of 101. **Course Attributes:**
Foreign Language Requirement

- **RUSS 105H - Intro to Russian Culture**

Credits: 3. Offered autumn. Fulfills both the Historical and Cultural (H) and American and European (Y) General Education Perspectives. Same as MCLG 105H and LS 105H. A chronological survey of Russian culture from its beginnings to the contemporary period. **Course Attributes:**
Historical & Cultural Course American and European

- **RUSS 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **RUSS 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **RUSS 193 - Study tours / Study abroad**

Credits: 1 TO 12. (R-10) Offered intermittently. University omnibus option for independent work. **Course Attributes:** Faculty-Led Study Abroad Omnibus Course

- **RUSS 201 - Intermediate Russian I**

Credits: 4. Offered autumn. Prereq., RUSS 102 or equiv. Continuation of active skills approach to Russian listening, speaking, reading, and writing.

- **RUSS 202 - Intermediate Russian II**

Credits: 4. Offered spring. Prereq., RUSS 201. Continuation of 201.

- **RUSS 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **RUSS 293 - Study tours / Study abroad**

Credits: 1 TO 12. (R-10) Offered intermittently. University omnibus option for independent work. **Course Attributes:** Faculty-Led Study Abroad Omnibus Course

- **RUSS 301 - Russian: Oral & Written Expr I**

Credits: 3. Offered autumn. Prereq., RUSS 202 or consent of instr. Emphasis on active use of Russian. Intensive practice in conversation and writing. **Course Attributes:**
Writing Course-Upper-Division

- **RUSS 302 - Russian: Oral Written Expr II**

Credits: 3. Prereq., RUSS 301 or consent of instr. A continued emphasis on active use of Russian. Intensive practice in conversation and writing. Continuation of 301.

- **RUSS 306L - Intro to Russian Literature I**

Credits: 3. Offered spring. A survey of Russian poetry and prose from the mid-nineteenth century through the Symbolist period of the early 20th century. Included are the works of Gogol, Turgenev, Dostoevsky, Tolstoy, and the Symbolists. **Course Attributes:** Literary & Artistic Stds Crse

- **RUSS 307L - Intro to Russian Lit II**

Credits: 3. Offered autumn alternate years. Same as MCLG 307L and LS 307L. Survey of Russian literature through the 20th century and into the 21st. **Course Attributes:** Literary & Artistic Stds Crse

- **RUSS 371 - SRAS: The New Great Game**

Credits: 3. Offered every term. Restricted to students in the SRAS program. Taught at The London School in Bishkek, Kyrgyzstan. This course offers an overview of the New Great Game as a renewed struggle for hegemony and control over natural resources in Central Asia between competing global powers, the Central Asian republics themselves, and neighboring states. Prereq., consent of instructor.

- **RUSS 372 - SRAS: Understanding Cent Asia**

Credits: 3. Offered every term. Prereq., consent of instructor. Restricted to students in the SRAS program. Taught at The London School in Bishkek, Kyrgyzstan. The course offers a broad overview of the cultural and social, as well as the historical and religious, dimensions of Central Asia, including Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan, and Tajikistan, in addition to Afghanistan and Xinjiang because of their influential role in greater Eurasia.

- **RUSS 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **RUSS 392 - Independent Study**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **RUSS 393 - Study tours / Study abroad**

Credits: 1 TO 12. Offered intermittently. University omnibus option for independent work. **Course Attributes:** Faculty-Led Study Abroad Omnibus Course

- **RUSS 398 - Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **RUSS 411 - 19th Century Russian Authors**

Credits: 3. Offered intermittently. Prereq., RUSS 202 or consent of instr. A study of various authors; may include Pushkin, Dostoevsky, Tolstoy, etc.

- **RUSS 412 - 20th Century Russian Authors**

Credits: 3. Offered intermittently. Prereq., RUSS 202 or consent of instr. A study of various authors; may include Bulgakov, Nabokov, Solzhenitsyn, etc.

- **RUSS 424 - Russian Short Story**

Credits: 3. Offered intermittently. Prereq., RUSS 202 or consent of instr. A chronological study of the Russian short story, 19th and 20th centuries.

- **RUSS 440 - Russian Poetry**
Credits: 3. Offered intermittently. Prereq., RUSS 202 or consent of instr. The evolution of Russian poetry from the end of the 18th century to the contemporary period.
- **RUSS 444 - The Russian Novel**
Credits: 3. Offered spring. Topics of the seminar include 1.) The Russian Novel and 2.) Dostoevsky and 3.) Women and Gender in Russian Culture. May be taken for honors credit through the Davidson Honors College. No knowledge of Russian is necessary, but Russian majors will be required to do selected readings in the original Russian. Fulfills the upper-division writing expectation for Russian majors.
- **RUSS 491 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **RUSS 492 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **RUSS 493 - Study tours / Study abroad**
Credits: 1 TO 12. (R-10) Offered intermittently. University omnibus option for independent work. **Course Attributes:** Faculty-Led Study Abroad Omnibus Course
- **RUSS 494 - Seminar in Russian Studies**
Credits: 1 TO 3. (R-9) Offered intermittently. Prereq., consent of instr. Specialized topics in various foreign literatures. Topics announced in class schedules. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced
- **RUSS 596 - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently. Level: Graduate

Spanish

- **SPNS 101 - Elementary Spanish I**
Credits: 5. Offered autumn. Emphasis on oral communication, with development in all major skill areas: listening, speaking, reading and writing. **Course Attributes:** Foreign Language Requirement
- **SPNS 102 - Elementary Spanish II**
Credits: 5. Offered spring. Prereq., SPNS 101. Continuation of 101. **Course Attributes:** Foreign Language Requirement
- **SPNS 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **SPNS 201 - Intermediate Spanish I**
Credits: 4. Offered autumn. Prereq., SPNS 102. Continued practice in the oral skills with added emphasis on grammar and reading proficiency.
- **SPNS 202 - Intermediate Spanish II**
Credits: 4. Offered spring. Prereq., SPNS 201. Continuation of 201.
- **SPNS 291 - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **SPNS 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.
- **SPNS 301 - Spanish: Oral and Written Expr**
Credits: 3. Offered autumn and spring. Prereq., SPNS 202 or equiv. Development of oral and written skills with an emphasis on Hispanic cultural context.
- **SPNS 305 - Spanish Phonetics**
Credits: 3. Offered once each academic year. Prereq., SPNS 202 or consent of instr. A practical and theoretical exploration of the Spanish sound system.
- **SPNS 306 - Commercial Spanish**
Credits: 3. (R-6) Offered intermittently. Prereq., SPNS 301. The use of business concepts and terminology in Spanish. Conducted entirely in Spanish. Investigation of cultural attitudes, resources of the Hispanic world, ways in which Hispanics conduct business, practice in business letter writing.
- **SPNS 308 - Intensive Spanish Abroad**
Credits: 1 TO 9. (R-9) Offered spring. Prereq., SPNS 202 or equiv. Intensive Spanish language course to coincide with intensive language course given at an institute or college during the Spanish Study Abroad Program. Credits vary according to the hours and intensity of the foreign language course and are determined by the director of the program.
- **SPNS 321 - Advanced Conversations**
Credits: 3. Offered intermittently. Prereq., SPNS 202. Intensive practice in oral Spanish through individual presentations, vocabulary and grammar work, and film discussion and analysis.
- **SPNS 326 - Contemporary Spanish Lit**
Credits: 3. Offered autumn and spring. Prereq., SPNS 202 or equiv. The study of contemporary works by peninsular authors, including an introduction to literary genres.
- **SPNS 331 - Contemp Latin Amer Lit**
Credits: 3. Offered autumn and spring. Prereq., SPNS 202 or equiv. The study of representative works by Latin-American authors with emphasis on the 20th century. Includes an introduction to literary genres.
- **SPNS 355 - Topics in Spanish Lit/Culture**
Credits: 1 TO 9. (R-9) Offered intermittently in spring. Prereq., SPNS 326 or SPNS 331 or consent of instr.
- **SPNS 359 - Span Amer Civ Lit & Film**
Credits: 3. Offered spring in odd-numbered years. Prereq., at least one upper-division class in Spanish and SPNS 301. Same as MCLG and LS 358. The development of the traditional society of Spanish American civilization through the interaction of European, Indian, and African elements. Credit not allowed for both LS/MCLG 358 and SPAN 359.
- **SPNS 391 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **SPNS 392 - Independent Study**
Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.
- **SPNS 398 - Internship**
Credits: 1 TO 6. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship may count toward graduation. **Course Attributes:** Internship graduation limit 6

- **SPNS 400 - Spanish: Applied Linguistics**
Credits: 3. Offered autumn. Prereq., SPNS 305 and LING 270 or 470. Topics in linguistics applied to the Spanish Language with an emphasis on morphology, syntax and semantics.
- **SPNS 408 - Spanish: Adv Comp & Conversat**
Credits: 3. Offered spring. Prereq., SPNS 301 or consent of instr. Intensive practice in writing on different levels of usage and style, combined with guided oral practice.
- **SPNS 432 - Latin American Literature**
Credits: 3. (R-6) Offered regularly. Prereq. SPNS 326 or 331 or consent of instr. Emphasis on major works of the 20th century.
- **SPNS 465 - Spanish Lit:Renaiss/Goldn Age**
Credits: 3. (R-6) Offered autumn even-numbered years. Prereq., SPNS 326 or 331 or consent of instr.
- **SPNS 466 - Spanish Lit:Modern & Contemp**
Credits: 3. (R-6) Offered spring even-numbered years. Prereq., SPNS 326 or 331 or consent of instr.
- **SPNS 599 - Professional Paper**
Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate
- **SPNS 699 - Thesis**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., graduate standing. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Classical Civilization

Bachelor of Arts - Classics; Classical Civilization Option; Track: Classical Civilization

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.5

Note: Degree requires 43-53 credits to complete.

Lower Division Core Courses

Rule: Must complete 9 credits from the following:

Note: Must select either CLAS 251L or 252L. Only 1 will be accepted toward the fulfillment of the required major credits.

	Course	Credits
—		

	CLAS 155L - Survey of Greek and Roman Lit	3 Credits
	CLAS 160L - Classical Mythology	3 Credits
	CLAS 251L - The Epic	3 Credits
	CLAS 252L - Greek Drama: Politics on Stage	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Degree Electives I

Rule: Must complete 12 credits from the following courses

—	Course	Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	CLAS 320 - Women in Antiquity	3 Credits
	CLAS 360H - Ancient Greek Civ and Culture	3 Credits
	HSTR 301H - Ancient Greek Social Hist	3 Credits
	HSTR 302H - Ancient Greece	3 Credits
	HSTR 304H - Ancient Rome	3 Credits
	PHL 261Y - History of Ancient Philosophy	3 Credits
	PHL 363 - Ancient Greek and Roman Phil	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Degree Electives II

Rule: Must complete 9 credits from the following courses

Note: If both CLAS 309 and CLAS 319 are taken, only 1 will count toward degree requirements.

—	Course	Credits
	CLAS 309 - Reading the City: Rome	3 Credits
	CLAS 319 - UM Students in Rome	1 Credits
	CLAS 365E - The Roots of Western Ethics	3 Credits
	GRK 202 - Intermediate Greek II	3 Credits

	GRK 300 - Major Greek Writers	3 Credits
	LATN 202 - Intermediate Latin II	3 Credits
	LATN 311 - Major Latin Authors	3 Credits
	PHL 465 - Plato	3 Credits
	PHL 466 - Aristotle	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Language Component

Rule: Student must complete one of the following options:

13-20 Total Credits Required

Option One: Latin

Rule: May complete all of the following:

—	Course	Credits
	LATN 101 - Elementary Latin I	5 Credits
	LATN 102 - Elementary Latin II	5 Credits
	LATN 201 - Intermediate Latin I	4 Credits
Minimum Required Grade: C-		14 Total Credits Required

Option Two: Greek

Rule: May complete all of the following:

—	Course	Credits
	GRK 101 - Elementary Greek I	5 Credits
	GRK 102 - Elementary Greek II	5 Credits
	GRK 201 - Intermediate Greek I	3 Credits
Minimum Required Grade: C-		13 Total Credits Required

Option Three: Latin and Greek

Rule: May complete all of the following:

—	Course	Credits
	GRK 101 - Elementary Greek I	5 Credits
	GRK 102 - Elementary Greek II	5 Credits
	LATN 101 - Elementary Latin I	5 Credits
	LATN 102 - Elementary Latin II	5 Credits
	Minimum Required Grade: C-	20 Total Credits Required

Classical Languages

Bachelor of Arts - Classics; Classical Languages Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 59

Required Cumulative GPA: 2.5

Note: Degree requires 59-62 credits to complete.

Required Lower Division Classes

Rule: Complete 3 of the following courses

Note: Must select either CLAS 251L or 252L. Only 1 will be accepted toward the fulfillment of the required major credits.

—	Course	Credits
	CLAS 155L - Survey of Greek and Roman Lit	3 Credits
	CLAS 160L - Classical Mythology	3 Credits
	CLAS 251L - The Epic	3 Credits
	CLAS 252L - Greek Drama: Politics on Stage	3 Credits

Minimum Required Grade: C-

9 Total Credits Required

Degree Electives

Rule: Complete 12 credits from the following courses

Course	Credits
ARTH 407 - Roman and Early Christian Art	3 Credits
CLAS 320 - Women in Antiquity	3 Credits
CLAS 360H - Ancient Greek Civ and Culture	3 Credits
HSTR 301H - Ancient Greek Social Hist	3 Credits
HSTR 302H - Ancient Greece	3 Credits
HSTR 304H - Ancient Rome	3 Credits
PHL 261Y - History of Ancient Philosophy	3 Credits
PHL 363 - Ancient Greek and Roman Phil	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Language Emphasis Requirements

Rule: Must complete the following subcategories

38 Total Credits Required

Language Emphasis Core

Rule: All courses are required

Course	Credits
GRK 101 - Elementary Greek I	5 Credits
GRK 102 - Elementary Greek II	5 Credits
LATN 101 - Elementary Latin I	5 Credits
LATN 102 - Elementary Latin II	5 Credits
Minimum Required Grade: C-	20 Total Credits Required

Language Emphasis Electives

Rule: For a Latin emphasis: complete 12 credits in Latin beyond LATN 102 plus 6 credits in Greek beyond GRK 102. For a Greek emphasis: complete 12 credits in Greek beyond GRK 102 plus 6 credits in Latin beyond LATN 102.

Course	Credits
GRK 191 - Special Topics	1 To 6 Credits
GRK 201 - Intermediate Greek I	3 Credits
GRK 202 - Intermediate Greek II	3 Credits
GRK 292 - Independent Study	1 To 6 Credits
GRK 300 - Major Greek Writers	3 Credits
GRK 391 - Special Topics	1 To 9 Credits
GRK 392 - Independent Study	1 To 9 Credits
GRK 492 - Independent Study	1 To 9 Credits
LATN 191 - Special Topics	1 To 6 Credits
LATN 201 - Intermediate Latin I	4 Credits
LATN 202 - Intermediate Latin II	3 Credits
LATN 292 - Independent Study	1 To 6 Credits
LATN 311 - Major Latin Authors	3 Credits
LATN 391 - Special Topics	1 To 9 Credits
LATN 392 - Independent Study	1 To 6 Credits
LATN 402 - Advanced Prose Composition	3 Credits
LATN 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-	18 Total Credits Required

Latin B.A.

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 59

Required Cumulative GPA: 2.5

Note: Degree requires 59-62 credits to complete.

Lower Division Core

Rule: Complete all of the following:

Note: Must select either CLAS 251L or 252L. Only 1 will be accepted toward the fulfillment of the required major credits.

—	Course	Credits
	CLAS 155L - Survey of Greek and Roman Lit	3 Credits
	CLAS 160L - Classical Mythology	3 Credits
	CLAS 251L - The Epic	3 Credits
	CLAS 252L - Greek Drama: Politics on Stage	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Upper Division Core

Rule: Complete all of the following courses

—	Course	Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	HSTR 304H - Ancient Rome	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Degree Electives

Rule: Complete 9 credits from the following courses

—	Course	Credits
	CLAS 320 - Women in Antiquity	3 Credits

	CLAS 360H - Ancient Greek Civ and Culture	3 Credits
	CLAS 362 - Ancient Greek & Roman Phil	3 Credits
	HSTR 301H - Ancient Greek Social Hist	3 Credits
	HSTR 302H - Ancient Greece	3 Credits
	PHL 261Y - History of Ancient Philosophy	3 Credits
	PHL 363 - Ancient Greek and Roman Phil	3 Credits
	PHL 465 - Plato	3 Credits
	PHL 466 - Aristotle	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Language Requirements

Rule: Must complete the following subcategories

35 Total Credits Required

Language Core

Rule: Must complete all of the following:courses

Note: Proficiency at the level of LATN 201 substitutes for LATN 101 and 102.

	Course	Credits
	LATN 101 - Elementary Latin I	5 Credits
	LATN 102 - Elementary Latin II	5 Credits
	LATN 201 - Intermediate Latin I	4 Credits
	LATN 202 - Intermediate Latin II	3 Credits
	LATN 402 - Advanced Prose Composition	3 Credits
Minimum Required Grade: C-		20 Total Credits Required

Language Electives

Rule: Must complete 15 credits in Latin beyond LATN 202

Note: GRK 101-102 may be substituted for 4 of the 15 additional credits beyond LATN 202.

Course	Credits
LATN 292 - Independent Study	1 To 6 Credits
LATN 311 - Major Latin Authors	3 Credits
LATN 391 - Special Topics	1 To 9 Credits
LATN 392 - Independent Study	1 To 6 Credits
LATN 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-	15 Total Credits Required

Teaching Latin

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - Classics; Track: Teaching Latin

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 62

Required Cumulative GPA: 2.5

Note: Degree requires 58-62 credits to complete. Students must gain admission to Teacher Education Program. An overall minimum grade point average of 3.0 is required for upper division work. Students must meet the requirements for teaching licensure.

Lower Division Core

Rule: Complete all of the following:courses

Note: Must select either CLAS 251L or 252L. Only 1 will be accepted toward the fulfillment of the required major credits

Course	Credits

	CLAS 155L - Survey of Greek and Roman Lit	3 Credits
	CLAS 160L - Classical Mythology	3 Credits
	CLAS 251L - The Epic	3 Credits
	CLAS 252L - Greek Drama: Politics on Stage	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Upper Division Core

Rule: Complete all of the following courses

—	Course	Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	HSTR 304H - Ancient Rome	3 Credits
	MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Degree Electives

Rule: Complete 9 credits from the following courses

—	Course	Credits
	CLAS 320 - Women in Antiquity	3 Credits
	CLAS 360H - Ancient Greek Civ and Culture	3 Credits
	CLAS 362 - Ancient Greek & Roman Phil	3 Credits
	HSTR 301H - Ancient Greek Social Hist	3 Credits
	HSTR 302H - Ancient Greece	3 Credits
	PHL 261Y - History of Ancient Philosophy	3 Credits
	PHL 363 - Ancient Greek and Roman Phil	3 Credits
	PHL 465 - Plato	3 Credits
	PHL 466 - Aristotle	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Language Requirements

Rule: Must complete the following subcategories

35 Total Credits Required

Language Core

Rule: Must complete all of the following courses

Note: Proficiency at the level of LATN 201 substitutes for LATN 101-102.

Course	Credits
LATN 101 - Elementary Latin I	5 Credits
LATN 102 - Elementary Latin II	5 Credits
LATN 201 - Intermediate Latin I	4 Credits
LATN 202 - Intermediate Latin II	3 Credits
LATN 402 - Advanced Prose Composition	3 Credits
Minimum Required Grade: C-	20 Total Credits Required

Language Electives

Rule: Must complete 15 credits in Latin beyond LATN 202

Note: GRK 101-102 may be substituted for 4 of the 15 additional credits beyond LATN 202.

Course	Credits
LATN 292 - Independent Study	1 To 6 Credits
LATN 311 - Major Latin Authors	3 Credits
LATN 391 - Special Topics	1 To 9 Credits
LATN 392 - Independent Study	1 To 6 Credits
LATN 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-	15 Total Credits Required

French B.A.

Bachelor of Arts - French

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 2.5 in all upper-division French courses presented in fulfillment of requirements for the French major. Must complete a minimum of 30 French upper division credits. French 101 through 202, or equivalent, are a prerequisite for this major.

Upper Division Core

Rule: Must complete all of the following courses:

Course	Credits
FRCH 301 - Adv Grammar/Oral Writ Exprsn	3 Credits
FRCH 350 - French Civ & Culture	3 Credits
FRCH 421 - Adv Stylistics & Oral Arg	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Survey Course Electives

Rule: Must complete 3 of the following courses

Course	Credits
FRCH 310 - Fr. Lit. Cult. Mid. Age Renass	3 Credits
FRCH 311 - Fr. Lit. Cult. 17th 18th Cent.	3 Credits
FRCH 312 - Fr. Lit. Cult. Long 19th Cent.	3 Credits
FRCH 313 - Literature and Culture III	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Degree Electives

Rule: Must complete at least 6 credits from the following courses

—	Course	Credits
	FRCH 300 - Into to Literature in French	3 Credits
	FRCH 338 - The French Cinema	3 Credits
	FRCH 339 - Surv African Cinema	3 Credits
	FRCH 355 - Spec Topcs:Fren Lang,Lit,Cultr	1 To 3 Credits
	FRCH 391 - Special Topics	1 To 9 Credits
	FRCH 392 - Independent Study	1 To 3 Credits
	FRCH 400 - French: Applied Linguistics	3 Credits
	FRCH 492 - Independent Study	1 To 9 Credits
	FRCH 494 - Seminar/Workshop	1 To 12 Credits
	FRCH 594 - Graduate Seminar	3 Credits
	FRCH 595 - Special Topics	1 To 6 Credits
	FRCH 596 - Independent Study	1 To 6 Credits
	Minimum Required Grade: C-	6 Total Credits Required

Literature and/or Culture Courses

Rule: Must complete 6 credits from the following courses

—	Course	Credits
	FRCH 400 - French: Applied Linguistics	3 Credits
	FRCH 420 - Studies in French Prose	3 Credits
	FRCH 421 - Adv Stylistics & Oral Arg	3 Credits
	FRCH 430 - Studies in French Drama	3 Credits
	FRCH 440 - Studies in French Poetry	3 Credits
	FRCH 491 - Special Topics	1 To 9 Credits

	FRCH 492 - Independent Study	1 To 9 Credits
	FRCH 494 - Seminar/Workshop	1 To 12 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching French

Extended Major Teaching Field of French: For an endorsement in the extended major teaching field of French, a student must complete the requirements for the B.A. with a major in French including FRCH 421, LING 270, and MCLG 410. Study in a French language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

French qualifies for a single field endorsement. However, there is a limited demand in the majority of Montana high schools for teachers with a single endorsement in French. Students should complete the requirements for a second teaching endorsement (major or minor) in another field in more demand in high schools.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - French; Track: Teaching French

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 3.00 in all upper-division French courses presented in fulfillment of requirements for the French teaching major. Must complete a minimum of 30 French upper division credits. French 101 through 202, or equivalent, are a prerequisite for this major. Study in a French language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

Upper Division Core

Rule: Must complete all of the following courses:

—	Course	Credits
	FRCH 301 - Adv Grammar/Oral Writ Exprsn	3 Credits
	FRCH 350 - French Civ & Culture	3 Credits
	FRCH 421 - Adv Stylistics & Oral Arg	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Survey Course Electives

Rule: Must complete 3 of the following courses

—	Course	Credits
	FRCH 310 - Fr. Lit. Cult. Mid. Age Renass	3 Credits
	FRCH 311 - Fr. Lit. Cult. 17th 18th Cent.	3 Credits
	FRCH 312 - Fr. Lit. Cult. Long 19th Cent.	3 Credits
	FRCH 313 - Literature and Culture III	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Degree Electives

Rule: Must complete at least 6 credits from the following courses

—	Course	Credits
	FRCH 300 - Into to Literature in French	3 Credits
	FRCH 338 - The French Cinema	3 Credits
	FRCH 339 - Surv African Cinema	3 Credits
	FRCH 355 - Spec Topcs:Fren Lang,Lit,Cultr	1 To 3 Credits
	FRCH 391 - Special Topics	1 To 9 Credits
	FRCH 392 - Independent Study	1 To 3 Credits
	FRCH 400 - French: Applied Linguistics	3 Credits
	FRCH 492 - Independent Study	1 To 9 Credits
	FRCH 494 - Seminar/Workshop	1 To 12 Credits

	FRCH 594 - Graduate Seminar	3 Credits
	FRCH 595 - Special Topics	1 To 6 Credits
	FRCH 596 - Independent Study	1 To 6 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Literature and/or Culture Courses

Rule: Must complete 6 credits from the following courses

—	Course	Credits
	FRCH 400 - French: Applied Linguistics	3 Credits
	FRCH 420 - Studies in French Prose	3 Credits
	FRCH 421 - Adv Stylistics & Oral Arg	3 Credits
	FRCH 430 - Studies in French Drama	3 Credits
	FRCH 440 - Studies in French Poetry	3 Credits
	FRCH 491 - Special Topics	1 To 9 Credits
	FRCH 492 - Independent Study	1 To 9 Credits
	FRCH 494 - Seminar/Workshop	1 To 12 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching Track

Rule: Must complete all of the following courses

—	Course	Credits

	LING 270S - Intro to Ling	3 Credits
	MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

German B.A.

Bachelor of Arts - German

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 48

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 2.5 in all upper-division GRMN courses presented in fulfillment of requirements for the German major.

Language Core

Rule: Must complete all of the following courses:

Course	Credits
GRMN 101 - Elementary German I	5 Credits
GRMN 102 - Elementary German II	5 Credits
GRMN 201 - Intermediate German I	4 Credits
GRMN 202 - Intermediate German II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Upper Division Core Courses

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

21-22 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

—	Course	Credits
	GRMN 301 - German: Oral and Written Exp	3 Credits
	GRMN 311 - Intro German Lit: Prose	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Subcategory 2

Rule: Must complete 1 of the following courses

—	Course	Credits
	GRMN 302 - German Oral & Written Expr II	3 Credits
	GRMN 305 - Practicum in Germ Lang	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Subcategory 3

Rule: Must complete 1 of the following courses

—	Course	Credits
	GRMN 312 - Intro German Lit: Dram/Poetry	3 Credits
	GRMN 318 - Intro to Germ & Aust Theat	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Subcategory 4

Rule: Must complete 1 of the following courses

—	Course	Credits
	GRMN 400 - Intro Linguistics of German	3 Credits
	LING 270 - Intro to Ling	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Subcategory 5

Rule: Must complete at least 2 3-credit courses in literature at the 400 level.

German Culture Electives

Rule: Must complete 3 of the following courses

Note: The upper-division writing expectation must be met by successfully completing either GRMN 351H or GRMN 352H.

Course	Credits
GRMN 322L - Advanced German Cinema	3 Credits
GRMN 350 - German Culture & Civilization	3 Credits
GRMN 351H - German Culture to 1900	3 Credits
GRMN 352H - Germ Cult 1900-Pres	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Teaching German

Extended Major Teaching Field of German: For an endorsement in the extended major teaching field of German, a student must complete the requirements for the B.A. with a major in German plus LING 270S and MCLG 410. Study in a German language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required. German qualifies for a single field endorsement. However, there is a limited demand in the majority of Montana high schools for teachers with a single endorsement in German. Students are encouraged to complete the requirements for a second teaching endorsement (major or minor) in another field in more demand in high schools.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - German; Track: Teaching German

Catalog Year: 2014-2015

Degree Specific Credits: 48

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 3.0 in all upper-division GRMN courses presented in fulfillment of requirements for the German teaching major. Study in a German language country is also required. The program may be provided through the University's Study Abroad Program or an equivalent experience.

Language Core

Rule: Must complete all of the following courses:

Note: Students with language background may be exempt from the GRMN 101-202 requirements. Please see the Department of Modern and Classical Languages and Literatures for additional information.

Course	Credits
GRMN 101 - Elementary German I	5 Credits
GRMN 102 - Elementary German II	5 Credits
GRMN 201 - Intermediate German I	4 Credits
GRMN 202 - Intermediate German II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Upper Division Core Courses

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

18-19 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

Course	Credits
GRMN 301 - German: Oral and Written Exp	3 Credits
GRMN 311 - Intro German Lit: Prose	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Subcategory 2

Rule: Must complete 1 of the following courses

—	Course	Credits
	GRMN 302 - German Oral & Written Expr II	3 Credits
	GRMN 305 - Practicum in Germ Lang	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Subcategory 3

Rule: Must complete 1 of the following courses

—	Course	Credits
	GRMN 312 - Intro German Lit: Dram/Poetry	3 Credits
	GRMN 318 - Intro to Germ & Aust Theat	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Subcategory 4

Rule: Must complete at least 2 3-credit courses in literature at the 400 level.

German Culture Electives

Rule: Must complete 2 of the following courses

Note: The upper-division writing expectation must be met by successfully completing either GRMN 351H or GRMN 352H.

—	Course	Credits
	GRMN 322L - Advanced German Cinema	3 Credits
	GRMN 350 - German Culture & Civilization	3 Credits
	GRMN 351H - German Culture to 1900	3 Credits
	GRMN 352H - Germ Cult 1900-Pres	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Teaching Track

Rule: Must complete the following courses

Course	Credits
GRMN 400 - Intro Linguistics of German	3 Credits
LING 270 - Intro to Ling	3 Credits
MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Japanese B.A.

Bachelor of Arts - Japanese

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 55

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum GPA of 2.5 in all their upper-division JPNS courses presented in fulfillment of requirements for the Japanese major. All other courses taken to satisfy the requirements of the major or minor must be completed with a grade of C- or better; the minimum GPA required is 2.00 in all lower division work attempted in the major.

Lower Division Core Courses

Rule: Complete the following subcategories of courses:

29 Total Credits Required

Language Core

Rule: Must complete all of the following courses:

—	Course	Credits
	JPNS 101 - Elementary Japanese I	5 Credits
	JPNS 102 - Elementary Japanese II	5 Credits
	JPNS 201 - Intermediate Japanese I	5 Credits
	JPNS 202 - Intermediate Japanese II	5 Credits
Minimum Required Grade: C-		20 Total Credits Required

Culture and Civilization Core

Rule: Must complete the following course:

—	Course	Credits
	JPNS 150H - Japanese Cult & Civiliz	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

East Asian Studies

Note: Student must complete at least 2 East Asian studies or history courses on Japan or East Asia at any level that are not taught in the Modern and Classical Languages and Literature department for a total of 6 additional credits.

Upper Division Core Courses

Rule: Must complete all of the following courses:

Note: Either JPNS 412 or JPNS 415 may be taken to complete the 14 credits.

JPNS 411 is repeatable once.

—	Course	Credits
	JPNS 301 - Advanced Japanese	4 Credits
	JPNS 302 - Advanced Japanese	4 Credits
	JPNS 411 - Mod Jpns Wrtrs/Thinkers	3 Credits
	JPNS 412 - Intro Classical Japanese	3 Credits

JPNS 415 - Adv Jpns for Professionals	3 Credits
Minimum Required Grade: C-	14 Total Credits Required

Major Electives

Rule: Must complete 12 credits from the following courses:

Note: JPNS 392 may be taken for up to 3 credits only.

Only 3 credits from JPNS 390 (Supervised Internship) or JPNS 392 (Independent Study) may count towards the 9 credits.

Japanese 391 may only be counted as an elective when the course is a Japanese literature, Japanese pedagogy/linguistics, or Japanese cultural course not part of basic Japanese language instruction.

Course	Credits
JPNS 306 - Japanese for Business/Tour	3 Credits
JPNS 311 - Jpns Clasc Lit Engl Trans	3 Credits
JPNS 312 - Jpns Lit Medieval to Mod	3 Credits
JPNS 371 - Japanese Film and Anime	3 Credits
JPNS 386 - Hist of Japanese Lang	3 Credits
JPNS 390 - Supervised Internship	1 To 12 Credits
JPNS 391 - Special Topics	1 To 12 Credits
JPNS 392 - Independent Study	1 To 6 Credits
JPNS 412 - Intro Classical Japanese	3 Credits
JPNS 431 - Post-War Japanese Lit	3 Credits
JPNS 491 - Special Topics	1 To 9 Credits
JPNS 492 - Independent Study	1 To 6 Credits
JPNS 500 - Readings in Japanese	1 To 3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Russian B.A.

Bachelor of Arts - Russian

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 48

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 2.5 in all upper-division courses presented in fulfillment of requirements for the Russian major. Must complete a minimum of 27 upper division credits in Russian courses and electives.

Lower Division Core Courses

Rule: Complete the following subcategories of courses

21 Total Credits Required

Language

Rule: Must complete all of the following courses:

—	Course	Credits
	RUSS 101 - Elementary Russian I	5 Credits
	RUSS 102 - Elementary Russian II	5 Credits
	RUSS 201 - Intermediate Russian I	4 Credits
	RUSS 202 - Intermediate Russian II	4 Credits
	Minimum Required Grade: C-	18 Total Credits Required

Culture

Rule: Must complete the following course

—	Course	Credits
	RUSS 105H - Intro to Russian Culture	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

Note: Student must complete at least 27 credits of upper-division work in Russian courses and electives, 15 credits of which must be in the target language.

27 Total Credits Required

Expression

Rule: Must complete all of the following courses:

Note: RUSS 494 must be taken for 3 credits and will fulfill the upper division writing requirement.

—	Course	Credits
	RUSS 301 - Russian: Oral & Written Expr I	3 Credits
	RUSS 302 - Russian: Oral Written Expr II	3 Credits
	RUSS 494 - Seminar in Russian Studies	1 To 3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Translation

Rule: Must complete 2 of the following courses

—	Course	Credits
	FILM 308 - Russian Cinema and Culture	3 Credits
	RUSS 306L - Intro to Russian Literature I	3 Credits
	RUSS 307L - Intro to Russian Lit II	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Language

Rule: Must complete 3 of the following courses

—	Course	Credits
	RUSS 411 - 19th Century Russian Authors	3 Credits
	RUSS 412 - 20th Century Russian Authors	3 Credits
	RUSS 424 - Russian Short Story	3 Credits
	RUSS 440 - Russian Poetry	3 Credits

Minimum Required Grade: C-	9 Total Credits Required
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History

Rule: Must complete 1 of the following courses

Course	Credits
HSTR 357 - Russia to 1881	3 Credits
HSTR 358 - Russia Since 1881	3 Credits
HSTR 458 - Russian Revolution 1900-1930	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Teaching Russian

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Russian; Track: Teaching Russian

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 51

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 3.00 in all upper-division courses presented in fulfillment of requirements for the Russian teaching major. Must complete a minimum of 27 upper division credits in Russian courses and electives.

Lower Division Core Courses

Rule: Complete the following subcategories of courses

21 Total Credits Required

Language

Rule: Must complete all of the following courses:

—	Course	Credits
	RUSS 101 - Elementary Russian I	5 Credits
	RUSS 102 - Elementary Russian II	5 Credits
	RUSS 201 - Intermediate Russian I	4 Credits
	RUSS 202 - Intermediate Russian II	4 Credits
	Minimum Required Grade: C-	18 Total Credits Required

Culture

Rule: Must complete the following course

—	Course	Credits
	RUSS 105H - Intro to Russian Culture	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

Note: Student must complete at least 27 credits of upper-division work in Russian courses and electives, 15 credits of which must be in the target language.

27 Total Credits Required

Expression

Rule: Must complete all of the following courses:

Note: RUSS 494 must be taken for 3 credits and will fulfill the upper division writing requirement.

—	Course	Credits
	RUSS 301 - Russian: Oral & Written Expr I	3 Credits
	RUSS 302 - Russian: Oral Written Expr II	3 Credits
	RUSS 494 - Seminar in Russian Studies	1 To 3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Translation

Rule: Must complete 2 of the following courses

—	Course	Credits
	MCLG 308 - Russian Cinema and Culture	3 Credits
	RUSS 306L - Intro to Russian Literature I	3 Credits
	RUSS 307L - Intro to Russian Lit II	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Language

Rule: Must complete 3 of the following courses

—	Course	Credits
	RUSS 411 - 19th Century Russian Authors	3 Credits
	RUSS 412 - 20th Century Russian Authors	3 Credits
	RUSS 424 - Russian Short Story	3 Credits
	RUSS 440 - Russian Poetry	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

History

Rule: Must complete 1 of the following courses

—	Course	Credits
---	--------	---------

	HSTR 357 - Russia to 1881	3 Credits
	HSTR 358 - Russia Since 1881	3 Credits
	HSTR 458 - Russian Revolution 1900-1930	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Track Course

Rule: Must complete the following course

	Course	Credits
	MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Spanish B.A.

Bachelor of Arts - Spanish

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 51

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 2.5 in all upper-division courses presented in fulfillment of requirements for the Spanish major.

Lower Division Core Courses

Rule: Must complete all of the following courses:

Course	Credits
SPNS 101 - Elementary Spanish I	5 Credits
SPNS 102 - Elementary Spanish II	5 Credits
SPNS 201 - Intermediate Spanish I	4 Credits
SPNS 202 - Intermediate Spanish II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Upper Division Core Courses

Rule: Must complete all of the following courses

Note: The sequential order of the following required courses must be followed:

- 1) SPNS 326 and SPNS 331 must be taken before any 400-level literature course
- 2) SPNS 301 must be taken before SPNS 408

Course	Credits
SPNS 301 - Spanish: Oral and Written Expr	3 Credits
SPNS 326 - Contemporary Spanish Lit	3 Credits
SPNS 331 - Contemp Latin Amer Lit	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Additional Upper Division Spanish Electives

Rule: Must complete 21 credits of upper-division courses in Spanish.

Note: The student must take at least 3 400-level courses. SPNS 408 may not count towards this requirement.

Minimum Required Grade: C-

21 Total Credits Required

Upper Division Writing

Rule: Must complete the following course

Note: This course fulfills the upper division writing requirement.

Course	Credits
MCLG 315 - Major Hispanic Authors	3 Credits

Teaching Spanish

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Extended Major Teaching Field of Spanish: For an endorsement in the extended major teaching field of Spanish, a student must complete the requirements for the B.A. with a major in Spanish including SPNS 301, 305, 400, 408 (SPAN 301, 302, 405, 408) and MCLG 410. Study in a Spanish language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required. Spanish qualifies for a single field endorsement. However, there is a limited demand in the majority of Montana high schools for teachers with a single endorsement in Spanish. Students are encouraged to complete the requirements for a second teaching endorsement (major or minor) in another field in more demand in high schools.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Spanish; Track: Teaching Spanish

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 57

Required Cumulative GPA: 2.5

Note: Students are required to maintain a minimum overall GPA of 3.0 in all upper-division courses presented in fulfillment of requirements for the Spanish teaching major. Study in a Spanish language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

Lower Division Core Courses

Rule: Must complete all of the following courses:

Note: Students with language background may be exempt from the SPNS 101-202 requirements. Please see the Department of Modern and Classical Languages and Literatures for additional information.

	Course	Credits
—		

	SPNS 101 - Elementary Spanish I	5 Credits
	SPNS 102 - Elementary Spanish II	5 Credits
	SPNS 201 - Intermediate Spanish I	4 Credits
	SPNS 202 - Intermediate Spanish II	4 Credits
Minimum Required Grade: C-		18 Total Credits Required

Upper Division Core Courses

Rule: Must complete all of the following courses

Note: The sequential order of the following required courses must be followed:

- 1) SPNS 326 and SPNS 331 must be taken before any 400-level literature course
- 2) SPNS 301 must be taken before SPNS 408

—	Course	Credits
	SPNS 301 - Spanish: Oral and Written Expr	3 Credits
	SPNS 326 - Contemporary Spanish Lit	3 Credits
	SPNS 331 - Contemp Latin Amer Lit	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Upper Division Core for Teaching Track

Rule: Complete all of the following courses

—	Course	Credits
	SPNS 305 - Spanish Phonetics	3 Credits
	SPNS 400 - Spanish: Applied Linguistics	3 Credits
	SPNS 408 - Spanish: Adv Comp & Conversat	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Additional Upper Division Spanish Electives

Rule: Must complete 12 credits of upper-division courses in Spanish.

Note: The student must take at least 2 400-level literature courses.

Minimum Required Grade: C-

12 Total Credits Required

Upper Division Writing

Rule: Must complete the following course

Note: This course fulfills the upper division writing requirement.

—	Course	Credits
	MCLG 315 - Major Hispanic Authors	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Must complete the following course

—	Course	Credits
	LING 270S - Intro to Ling	3 Credits
	MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Arabic Studies Minor

Minor - Arabic Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Note: At least 9 credits must be of upper division courses. A minimum grade of C is required in all the courses taken to fulfill the minor.

Lower Core Courses

Rule: Must complete all of the following:

—	Course	Credits
	ARAB 101 - Elementary Modern Arabic I	5 Credits
	ARAB 102 - Elementary Modern Arabic II	5 Credits
	ARAB 201 - Intermediate Modern Arabic I	4 Credits
	ARAB 202 - Intermediate Modern Arabic II	4 Credits
Minimum Required Grade: C		18 Total Credits Required

Upper Core Courses

Rule: Must complete all of the following:

—	Course	Credits
	ARAB 301 - Adv Modern Standard Arabic I	3 Credits
	ARAB 302 - Adv Modern Standard Arabic II	3 Credits
	ARAB 305 - The Arab World	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Electives

Rule: Must complete 3 credits from the following:

Note: Independent Study: Students may count up to 3 credits from an independent study related to the Arabic language or the Arab world. Before taking an independent study outside the Arabic program, you need to consult with the advisor of the minor. Upon consent of the advisor of the academic minor, up to three credits (either taken at the University of Montana or transferred from another college or university) may be counted as part of the electives if at least 75% of the content is related to the Arab world.

—	Course	Credits
	ARAB 307 - Model Arab League Delegates	3 Credits
	ARAB 317 - Model Arab League Staff	3 Credits
	ARAB 392 - Independent Study	1 To 6 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits

	HSTR 264 - Islamic Civ: Modrn Era	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Chinese Minor

Minor - Chinese (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 29

Required Cumulative GPA: 2.0

Lower Core Courses

Rule: Must complete all of the following:

—	Course	Credits
	CHIN 101 - Elementary Chinese I	5 Credits
	CHIN 102 - Elementary Chinese II	5 Credits
	CHIN 201 - Intermediate Chinese I	5 Credits
	CHIN 202 - Intermediate Chinese II	5 Credits
Minimum Required Grade: C-		20 Total Credits Required

Upper Division Electives

Rule: Must complete 9 credits from the following:

Note: With prior approval, 3 of these credits may be in China-focused courses offered by other departments.

—	Course	Credits
	CHIN 313L - Chinese Poetry in Translat	3 Credits
	CHIN 314L - Tradit Chinese Literature	3 Credits

	CHIN 380 - Chinese Folktales	3 Credits
	CHIN 388 - Readings Classical Chinese	3 Credits
	CHIN 432 - 20th Cent Chin Fiction in Eng	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Classical Civilization Minor

Minor - Classical Civilization (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 35

Required Cumulative GPA: 2.0

Lower Division Core

Rule: Must complete all of the following:

Course	Credits
CLAS 160L - Classical Mythology	3 Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
PHL 261Y - History of Ancient Philosophy	3 Credits
PHL 363 - Ancient Greek and Roman Phil	3 Credits
Minimum Required Grade: C-	13 Total Credits Required

Language Requirements

Rule: Must complete 1 of the following language sequences

10 Total Credits Required

| *Greek*

Rule: May complete the following sequence

—	Course	Credits
	GRK 101 - Elementary Greek I	5 Credits
	GRK 102 - Elementary Greek II	5 Credits
	Minimum Required Grade: C-	10 Total Credits Required

Latin

Rule: May complete the following sequence

—	Course	Credits
	LATN 101 - Elementary Latin I	5 Credits
	LATN 102 - Elementary Latin II	5 Credits
	Minimum Required Grade: C-	10 Total Credits Required

Degree Electives

Rule: Must complete the following subcategories

12 Total Credits Required

Electives I

Rule: Must complete 9 credits from the following:courses

—	Course	Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	CLAS 155L - Survey of Greek and Roman Lit	3 Credits
	CLAS 251L - The Epic	3 Credits
	CLAS 252L - Greek Drama: Politics on Stage	3 Credits
	CLAS 360H - Ancient Greek Civ and Culture	3 Credits
	CLAS 365E - The Roots of Western Ethics	3 Credits

	GRK 201 - Intermediate Greek I	3 Credits
	GRK 202 - Intermediate Greek II	3 Credits
	GRK 300 - Major Greek Writers	3 Credits
	LATN 201 - Intermediate Latin I	4 Credits
	LATN 202 - Intermediate Latin II	3 Credits
	LATN 311 - Major Latin Authors	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Electives II

Rule: Must complete 3 credits from the following courses

	Course	Credits
	HSTR 301H - Ancient Greek Social Hist	3 Credits
	HSTR 302H - Ancient Greece	3 Credits
	HSTR 304H - Ancient Rome	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

French Minor

Minor - French (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Note: French 101-202, or equivalent, are prerequisites to the minor in French.

Upper Division Core

Rule: Must complete all of the following:

—	Course	Credits
	FRCH 301 - Adv Grammar/Oral Writ Exprsn	3 Credits
	FRCH 350 - French Civ & Culture	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Degree Electives

Rule: Must complete the following subcategories

9 Total Credits Required

300-level courses

Rule: Must complete 2 of the following courses

—	Course	Credits
	FRCH 310 - Fr. Lit. Cult. Mid. Age Renass	3 Credits
	FRCH 311 - Fr. Lit. Cult. 17th 18th Cent.	3 Credits
	FRCH 312 - Fr. Lit. Cult. Long 19th Cent.	3 Credits
	FRCH 313 - Literature and Culture III	3 Credits
	FRCH 338 - The French Cinema	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

400-level courses

Rule: Must complete 1 of the following courses

—	Course	Credits
	FRCH 400 - French: Applied Linguistics	3 Credits
	FRCH 420 - Studies in French Prose	3 Credits
	FRCH 421 - Adv Stylistics & Oral Arg	3 Credits
	FRCH 430 - Studies in French Drama	3 Credits

	FRCH 440 - Studies in French Poetry	3 Credits
	FRCH 491 - Special Topics	1 To 9 Credits
	FRCH 492 - Independent Study	1 To 9 Credits
	FRCH 494 - Seminar/Workshop	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching French Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Minor Teaching Field of French: For an endorsement in the minor teaching field of French, a student must complete FRCH 101, 102, 201, 202, 301, 350, 421 (FREN 101,102, 201, 202, 301, 302, 401) LING 270, and MCLG 410. Study in a French-language country, provided either through the University's Study Abroad Programs or an experience considered to be equivalent, also is required.

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - French (Minor); Track: Teaching French

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 15

Required Cumulative GPA: 2.5

Note: French 101-202, or equivalent, are prerequisites to the minor in French. Study in a French-language country, provided either through the University's Study Abroad Programs or an experience considered to be equivalent, also is required. An overall minimum grade point average of 3.0 is required for upper division work.

Upper Division Core

Rule: Must complete all of the following:

Course	Credits

	FRCH 301 - Adv Grammar/Oral Writ Exprsn	3 Credits
	FRCH 350 - French Civ & Culture	3 Credits
	FRCH 421 - Adv Stylistics & Oral Arg	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Track Requirements

Rule: Must complete all of the following:

	Course	Credits
	LING 270S - Intro to Ling	3 Credits
	MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

German Minor

Minor - German (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 33

Required Cumulative GPA: 2.5

Language Core

Rule: Must complete all of the following courses:

—	Course	Credits
	GRMN 101 - Elementary German I	5 Credits
	GRMN 102 - Elementary German II	5 Credits
	GRMN 201 - Intermediate German I	4 Credits
	GRMN 202 - Intermediate German II	4 Credits
Minimum Required Grade: C-		18 Total Credits Required

Upper Division Core Courses

Rule: Must complete all of the following subcategories

Note: Native or near-native speakers of German must substitute 2 400-level literature courses for GRMN 301 and GRMN 302.

Minimum Required Grade: C-

12-13 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

—	Course	Credits
	GRMN 301 - German: Oral and Written Exp	3 Credits
	GRMN 311 - Intro German Lit: Prose	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Subcategory 2

Rule: Must complete 1 of the following courses

—	Course	Credits
	GRMN 302 - German Oral & Written Expr II	3 Credits
	GRMN 305 - Practicum in Germ Lang	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Subcategory 3

Rule: Must complete 1 of the following courses

Course	Credits
GRMN 312 - Intro German Lit: Dram/Poetry	3 Credits
GRMN 318 - Intro to Germ & Aust Theat	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

German Culture Electives

Rule: Must complete 1 of the following courses

Course	Credits
GRMN 322L - Advanced German Cinema	3 Credits
GRMN 350 - German Culture & Civilization	3 Credits
GRMN 351H - German Culture to 1900	3 Credits
GRMN 352H - Germ Cult 1900-Pres	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Teaching German Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Minor Teaching Field of German: For an endorsement in the minor teaching field of German, a student must complete GRMN 101, 102, 201, 202, 301, 302 or 305 (GERM 101,102, 201, 202, 301, 302 or 305); one of the following German culture courses: 351H, 352H, 350, 322L or 362Y (303, 304H, 355, 361L or 362H); GRMN 400 (GERM 403), LING 270S, and MCLG 410. Study in a German-language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - German (Minor); Track: Teaching German

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Note: An overall minimum grade point average of 3.0 is required for upper division work. Study in a German language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

Language Core

Rule: Must complete all of the following courses:

Note: Students with language background may be exempt from the GRMN 101-202 requirements. Please see the Department of Modern and Classical Languages and Literatures for additional information.

Course	Credits
GRMN 101 - Elementary German I	5 Credits
GRMN 102 - Elementary German II	5 Credits
GRMN 201 - Intermediate German I	4 Credits
GRMN 202 - Intermediate German II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Upper Division Core Courses

Rule: Must complete all of the following subcategories

Note: Native or near-native speakers of German must substitute 2 400-level literature courses for GRMN 301 and GRMN 302.

Minimum Required Grade: C-

6 Total Credits Required

Subcategory 1

Rule: Must complete the following course

Course	Credits
GRMN 301 - German: Oral and Written Exp	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Subcategory 2

Rule: Must complete 1 of the following courses

Course	Credits
GRMN 302 - German Oral & Written Expr II	3 Credits
GRMN 305 - Practicum in Germ Lang	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

German Culture Electives

Rule: Must complete 1 of the following courses

Course	Credits
GRMN 322L - Advanced German Cinema	3 Credits
GRMN 350 - German Culture & Civilization	3 Credits
GRMN 351H - German Culture to 1900	3 Credits
GRMN 352H - Germ Cult 1900-Pres	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. Individuals completing a teaching minor must also complete a teaching major in another content area. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. Individuals completing a teaching minor must also complete a teaching major in another content area. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Track Requirements

Rule: Must complete both of the following

Course	Credits
LING 270S - Intro to Ling	3 Credits

MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Greek Minor

Minor - Greek (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 25

Required Cumulative GPA: 2.5

Required Lower Division Courses

Rule: Must complete all of the following courses:

Course	Credits
GRK 101 - Elementary Greek I	5 Credits
GRK 102 - Elementary Greek II	5 Credits
GRK 201 - Intermediate Greek I	3 Credits
GRK 202 - Intermediate Greek II	3 Credits
Minimum Required Grade: C-	16 Total Credits Required

Required Upper Division Courses

Rule: Must complete 9 credits from the following courses:

Course	Credits
GRK 300 - Major Greek Writers	3 Credits
GRK 391 - Special Topics	1 To 9 Credits
GRK 392 - Independent Study	1 To 9 Credits

GRK 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-	9 Total Credits Required

Japanese Minor

Minor - Japanese (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Lower Division Core Courses

Rule: Must complete all of the following courses:

—	Course	Credits
	JPNS 101 - Elementary Japanese I	5 Credits
	JPNS 102 - Elementary Japanese II	5 Credits
	JPNS 150H - Japanese Cult & Civiliz	3 Credits
	JPNS 201 - Intermediate Japanese I	5 Credits
	JPNS 202 - Intermediate Japanese II	5 Credits
	Minimum Required Grade: C-	23 Total Credits Required

Upper Division Elective Courses

Rule: Must complete 9 credits from the following courses:

Note: JPNS 392 may be taken for up to 3 credits only.

Only 3 credits from JPNS 390 (Supervised Internship) or JPNS 392 (Independent Study) may count toward the 9 credits.

If offered, JPNS 191 or JPNS 291 may be taken in place of 1 of the above electives.

Also permitted in substitution would be 1 course from outside the department if it has a substantial Japan-related element.

—	Course	Credits
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	JPNS 306 - Japanese for Business/Tour	3 Credits
	JPNS 311 - Jpns Clasc Lit Engl Trans	3 Credits
	JPNS 312 - Jpns Lit Medieval to Mod	3 Credits
	JPNS 371 - Japanese Film and Anime	3 Credits
	JPNS 386 - Hist of Japanese Lang	3 Credits
	JPNS 390 - Supervised Internship	1 To 12 Credits
	JPNS 391 - Special Topics	1 To 12 Credits
	JPNS 392 - Independent Study	1 To 6 Credits
	JPNS 411 - Mod Jpns Wrtrs/Thinkers	3 Credits
	JPNS 412 - Intro Classical Japanese	3 Credits
	JPNS 431 - Post-War Japanese Lit	3 Credits
	JPNS 491 - Special Topics	1 To 9 Credits
Minimum Required Grade: C-		9 Total Credits Required

Latin Minor

Minor - Latin (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 26

Required Cumulative GPA: 2.5

Required Lower Division Courses

Rule: Must complete all of the following courses:

—	Course	Credits
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	LATN 101 - Elementary Latin I	5 Credits
	LATN 102 - Elementary Latin II	5 Credits
	LATN 201 - Intermediate Latin I	4 Credits
	LATN 202 - Intermediate Latin II	3 Credits
Minimum Required Grade: C-		17 Total Credits Required

Required Upper Division Courses

Rule: Must complete nine credits from the following courses:

	Course	Credits
	LATN 311 - Major Latin Authors	3 Credits
	LATN 391 - Special Topics	1 To 9 Credits
	LATN 392 - Independent Study	1 To 6 Credits
	LATN 402 - Advanced Prose Composition	3 Credits
	LATN 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-		9 Total Credits Required

Teaching Latin Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Latin (Minor); Track: Teaching Latin

Catalog Year: 2014-2015

Degree Specific Credits: 26

Required Cumulative GPA: 2.5

Note: An overall minimum grade point average of 3.0 is required for upper-division work.

Required Lower Division Courses

Rule: Must complete all of the following courses:

Course	Credits
LATN 101 - Elementary Latin I	5 Credits
LATN 102 - Elementary Latin II	5 Credits
LATN 201 - Intermediate Latin I	4 Credits
LATN 202 - Intermediate Latin II	3 Credits
Minimum Required Grade: C-	17 Total Credits Required

Required Upper Division Courses

Rule: Must complete nine credits from the following courses:

Course	Credits
LATN 311 - Major Latin Authors	3 Credits
LATN 391 - Special Topics	1 To 9 Credits
LATN 392 - Independent Study	1 To 6 Credits
LATN 402 - Advanced Prose Composition	3 Credits
LATN 492 - Independent Study	1 To 12 Credits
Minimum Required Grade: C-	9 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Course	Credits
MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Latin American Studies Minor

Minor - Latin American Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 32

Required Cumulative GPA: 2.5

Required Lower Division Courses

Rule: Must complete all of the following courses:

Course	Credits
MCLG 100H - Intro Latin American Studies	3 Credits
SPNS 101 - Elementary Spanish I	5 Credits
SPNS 102 - Elementary Spanish II	5 Credits
SPNS 201 - Intermediate Spanish I	4 Credits
Minimum Required Grade: C-	17 Total Credits Required

Minor Electives

Rule: Must complete 15 credits from the following courses:

Note: SPNS 494 may count when topic is related to Latin American literature such as Latin American drama, poetry, novel, short story, Argentinian literature, or 19th Century Latin American Literature.

	Course	Credits
	ANTY 354H - Mesoamerican Prehistory	3 Credits
	ARTH 433H - Acient American Art	3 Credits
	ARTH 434H - Latin American Art	3 Credits
	ARTH 494 - Sem Art Hist & Crit	3 Credits
	ENST 493 - Study Abroad: Envir Justice LA	3 Credits
	HSTR 230H - Colonial Latin America	3 Credits
	HSTR 231H - Modern Latin America	3 Credits
	HSTR 334 - Latin America: Reform and Revo	3 Credits
	HSTR 335 - Lat Am Workers & Labor	3 Credits
	HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
	MCLG 358 - Lat Amer Civ Thru Lit/Film	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 327 - Politics of Mexico	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 463 - Development Administration	3 Credits
	S W 323 - Women & Soc Action Amer	3 Credits
	SPNS 331 - Contemp Latin Amer Lit	3 Credits
	SPNS 359 - Span Amer Civ Lit & Film	3 Credits
	SPNS 432 - Latin American Literature	3 Credits
	SPNS 494 - Seminar	1 To 12 Credits
Minimum Required Grade: C-		15 Total Credits Required

Russian Minor

Minor - Russian (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 1.7

Lower Division Core Requirements

Rule: Must complete all four courses or have equivalent courses

Course	Credits
RUSS 101 - Elementary Russian I	5 Credits
RUSS 102 - Elementary Russian II	5 Credits
RUSS 201 - Intermediate Russian I	4 Credits
RUSS 202 - Intermediate Russian II	4 Credits
Minimum Required Grade: C	18 Total Credits Required

Upper Division Credits

Rule: Must complete 12 upper division credits in Russian-related courses

Minimum Required Grade: C

12 Total Credits Required

Teaching Russian Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Russian (Minor); Track: Teaching Russian

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Note: An overall minimum grade point average of 3.0 is required for upper division work.

Lower Division Core Requirements

Rule: Must complete all four courses or have equivalent courses

Course	Credits
RUSS 101 - Elementary Russian I	5 Credits
RUSS 102 - Elementary Russian II	5 Credits
RUSS 201 - Intermediate Russian I	4 Credits
RUSS 202 - Intermediate Russian II	4 Credits
Minimum Required Grade: C	18 Total Credits Required

Upper Division Credits

Rule: Complete all of the following courses.

Course	Credits
RUSS 301 - Russian: Oral & Written Expr I	3 Credits
RUSS 302 - Russian: Oral Written Expr II	3 Credits
RUSS 306L - Intro to Russian Literature I	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Course	Credits
MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Russian Studies Minor

Minor - Russian Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Lower Division Core Courses

Rule: Must complete the following subcategories

21 Total Credits Required

Language

Rule: Must complete all of the following courses

Course	Credits
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	RUSS 101 - Elementary Russian I	5 Credits
	RUSS 102 - Elementary Russian II	5 Credits
	RUSS 201 - Intermediate Russian I	4 Credits
	RUSS 202 - Intermediate Russian II	4 Credits
Minimum Required Grade: C-		18 Total Credits Required

Culture

Rule: Must complete the following course

	Course	Credits
	MCLG 105H - Intro to Russian Culture	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Degree Electives

Rule: Must complete the following subcategories

9 Total Credits Required

History

Rule: Must complete 1 of the following courses

	Course	Credits
	HSTR 357 - Russia to 1881	3 Credits
	HSTR 358 - Russia Since 1881	3 Credits
	HSTR 458 - Russian Revolution 1900-1930	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Russian Electives

Rule: Must complete 6 credits of upper-division coursework

Note: 3 of the 6 credits must be taken in the MCLL department and 3 credits from a third department/discipline.

Spanish Minor

Minor - Spanish (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Lower Division Core

Rule: Must complete all of the following courses:

Course	Credits
SPNS 101 - Elementary Spanish I	5 Credits
SPNS 102 - Elementary Spanish II	5 Credits
SPNS 201 - Intermediate Spanish I	4 Credits
SPNS 202 - Intermediate Spanish II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Upper Division Core

Rule: Must complete all of the following subcategories

6 Total Credits Required

Expression

Rule: Must complete the following course

Course	Credits
SPNS 301 - Spanish: Oral and Written Expr	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Literature

Rule: Must complete 1 of the following courses

—	Course	Credits
	SPNS 326 - Contemporary Spanish Lit	3 Credits
	SPNS 331 - Contemp Latin Amer Lit	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Upper Division Electives

Rule: Must complete the following subcategories

12 Total Credits Required

Literature and Linguistics

Rule: Must complete 1 of the following courses

—	Course	Credits
	SPNS 400 - Spanish: Applied Linguistics	3 Credits
	SPNS 432 - Latin American Literature	3 Credits
	SPNS 465 - Spanish Lit:Renaiss/Goldn Age	3 Credits
	SPNS 466 - Spanish Lit:Modern & Contemp	3 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Additional Electives

Rule: Must complete 9 credits of additional upper division SPNS electives

Teaching Spanish Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Minor Teaching Field of Spanish: For an endorsement in the minor teaching field of Spanish, a student must complete SPNS 101 through 202 or equivalent, 301, 305, 326 or 331, 400 (SPAN 101 through 202, 301-302, 311L or 312, 405) and MCLG 410. Study in a Spanish-language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Spanish (Minor); Track: Teaching Spanish

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Note: An overall minimum grade point average of 3.0 is required for upper division work. Study in a Spanish language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

Lower Division Core

Rule: Must complete all of the following courses:

Note: Students with language background may be exempt from the SPNS 101-202 requirements. Please see the Department of Modern and Classical Languages and Literatures for additional information.

Course	Credits
SPNS 101 - Elementary Spanish I	5 Credits
SPNS 102 - Elementary Spanish II	5 Credits
SPNS 201 - Intermediate Spanish I	4 Credits
SPNS 202 - Intermediate Spanish II	4 Credits
Minimum Required Grade: C-	18 Total Credits Required

Upper Division Core

Rule: Must complete all of the following subcategories

12 Total Credits Required

Expression

Rule: Must complete the following course

—	Course	Credits
	SPNS 301 - Spanish: Oral and Written Expr	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Literature

Rule: Must complete 1 of the following courses

—	Course	Credits
	SPNS 326 - Contemporary Spanish Lit	3 Credits
	SPNS 331 - Contemp Latin Amer Lit	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Phonetics and Linguistics

Rule: Must complete all of the following

—	Course	Credits
	LING 270S - Intro to Ling	3 Credits
	SPNS 305 - Spanish Phonetics	3 Credits
	SPNS 400 - Spanish: Applied Linguistics	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course

Course	Credits
MCLG 410 - Methods Tchg For Lang	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Native American Studies

Dave Beck, Chair

The Native American Studies Department at the University of Montana builds its curriculum on the foundation of three interrelated principles: sovereignty, indigeneity and community well-being. In so doing we pay close attention to the continuing role of traditional value systems, the impacts of colonization and the efforts toward decolonization within tribal communities. We define sovereignty broadly as one of the rights of all indigenous peoples, including both the political-legal foundations as provided in U.S. law and policy and self-determination more generally. Indigeneity underlies the unique holistic relationship that Native American communities have to the land and to the environment. In addition, our degree program not only intends to advance the well-being of our individual students, both native and non-native, but also to enhance the well-being of Indigenous communities across Montana, the United States and globally, by providing necessary and relevant education about those communities as well as the skills and knowledge for those working within those communities to do so effectively. Our curriculum and the foundations of faculty research are broadly cross-disciplinary with these principles at their base.

Native American Studies is an academic discipline committed to examining the contemporary and past experiences and life ways of the first Americans from their perspective. The curriculum is designed to provide a study of American Indians from a holistic and humanistic viewpoint by focusing upon their cultures, history, and contemporary life. Courses are designed for both Native American and non Native American students so they can better understand human similarities and differences, thereby leading to more effective work with and within tribal communities, through stronger knowledge bases of tribal America, and the development of better communications and cross-cultural relationships.

The Native American Studies major supports the objectives of a liberal arts education. It is interdisciplinary and provides a perspective that critically analyzes and evaluates the strengths and limitations of each contributing discipline.

Department Faculty

Professors

David Beck, Professor
Richmond Clow, Professor
Wade Davies, Professor & Co-Chair
S. Neyooxet Greymorning, Professor
Kathryn Shanley, Professor & Special Assistant to the Provost Native American and Indigenous Education

Assistant Professors

Theodore Van Alst, Assistant Professor & Co-Chair

Adjunct Faculty

Lecturers

George Price, Lecturer

Course Descriptions

Film

- **FILM 860 - Native Americans & Cinema**

Credits: 3. Offered once each year. Same as NASX 360. Surveys the image of Native Americans in American film with an emphasis on revisionist, or breakthrough films. Ultimate focus will be on films featuring Native American writers, directors and actors.

Native American Studies

- **NAS 260 - African Amer & Native Amer**

Credits: 3. Offered Fall, even years. Same as AAS 260. A study of the broad scope of relations between African Americans and Native Americans in colonial and United States history. Topics explored through history, sociology, and cultural anthropology.

Native American Studies

- **NASX 105H - Intro Native Amer Studies**

Credits: 3. Offered Autumn and Spring. Survey course to acquaint the student with Native American Studies by a general overview of Indian history, culture, philosophy, religious beliefs and contemporary issues. **Course Attributes:** Historical & Cultural Course
Indigenous and Global

- **NASX 141 - Elementary Blackfoot I**

Credits: 5. Offered autumn. An introduction to the Blackfoot language and culture. Students will learn how to write and read Blackfoot as well as how to conduct simple conversations. **Course Attributes:** Foreign Language Requirement

- **NASX 142 - Elementary Blackfoot II**

Credits: 4. Offered intermittently spring. Continuation of 141. **Course Attributes:** Foreign Language Requirement

- **NASX 180 - Event Planning**

Credits: 3. Offered spring semester. This course is intended for students to learn the skills necessary to put on a large event. The course is intended as a hands-on experiential learning course. The culmination of the course will be putting on the annual Kyi-Yo contest pow-wow, the first large regional pow-wow of the year on the circuit.

- **NASX 191 - Special Topics**

Credits: 1 TO 9. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **NASX 192 - Independent Study**

Credits: 1 TO 6. (R-6) Prereq., consent of instr. Selected topics on American Indians under the direct supervision of a faculty member.

- **NASX 198 - Internship**

Credits: 1 TO 6. (R-9) Offered by special arrangement. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **NASX 201X - Indian Cultr Exprssd Thru Lang**

Credits: 3. Offered Autumn. This course has been designed to introduce students to a non-Western perspective of the relationship that exists between Indian cultures and their languages. Students will be exposed to various languages of American Indian peoples, and how through Native languages insight can be gained into history, traditions, and cultural life-ways of Indian peoples. **Course Attributes:** Indigenous and Global

- **NASX 210X - Native Amer Sports & Games**

Credits: 3. Offered Autumn or Spring. Explores Native American sports and games, both traditional and modern. Through classroom learning and actual play, students gain an understanding of how play and competition have been vital to Native communities. **Course Attributes:** Indigenous and Global

- **NASX 231X - Indig World View Perspectives**

Credits: 3. Offered Spring. Same as ANTY 231X. Examination of Indigenous belief systems, with regard to world views, religious ceremonies, cultural ways and the impact that Anglo-European culture has had upon these systems. Focus on Indigenous peoples of Australia, New Zealand, Canada and the United States **Course Attributes:** Indigenous and Global

- **NASX 235X - Oral/Written Trads Native Amer**

Credits: 3. Offered Autumn and Spring. Analysis of the oral traditions of Native Americans including an introduction to the literary works of early leading American Indian writers. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Approved Indigenous and Global
Writing Course-Intermediate

- **NASX 239X - Nat North Amer History & Art**

Credits: 3. Focus on Native North American history through art and material culture and its relationship to American Indian tribally specific aesthetics, cosmologies, worldviews and life-ways, historic uses and the contemporary Indian artistic experience. **Course Attributes:** Literary & Artistic Stds Crse Indigenous and Global

- **NASX 260X - Indig Community Developmnt**

Credits: 3. Offered intermittently. This course introduces the student to concepts in indigenous/rural sustainable community development in the countries of North America in broad historical and cultural frameworks. **Course Attributes:** Indigenous and Global

- **NASX 280 - NA Studies Rsrch Theors/Mthds**

Credits: 3. Offered Autumn. Prereq., NAS major or minor. Introduction to the Research materials pertaining to the study of American Indian peoples and cultures. Emphasis on current research trends and writing. **Course Attributes:** Writing Course-Lower-Division
Writing Course-Approved Writing Course-Intermediate

- **NASX 291 - Special Topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **NASX 292 - Independent Study**

Credits: 1 TO 6. (R 6) Experimental offerings of visiting professors, experimental offerings of new courses or one time offerings of current topics.

- **NASX 303E - Ecol Persp in Nat Amer Trad**
 Credits: 3. Offered Autumn and Spring. An examination of Native American environmental ethics and tribal and historical and contemporary use of physical environmental resources. **Course Attributes:** Ethical & Human Values Course Indigenous and Global
- **NASX 304E - Native American Beliefs/Philos**
 Credits: 3. Offered Autumn and Spring. A study of selected ethical systems; origins, world views; religious beliefs and the way they have been affected by western civilization. **Course Attributes:** Ethical & Human Values Course Non-Western Course Indigenous and Global
- **NASX 306X - Contemp Global Iss Indg People**
 Credits: 3. Offered Autumn. An examination of the major issues that affect the contemporary experiences of Indigenous Peoples of the Americas, and other global communities. **Course Attributes:** Indigenous and Global
- **NASX 340 - Native American Lit**
 Credits: 3. Offered Autumn. Prereq., three credits of lower-division LIT courses and NASX 105H or 235X. Same as LIT 305. Selected readings from Native American Literature and criticism with emphasis on the literatures after the Native American literary Renaissance. A minimum of three genres covered and three culture areas. **Course Attributes:** Writing Course-Upper-Division
- **NASX 351 - Traditional Eco Knowledge**
 Credits: 3. Offered summer. This course is one unit of the four unit (12 credit) summer semester program: "Wild Rockies Summer Semester." Description: This course will explore the traditional ecological perspectives of the Salish, Kootenai, Blackfeet and Tlingit people, as well as how these perspectives relate to Western concepts of ecology. Through field-based activities, lectures by tribal elders, and personal exploration, students will come to a heightened understanding of the still vital cultural perspectives and practices of modern American Indians, particularly in the Rockies of Montana and Canada.
- **NASX 352 - Montana's Indians/Land**
 Credits: 3. Offered autumn. This course is one unit of the four unit (12 credit) fall semester program: "Montana Afoot & Afloat: Human/Land Relations." Description: This course gives students a greater understanding of Indian people's traditional relationships with the land in Montana, and an understanding of how and why those relationships may have changed. Extensive time will be spent on the Fort Belknap, Northern Cheyenne and Crow Reservations where the class will meet with tribal elders and learning will have an emphasis on environmental and tribal/land relationships.
- **NASX 354X - Indians of MT since Rsrvtn Era**
 Credits: 3. Offered Autumn. Same as HSTA 354. Examination of the history of Montana Indians since the establishment of the reservations, contemporary conditions, and issues among both reservation and non-reservation Indian communities in the state. Special attention given to social and economic conditions, treaty rights, tribal sovereignty, and legal issues. **Course Attributes:** Indigenous and Global
- **NASX 360 - Native Amer and Cinema**
 Credits: 3. Offered Autumn or Spring. Same as ENFM 344. Surveys the image of Native Americans in American film with an emphasis on "revisionist," or "breakthrough" films. Ultimate focus will be on films featuring Native American writers, directors and actors.
- **NASX 391 - Special Topics**
 Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **NASX 394 - Workshop/Seminar**
 Credits: 1 TO 6. (R-6) Offered intermittently. Variable topics addressing Indian law, policy and

culture by visiting scholars.

- **NASX 398 - Internship**

Credits: 1 TO 6. (R-6) Offered by special arrangement. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **NASX 403 - Contmp Tribal Resource Issues**

Credits: 3. Offered intermittently. Acquaints students with contemporary tribal resource management and environmental policies.

- **NASX 405H - Gndr Iss in Native Amer Stdies**

Credits: 3. Offered intermittently. Same as WS 342H. Focus on American Indian gender relations and their cultural continuity and historical evolution. National in scope with concentration on certain tribes. Group analysis of contemporary gender issues relevant to Native American peoples. **Course Attributes:** Historical & Cultural Course

- **NASX 430 - American Indian Education**

Credits: 3. Offered intermittently. An overview of American Indian education including a look at the unique needs of Indian children.

- **NASX 464 - Hist Amer Indian Affrs to 1776**

Credits: 3. Offered Autumn. Same as HIST 464. A study of American Indian relations with Europeans and the United States from first contact to 1776.

- **NASX 465 - Hist Amer Indian Affrs 10 Cent**

Credits: 3. Offered Spring. Same as HIST 465. A study of tribal encounters and adjustments to the American nations in the nineteenth century.

- **NASX 466 - Hist of Indian Affrs from 1890**

Credits: 3. Offered Autumn. Same as HIST 466. A study of tribal encounters and adjustments to the American nation from 1890.

- **NASX 475 - Tribal Sovereignty**

Credits: 3. Offered Spring. An examination of the evolution of tribal governments from a historical and political perspective. Particular attention is devoted to the issues of tribal sovereignty and tribal-state conflicts.

- **NASX 481 - Native American Film**

Credits: 3. Offered once a year. Prereq., NASX 360 or consent of instr.

- **NASX 488 - Stds in Native Amer Autbio**

Credits: 3. Offered intermittently. Same as LIT 429. Prereq., LIT 300 or LIT 305/NASX 340, or consent of instr. Study of texts that present a first-person story of Native American individual's life within historical and cultural contexts, with discussion of theories of autobiography.

- **NASX 491 - Special Topics**

Credits: 1 TO 6. (R-6) Prereq., upper-division standing and consent of instr. Selected topics on American Indians under the direct supervision of a faculty member.

- **NASX 492 - Independent Study**

Credits: 1 TO 6. (R-9) Offered by special arrangement. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics.

- **NASX 494 - Seminar/Workshop**

Credits: 3. (R-6) Offered Spring. Prereq., NAS major or minor, 18 credits in NAS, and junior standing or higher. Senior reading capstone course for the review of past and current literature on and by American Indians. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **NASX 499 - Senior Capstone/Thesis**

Credits: 3 TO 9. (R-9) Offered by special arrangement. Prereq., NAS major or minor, 18 credits in NAS, junior standing, and consent of instr. Independent research project in Native American Studies, supervised by a faculty member, and leading to completion of baccalaureate degree.

- **NASX 594 - Sem Native American Stds**

Credits: 1 TO 3. (R-6) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

- **NASX 595 - Special Topics**

Credits: 1 TO 9. (R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Internships/Practicums

- **NASX 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., graduate standing and consent of instr. Study of selected topics or problems on American Indians under the direct supervision of a faculty member. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **NASX 598 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

Native American Studies B.A.

Bachelor of Arts - Native American Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Lower Division Core Courses

Rule: Must complete all of the following courses:

	Course	Credits
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	NASX 105H - Intro Native Amer Studies	3 Credits
	NASX 201X - Indian Cultr Exprssd Thru Lang	3 Credits
	NASX 235X - Oral/Written Trads Native Amer	3 Credits
	NASX 280 - NA Studies Rsrch Theors/Mthds	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

18 Total Credits Required

Fundamentals

Rule: Must complete all of the following courses

	Course	Credits
	NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
	NASX 304E - Native American Beliefs/Philos	3 Credits
	NASX 494 - Seminar/Workshop	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Indigenous

Rule: Must complete 1 of the following courses

	Course	Credits
	NASX 306X - Contemp Global Iss Indg People	3 Credits
	NASX 475X - Tribal Sovereignty	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

History

Rule: Must complete 2 of the following courses

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Course	Credits
NASX 464X - Hist Amer Indian Affrs to 1776	3 Credits
NASX 465X - Hist Amer Indian Affrs 19 Cent	3 Credits
NASX 466X - Hist of Indian Affrs from 1890	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Elective Courses

Rule: Must complete 9 credits from the following courses:

Course	Credits
AAS 260 - African Amer & Native Amer	3 Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 323X - Native Peoples of Montana	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
HSTA 455 - Indian, Bison, & Horse	3 Credits
HSTR 367 - 19th Cent Amer West	3 Credits
HSTR 369 - 20th Cent Amer West	3 Credits
NASX 141 - Elementary Blackfoot I	4 Credits
NASX 142 - Elementary Blackfoot II	4 Credits
NASX 180 - Event Planning	3 Credits
NASX 191 - Special Topics	1 To 9 Credits
NASX 198 - Internship	1 To 6 Credits
NASX 210X - Native Amer Sports & Games	3 Credits
NASX 231X - Indig World View Perspectives	3 Credits
NASX 260 - Indig Community Developmnt	3 Credits
NASX 291 - Special Topics	1 To 6 Credits
NASX 340 - Native American Lit	3 Credits

	NASX 354X - Indians of MT since Rsrvtvn Era	3 Credits
	NASX 360 - Native Amer and Cinema	3 Credits
	NASX 388 - Native Amer Health & Healing	3 Credits
	NASX 391 - Special Topics	1 To 6 Credits
	NASX 394 - Workshop/Seminar	1 To 6 Credits
	NASX 403 - Contmp Tribal Resource Issues	3 Credits
	NASX 405H - Gndr Iss in Native Amer Stdies	3 Credits
	NASX 430 - American Indian Education	3 Credits
	NASX 488 - Stds in Native Amer Autobio	3 Credits
	NASX 491 - Independent Study	1 To 6 Credits
	NASX 499 - Senior Capstone/Thesis	3 To 9 Credits
	PHAR 320 - Am Ind Health Issues	2 Credits
Minimum Required Grade: C-		9 Total Credits Required

Language Rejuvenation and Maintenance Certificate

Certificate of Art - Language Rejuvenation & Maint

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Core Courses

Rule: All courses are required

	Course	Credits
—		

	ANTY 476 - Methods for Native Languages	3 Credits
	CSD 210 - Speech & Lang Devel	3 Credits
	NASX 201X - Indian Cultr Exprssd Thru Lang	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Degree Electives

Rule: Complete a minimum of 9 credits from the following list of courses

Note: ANTY 476 may be repeated for elective credits.

Course	Credits
ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ANTY 423 - Culture and Identity	3 Credits
NASX 141 - Elementary Blackfoot I	4 Credits
NASX 235X - Oral/Written Tradts Native Amer	3 Credits
PSCI 411 - Nonprofit Grant Writing	2 Credits
PSCI 412 - Nonprofit Fundraising	2 Credits
Minimum Required Grade: C-	9 Total Credits Required

Native American Studies Minor

Minor - Native American Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Core Courses

Rule: Must complete all of the following courses

Course	Credits
NASX 105H - Intro Native Amer Studies	3 Credits
NASX 235X - Oral/Written Trads Native Amer	3 Credits
NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
NASX 304E - Native American Beliefs/Philos	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Degree Electives

Rule: Must complete 9 credits in the following courses

Course	Credits
AAS 260 - African Amer & Native Amer	3 Credits
ANTY 122S - Race and Minorities	3 Credits
ANTY 323X - Native Peoples of Montana	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
HSTA 455 - Indian, Bison, & Horse	3 Credits
HSTR 367 - 19th Cent Amer West	3 Credits
HSTR 369 - 20th Cent Amer West	3 Credits
NASX 141 - Elementary Blackfoot I	4 Credits
NASX 142 - Elementary Blackfoot II	4 Credits
NASX 180 - Event Planning	3 Credits
NASX 191 - Special Topics	1 To 9 Credits
NASX 198 - Internship	1 To 6 Credits
NASX 201X - Indian Cultr Exprssd Thru Lang	3 Credits
NASX 210X - Native Amer Sports & Games	3 Credits
NASX 231X - Indig World View Perspectives	3 Credits
NASX 260X - Indig Community Developmnt	3 Credits

	NASX 280 - NA Studies Rsrch Theors/Mthds	3 Credits
	NASX 291 - Special Topics	1 To 6 Credits
	NASX 306X - Contemp Global Iss Indg People	3 Credits
	NASX 340 - Native American Lit	3 Credits
	NASX 354X - Indians of MT since Rsrvtn Era	3 Credits
	NASX 360 - Native Amer and Cinema	3 Credits
	NASX 388 - Native Amer Health & Healing	3 Credits
	NASX 391 - Special Topics	1 To 6 Credits
	NASX 394 - Workshop/Seminar	1 To 6 Credits
	NASX 405H - Gndr Iss in Native Amer Stdies	3 Credits
	NASX 464X - Hist Amer Indian Affrs to 1776	3 Credits
	NASX 465X - Hist Amer Indian Affrs 19 Cent	3 Credits
	NASX 466X - Hist of Indian Affrs from 1890	3 Credits
	NASX 475X - Tribal Sovereignty	3 Credits
	NASX 488 - Stds in Native Amer Autobio	3 Credits
	NASX 491 - Independent Study	1 To 6 Credits
	NASX 499 - Senior Capstone/Thesis	3 To 9 Credits
Minimum Required Grade: C-		9 Total Credits Required

Philosophy Department

Matthew Strohl, Chair

Philosophy is the search for an understanding of how the world as a whole hangs together and how we are to assume our place in that world. Philosophy is the trustee of the heritage of great philosophical texts, and it engages those texts in conversation with contemporary problems. Secondly, philosophy turns directly to the contemporary world and tries to illuminate and advance its concerns with ethics and art, with science and technology, with ecology and feminism, with law and medicine.

Bachelor of Arts and Master of Arts degrees are offered. More information is available online: <http://www.cas.umt.edu/philosophy>

Department Faculty

Professors

Albert Borgmann, Regents Professor Emeritus of Philosophy
Christopher Preston, Professor of Philosophy
David Sherman, Professor of Philosophy
Deborah Slicer, Professor of Philosophy, Graduate Advisor

Associate Professors

Bridget Clarke, Associate Professor of Philosophy
Armond Duwell, Associate Professor of Philosophy
Soazig Le Bihan, Associate Professor of Philosophy
Paul Muench, Associate Professor of Philosophy
Matthew Strohl, Associate Professor of Philosophy, Department Chair

Adjunct Faculty

Patrick Burke, Adjunct Instructor of Philosophy
David Clark, Adjunct Assistant Professor of Philosophy
Daniel Congdon

Emeritus Professors

Thomas Huff, Adjunct Professor / Professor of Philosophy, Emeritus
Fred McGlynn, Professor Emeritus

Course Descriptions

Philosophy

- **PHL 101Y - Introduction to Philosophy**
Credits: 3. (R-12) Offered yearly. An introduction to philosophy through examination of the thought of selected great philosophers or of traditional positions on classical philosophical problems.
Course Attributes: American and European
- **PHL 102Y - Topical Intro to Philosophy**
Credits: 1 TO 4. (R-9) Offered yearly. An introduction to philosophy through examination of a selected topic (such as existentialism, philosophy of film, technology and the good life, science and society, philosophy of religion). Course Attributes: American and European
- **PHL 110E - Introduction to Ethics**
Credits: 3. Offered every term. An examination of the Western vision of morality through the careful study of selected writings from Aristotle, Kant and Mill. Additional works in ethics may supplement primary readings. Course Attributes: Ethical & Human Values Course
- **PHL 112E - Intro Ethics and Environment**
Credits: 3. Offered intermittently. An introductory-level ethics course with a special interest in the natural environment. The course will (a) introduce students to the three classical traditions in ethics - virtue, Kantianism, and utilitarianism, (b) ground these theories in questions about the

moral status of non-humans and our moral duties to non-humans, (c) include an applied section of the course that will cover animal welfare, biotechnology, and other current topics. **Course Attributes:** Ethical & Human Values Course

- **PHL 114E - Intro to Political Ethics**

Credits: 3. Offered intermittently. An examination of the issues of political ethics through the careful study of selected writings from the three great Western political traditions: classical natural law theory, modern individualism, and contemporary distributive justice. **Course Attributes:** Ethical & Human Values Course

- **PHL 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHL 198 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of faculty supervisor and the Internship Services Office. Extended classroom experience which provides practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **PHL 210E - Moral Philosophy**

Credits: 3. Offered autumn and spring. Prereq., philosophy major or minor, or consent of instr. An examination of leading approaches to moral philosophy through a careful reading of classical texts in the Western tradition. A more thorough treatment of the material offered in PHL 110E. Intended primarily for philosophy majors and minors. **Course Attributes:** Ethical & Human Values Course Writing Course-Approved Writing Course-Intermediate

- **PHL 233 - Intro to Logic: Deduction**

Credits: 3. Offered autumn and spring. Understanding general principles of reasoning and the habits of clear and correct thinking. Emphasis on the analysis of the logical structure of claims in natural language and the skills of elementary deductive inference.

- **PHL 235 - Intro to Logic: Induction**

Credits: 3. Offered intermittently. Prereq., PHL 233 or equivalent, or consent of instr. A study of the formal principles of reasoning from evidence.

- **PHL 241N - Hist & Philosophy of Science**

Credits: 3. Offered intermittently. The epistemological and metaphysical developments of natural philosophy or science. The origins of science in ancient Greece, and its subsequent developments during the scientific revolution. Developments in biology, especially Darwinism and genetics, and developments in physics. **Course Attributes:** Historical & Cultural Course
Natural Science Course

- **PHL 261Y - History of Ancient Philosophy**

Credits: 3. Offered autumn. Introduction to the central works of Plato and Aristotle, with an overview of Presocratic and Hellenistic philosophy. **Course Attributes:** American and European

- **PHL 262Y - History of Modern Philosophy**

Credits: 3. Offered spring. A survey of the history of philosophy from Descartes to Kant, which includes other continental rationalists and the British Empiricists. **Course Attributes:** American and European

- **PHL 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHL 292 - Independent Study**
 Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.
- **PHL 298 - Internship**
 Credits: 1 TO 6. (R-9) Offered intermittently. Prereq., consent of faculty supervisor and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
 Internship graduation limit 6
- **PHL 301 - Knowledge and Reality**
 Credits: 3. (R-9) Offered intermittently. Prereq., upper-division standing or consent of instr. Selected topics in one or more of the following areas: epistemology (the study of knowledge), philosophy of science, metaphysics. Intended primarily for non-majors.
- **PHL 311 - The Good, Right, Beautiful**
 Credits: 3. (R-9) Offered intermittently. Prereq., upper-division standing or consent of instr. Selected topics in one or more of the following areas: ethics, philosophy of mind/action, aesthetics. Intended primarily for non-majors.
- **PHL 316 - Historical Figures in Phil**
 Credits: 3. (R-9) Offered intermittently. Prereq., upper-division standing or consent of instr. Study of one or more historically significant philosophers. Intended primarily for non-majors.
- **PHL 321E - Philosophy & Biomedical Ethics**
 Credits: 3. Offered intermittently. Prereq., upper-division standing or consent of instr. An examination of ethical problems raised by the practice of medicine and by recent developments in medically-related biological sciences. **Course Attributes:** Ethical & Human Values Course
- **PHL 323 - Ethics of Climate Change**
 Credits: 3. This course will examine some of the fundamental issues raised by global climate change and consider how environmental ethics might help to address these issues. Students will become acquainted with the essential elements of climate change science and be provided with an introduction to contemporary approaches to environmental ethics that have developed out of the primary ethical traditions of western thought: deontological (Kantian) ethics, utilitarian ethics, and virtue ethics. In addition, the course will examine alternative understandings of the appropriate relationship between humans and the natural world including: "Deep Ecology" and Native American perspectives.
- **PHL 351 - Philosophy and Feminism**
 Credits: 3. Offered intermittently. Prereq., upper-division standing or consent of instr. Study of what distinguishes feminist from traditional approaches to ethics. May also examine other relevant areas of philosophy, including epistemology, political theory, philosophy of science and environment.
- **PHL 363 - Ancient Greek and Roman Phil**
 Credits: 3. Offered intermittently. Examination of the thought of the philosophers of Greece and Rome as expressed in original works read in English translation. Ancient philosophy studied within its historical, linguistic and cultural setting. Cannot receive credit for both PHL 363 and MCLG 362H.
- **PHL 370 - Philosophy of Religion**
 Credits: 3. Offered intermittently. Prereq., upper-division standing or consent of instr. An examination of one or more of the classic problems of Western philosophy of religion, such as the traditional arguments for and against the existence of God, the relationship of faith and reason, the status of religious experience, the problem of evil, and the problem of reconciling divine omniscience with human freedom.

- **PHL 390 - Research**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student. **Course Attributes:** Research & Creative Schlrshp

- **PHL 391 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHL 392 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **PHL 394 - Seminar**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

- **PHL 398 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of faculty supervisor and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **PHL 405 - 20th Century Analytic Phil**

Credits: 3. (R-9) Offered intermittently. Prereq., upper-division standing, PHL 210E, PHL 233, and PHL 262Y, or consent of instr. Intensive study of the work of one or more philosophers (such as Frege, Russell, Wittgenstein) or historical introduction to the major issues and figures of 20th century philosophy in the analytic tradition (with readings from Frege, Russell, Wittgenstein, Quine and others).

- **PHL 406 - Contemp Issues Analytic Phil**

Credits: 3. (R-6) Offered intermittently. Prereq., upper-division standing, PHL 210E, PHL 233, and PHL 262Y, or consent of instr. Examination of contemporary issues in analytic philosophy focusing on one or more of the following topics: philosophy of language, epistemology, metaphysics, philosophy of mind.

- **PHL 412 - Ethics and Public Affairs**

Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. Examination of morally relevant issues in government, journalism, education and other social institutions. Issues considered may include just war theory, deception, confidentiality, conflict of interest, privacy, paternalism responsibilities in conflict with other institutions, and responsibilities across national boundaries, among others.

- **PHL 422 - Environmental Philosophy**

Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. Critical exploration of selected philosophical and literary texts pertinent to the ethics of human relationships with the natural environment.

- **PHL 427 - Topics in Philosophy of Art**

Credits: 1 TO 4. (R-9) Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. Examination of philosophical problems related to particular arts and discussion of the nature of the arts. Topics considered may include music, visual arts, literature, and film.

- **PHL 429 - Philosophy in Literature**

Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. Philosophical thought in selected works of literature.

- **PHL 445 - Central Issues Phil of Science**
Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. A consideration of philosophical issues relating to the nature of modern physical science: method, explanation, theory, progress, space/time, causality, relation of science to philosophy.
- **PHL 449 - Hist Moral and Political Phil**
Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. Reading and interpretation of selected writings in the history of moral philosophy and/or political philosophy.
- **PHL 450 - Contemp Moral/Political Theory**
Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. Recent theories in ethics and their implications; recent work in political theory, emphasizing contemporary liberalism and its critics.
- **PHL 455 - Phil of Society and Culture**
Credits: 3. Offered intermittently. Prereq., upper-division standing and PHL 210E, or consent of instr. A philosophical examination of cultural forces shaping modern society, forces such as science, technology, or domesticity.
- **PHL 462 - Early Modern Philosophy**
Credits: 3. (R-6) Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 262Y, or consent of instr. Intensive study of the work of one or more of the major philosophers from the early modern period (Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume).
- **PHL 464 - Kant**
Credits: 3. Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 262Y, or consent of instr. Reading and interpretation of selected works.
- **PHL 465 - Plato**
Credits: 3. Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 261Y, or consent of instr. Reading and interpretation of selected works.
- **PHL 466 - Aristotle**
Credits: 3. Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 261Y, or consent of instr. Reading and interpretation of selected works.
- **PHL 467 - 19th Century Continental Phil**
Credits: 3. (R-6) Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 262Y, or consent of instr. Intensive study of the work of one or more 19th century continental philosophers (such as Hegel, Schopenhauer, Kierkegaard, Marx, Nietzsche).
- **PHL 468 - 20th Century Continental Phil**
Credits: 3. (R-9) Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 262Y, or consent of instr. Intensive study of the work of one or more 20th century continental philosophers (such as Heidegger, Husserl, Sartre, Merleau-Ponty, Ricoeur, Derrida) or several texts representing a major movement in 20th century continental thought (such as Phenomenology, Existentialism, Hermeneutics, Post-structuralism).
- **PHL 490 - Research**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student. **Course Attributes:**
Research & Creative Schlrshp
- **PHL 491 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHL 492 - Independent Study**
 Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **PHL 494 - Seminar**
 Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.
- **PHL 498 - Internship**
 Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of faculty supervisor and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
 Internship graduation limit 6
- **PHL 499 - Senior Seminar**
 Credits: 3. (R-9) Offered spring. Prereq., senior standing and philosophy major or philosophy minor, or consent of instr. Research in problems in philosophy. **Course Attributes:**
 Writing Course-Upper-Division Writing Course-Advanced
- **PHL 501 - Episto/Technol/Science**
 Credits: 3. (R-6) Offered yearly. Reading and interpretation of selected writings that address one of three topics: epistemology (theory of knowledge), philosophy of technology, or philosophy of science (focus will be foundations of ecology). Level: Graduate
- **PHL 502 - Topics in Value Theory**
 Credits: 3. (R-6) Offered yearly. Reading and interpretation of selected writings in value theory. Level: Graduate
- **PHL 504 - Topics in Environ Philosophy**
 Credits: 3. (R-9) Offered yearly. Same as ENST 504. Critical study/discussion of current (as well as benchmark) texts and issues in environmental ethics, environmental politics, and the philosophy of ecology. Interdisciplinary; open to interested students from all disciplines. Level: Graduate
- **PHL 505 - Topics in Contemp Phil**
 Credits: 3. (R-6) Offered intermittently. Reading and interpretation of selected writings in contemporary philosophy. Level: Graduate
- **PHL 510 - Phil Forum Colloquium**
 Credits: 1. (R-3) Offered autumn and spring. Prereq., graduate standing. Discussion and further exploration of issues presented at the weekly Philosophy Forum. Level: Graduate
- **PHL 521 - Theory & Skills for Ethics**
 Credits: 3. Offered intermittently. Exploration and critical reflection of concepts and significant issues in the teaching of practical ethics in classroom and corporate settings. Level: Graduate
- **PHL 581 - Thesis Proposal Prep**
 Credits: 1 TO 2. (R-2) Offered every semester. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate
- **PHL 590 - Research**
 Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate **Course Attributes:** Research & Creative Schlrshp
- **PHL 591 - Special Topics**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors,

experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **PHL 592 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

- **PHL 593 - Professional Paper**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:**
Faculty-Led Study Abroad

- **PHL 594 - Seminar**

Credits: 1 TO 9. (R-9) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

- **PHL 598 - Internship**

Credits: 1 TO 12. (R-12) Offered intermittently. Prereq., consent of faculty supervisor and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate **Course Attributes:**
Internships/Practicums

- **PHL 599 - Thesis**

Credits: 1 TO 6. (R-9) Offered every semester. Prereq., approval of a thesis proposal by the student's thesis committee. Level: Graduate

Philosophy B.A.

Bachelor of Arts - Philosophy

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 33

Required Cumulative GPA: 1.7

Philosophy Lower-Division Core

Rule: All courses are required.

Note: General Education fulfillment through the lower-division core: PHL 210E fulfills the "approved writing course" and "Ethical & Human Values".

Both PHL 261Y and PHL 262Y fulfill the "American & European Perspectives".

—	Course	Credits
	PHL 210E - Moral Philosophy	3 Credits

	PHL 233 - Intro to Logic: Deduction	3 Credits
	PHL 261Y - History of Ancient Philosophy	3 Credits
	PHL 262Y - History of Modern Philosophy	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Philosophy Upper-Division Core

Rule: Complete four courses (12 credits) with one course (3 credits) in each of the following four core areas.

Minimum Required Grade: C-

12 Total Credits Required

I. History

Rule: Complete one course (3 credits).

Note: Special Topics courses taught at the 400-level (PHL 491 [PHIL 495]) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

	Course	Credits
	PHL 462 - Early Modern Philosophy	3 Credits
	PHL 464 - Kant	3 Credits
	PHL 465 - Plato	3 Credits
	PHL 466 - Aristotle	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

II. Value Theory

Rule: Complete one course (3 credits).

Note: Special Topics courses taught at the 400-level (PHL 491 [PHIL 495]) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

	Course	Credits
	PHL 412 - Ethics and Public Affairs	3 Credits
	PHL 422 - Environmental Philosophy	3 Credits
	PHL 427 - Topics in Philosophy of Art	1 To 4 Credits
	PHL 429 - Philosophy in Literature	3 Credits

	PHL 449 - Hist Moral and Political Phil	3 Credits
	PHL 450 - Contemp Moral/Political Theory	3 Credits
	PHL 455 - Phil of Society and Culture	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

III. Continental Philosophy

Rule: Complete one course (3 credits).

Note: Special Topics courses taught at the 400-level (PHL 491 [PHIL 495]) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

—	Course	Credits
	PHL 467 - 19th Century Continental Phil	3 Credits
	PHL 468 - 20th Century Continental Phil	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

IV. Analytic Philosophy

Rule: Complete one course (3 credits).

Note: Special Topics courses taught at the 400-level (PHL 491 [PHIL 495]) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

—	Course	Credits
	PHL 405 - 20th Century Analytic Phil	3 Credits
	PHL 406 - Contemp Issues Analytic Phil	3 Credits
	PHL 445 - Central Issues Phil of Science	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Required Upper-Division Electives in Philosophy

Rule: Students must complete two courses (6 credits).

Note: Any course taken for an Upper-Division Core area would not also apply to the Upper-Division Elective requirement.

—	Course	Credits
	PHL 301 - Knowledge and Reality	3 Credits

PHL 311 - The Good, Right, Beautiful	3 Credits
PHL 316 - Historical Figures in Phil	3 Credits
PHL 321E - Philosophy & Biomedical Ethics	3 Credits
PHL 323 - Ethics of Climate Change	3 Credits
PHL 351 - Philosophy and Feminism	3 Credits
PHL 363 - Ancient Greek and Roman Phil	3 Credits
PHL 370 - Philosophy of Religion	3 Credits
PHL 390 - Research	1 To 9 Credits
PHL 391 - Special Topics	1 To 9 Credits
PHL 392 - Independent Study	1 To 9 Credits
PHL 394 - Seminar	1 To 9 Credits
PHL 398 - Internship	1 To 6 Credits
PHL 405 - 20th Century Analytic Phil	3 Credits
PHL 406 - Contemp Issues Analytic Phil	3 Credits
PHL 412 - Ethics and Public Affairs	3 Credits
PHL 422 - Environmental Philosophy	3 Credits
PHL 427 - Topics in Philosophy of Art	1 To 4 Credits
PHL 429 - Philosophy in Literature	3 Credits
PHL 445 - Central Issues Phil of Science	3 Credits
PHL 449 - Hist Moral and Political Phil	3 Credits
PHL 450 - Contemp Moral/Political Theory	3 Credits
PHL 455 - Phil of Society and Culture	3 Credits
PHL 462 - Early Modern Philosophy	3 Credits
PHL 464 - Kant	3 Credits
PHL 465 - Plato	3 Credits

	PHL 466 - Aristotle	3 Credits
	PHL 467 - 19th Century Continental Phil	3 Credits
	PHL 468 - 20th Century Continental Phil	3 Credits
	PHL 490 - Research	1 To 9 Credits
	PHL 491 - Special Topics	1 To 9 Credits
	PHL 492 - Independent Study	1 To 9 Credits
	PHL 494 - Seminar	1 To 9 Credits
	PHL 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-		6 Total Credits Required

Senior Seminar

Rule: Students must complete PHL 499 (PHIL 480). 3 credits.

Note: This capstone course is normally taken during the spring semester of senior year.

General Education fulfillment: PHL 499 fulfills the "Upper Division Writing Expectation for the major"

Course	Credits
PHL 499 - Senior Seminar	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Modern and Classical Language Requirement

Note: Students who major in philosophy must demonstrate third semester proficiency in a foreign language either by completing three semesters of one foreign language, with grades of C- (1.67) or better, or by receiving an equivalent score on a competence exam. Recommended languages for philosophy are Ancient Greek, Latin, French, and German.

Philosophy Minor

Minor - Philosophy (Minor)

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Note: Students must complete a minimum of 18 credits in philosophy; at least 6 credits must be in courses numbered 300 and higher.

Lower Division Core

Rule: Must complete all of the following courses:

Note: General Education fulfillment through the lower-division core: PHL 210E fulfills the "approved writing course" and "Ethical & Human Values". Both PHL 261Y and PHL 262Y fulfill the "American & European Perspectives".

Course	Credits
PHL 210E - Moral Philosophy	3 Credits
PHL 233 - Intro to Logic: Deduction	3 Credits
PHL 261Y - History of Ancient Philosophy	3 Credits
PHL 262Y - History of Modern Philosophy	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Core Area Requirement

Rule: Students must complete at least one course in two of the four core areas. Both must be upper division.

Note: Special Topics courses taught at the 400-level (PHL 491 [PHIL 495]) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

Minimum Required Grade: C-

6 Total Credits Required

History

Course	Credits
PHL 462 - Early Modern Philosophy	3 Credits
PHL 464 - Kant	3 Credits
PHL 465 - Plato	3 Credits
PHL 466 - Aristotle	3 Credits

Minimum Required Grade: C-

Value Theory

—	Course	Credits
	PHL 412 - Ethics and Public Affairs	3 Credits
	PHL 422 - Environmental Philosophy	3 Credits
	PHL 427 - Topics in Philosophy of Art	1 To 4 Credits
	PHL 429 - Philosophy in Literature	3 Credits
	PHL 449 - Hist Moral and Political Phil	3 Credits
	PHL 450 - Contemp Moral/Political Theory	3 Credits
	PHL 455 - Phil of Society and Culture	3 Credits
Minimum Required Grade: C-		

Continental Philosophy

—	Course	Credits
	PHL 467 - 19th Century Continental Phil	3 Credits
	PHL 468 - 20th Century Continental Phil	3 Credits
Minimum Required Grade: C-		

Analytic Philosophy

—	Course	Credits
	PHL 405 - 20th Century Analytic Phil	3 Credits
	PHL 406 - Contemp Issues Analytic Phil	3 Credits
	PHL 445 - Central Issues Phil of Science	3 Credits

Physics and Astronomy Department

Daniel B. Reisenfeld, Chair

Physics is considered to be the most fundamental of all disciplines in the natural sciences. In physics we try to describe and understand a myriad of physical phenomena ranging from subatomic to cosmological scales by quantifying the relationships among different physical quantities. Not only does physics have its own merit as a challenging but exciting scientific endeavor, it provides the basis for understanding underlying processes in astronomy, biology, chemistry, geology, computer science, engineering, and even in behavioral sciences. Applications of physics are virtually unlimited: computers, communications, energy production, medical technology, and space flight, to name just a few. The Department of Physics and Astronomy offers a range of physics courses from introductory to advanced undergraduate level in both experimental and theoretical physics with computational methods in mind. In addition, we offer introductory to advanced astronomy and astrophysics courses in which astronomical applications of physics are emphasized. These courses deal with the Universe, from the solar system to clusters of galaxies, both theoretically and observationally. The Department of Physics and Astronomy offers the Bachelor of Arts degree with a major in physics. Graduates with this degree are prepared for further study in physics or related fields at the masters or Ph.D. level, as well as a wide variety of technical positions in industry.

In addition, the department offers three options that combine a solid background in the study of physics with in-depth study in other fields. These options allow for specialization in related fields and provide appropriate background for certain employment opportunities and for continued graduate or professional study. For more details, see the related sections of this catalog.

- Astronomy
- Computational Physics
- Teaching Broadfield Science

Department Faculty

Professors

Daniel Reisenfeld, Chair, Professor of Physics & Astronomy
Eijiro Uchimoto, Professor
Andrew Ware, Professor

Associate Professors

Nate McCrady, Associate Professor

Assistant Professors

Paul Janzen, Assistant Professor
David Macaluso, Assistant Professor

Adjunct Faculty

Benjamin Grossmann, Adjunct Assistant Professor
Brad Halfpap, Adjunct Associate Professor

Lecturers

Alex Bulmahn, Lecturer
Diane Friend, Lecturer

Research Faculty

Vladimir Kovalev, Assistant Research Professor
Phong Tran, Assistant Research Professor

Course Descriptions

Astronomy

- **ASTR 131N - Planetary Astronomy**

Credits: 3. Offered autumn. Prereq., high school algebra and geometry. An introduction to observational, historical, and planetary astronomy. Students will have a chance to visit UM's state-of-the-art planetarium and observe with our 0.4 meter telescope. **Course Attributes:**
Natural Science Course

- **ASTR 132N - Stars, Galaxies, and the Universe**

Credits: 3. Offered spring. Prereq., high school algebra and geometry. An introduction to stars, stellar evolution, galaxies, and cosmology. Students will have a chance to visit UM's state-of-the-art planetarium and observe with our 0.4 meter telescope. **Course Attributes:**
Natural Science Course

- **ASTR 134N - Planetary Astronomy Lab**

Credits: 1. Offered autumn. Prereq. or coreq., ASTR 131N Laboratory exercises in observational and planetary astronomy. Students will have a chance to visit UM's state-of-the-art planetarium and observe with our 0.4 meter telescope. **Course Attributes:** Natural Science Lab Course
Natural Science Course

- **ASTR 135N - Stars, Galaxies, and the Universe Lab**

Credits: 1. Offered spring. Prereq. or coreq., ASTR 132N. Laboratory exercises in observational, stellar, and galactic astronomy. Students will have a chance to visit UM's state-of-the-art planetarium and observe with our 0.4 meter telescope. **Course Attributes:**
Natural Science Lab Course Natural Science Course

- **ASTR 142N - The Evolving Universe**

Credits: 4. Offered spring. Prereq., M 151 or equiv. Overview of recent developments in planetary system formation, stars, galaxies, and cosmology. Some astronomical observing required outside of normal class hours. **Course Attributes:** Natural Science Lab Course
Natural Science Course

- **ASTR 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics.

- **ASTR 198 - Internship**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internship graduation limit 6

- **ASTR 292 - Independent Study**
Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.
- **ASTR 351 - Planetary Science**
Credits: 3. Offered autumn even-numbered years. Prereq., PHSX 215N-216N or 205N-206N and M 162 or 171. Same as GEO 317. Physical and geological characteristics of planets, satellites, asteroids, comets, and meteoroids, with an emphasis on comparative planetology.
- **ASTR 353 - Galactic Astrophysics**
Credits: 3. Offered spring odd-numbered years. Prereq., ASTR 132N, PHSX 217N-218N, M 273. The nature of the Milky Way galaxy and other galaxies, galactic evolution, the large scale structure of the universe, active galaxies and quasars, and cosmology, including the early universe.
- **ASTR 362 - Observational Astronomy**
Credits: 3. Offered autumn even-numbered years. Prereq., ASTR 132N or 142N, PHXS 217N-218N. Laboratory study of the probabilistic behavior of light, data acquisition with telescopes, digital imaging and spectroscopy. Emphasis on fundamental statistical tools, scientific computer programming, and written and oral presentation of scientific results.
- **ASTR 363 - Stellar Astr & Astrophys I**
Credits: 3. Offered autumn odd-numbered years. Prereq., ASTR 132N, M 273, and PHSX 217N-218N; PHSX 343 recommended. Detailed application of physical laws to determine the nature of the stars; analysis of stellar spectra and atmospheres; solar astrophysics; structure of stars and their evolution.
- **ASTR 365 - Stellar Ast & Astrophys II**
Credits: 3. Offered spring even-numbered years. Prereq., ASTR 363. Continuation of ASTR 363.
- **ASTR 391 - Special Topics**
Credits: 1 TO 9. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ASTR 392 - Independent Study**
Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.
- **ASTR 398 - Internship**
Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.
Course Attributes: Internships/Practicums Internship graduation limit 6
- **ASTR 494 - Senior Capstone Seminar**
Credits: 1. Offered autumn. Prereq., junior or senior standing in physics. Each student will present a seminar on research performed prior to or during their senior year.
- **ASTR 499 - Seminar/Workshop**
Credits: 1. Offered autumn. Prereq., junior or senior standing in physics. Each student will present a seminar on research performed prior to or during their senior year.

General engineering Core

- **EGEN 101 - Intro to Eng Cal & Prob Solv**
Credits: 3. Offered autumn. Prereq. or coreq., M 151 or equivalent. An introduction to engineering calculations, problem solving, and design. Students are taught to solve and present engineering problems on computers using spreadsheet and graphic software (AutoCAD). In addition, there will be discussions on engineering failures and engineering ethics.

Physics

- **PHSX 101 - Freshman Physics Experience**

Credits: 1. Offered autumn. Prereq., freshman standing (fewer than 30-credits towards degree) or consent of instructor. This course is intended for all incoming students either majoring in physics or considering majoring in physics. This seminar course presents an overview of the undergraduate experience as a physics major. Seminars on recent developments in physics and astronomy and opportunities for undergraduate involvement in research and instruction are included.

- **PHSX 141N - Einstein's Relativity**

Credits: 3. Offered spring. Prereq., working knowledge of high school physics and high school calculus, or consent of instr. Modern theoretical study of space, time, the principle of relativity, and its implications. Analysis of apparent paradoxes, and applications to particle physics. **Course Attributes:** Natural Science Course

- **PHSX 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHSX 198 - Internship**

Credits: 1 TO 9. (R-6) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums

- **PHSX 205N - College Physics I**

Credits: 4. Offered autumn and spring. Prereq., M 122 or 151 or equivalent, and prereq. or coreq. PHSX 206N. Mechanics, sound, and heat. For non-physical science majors. This course satisfies the lecture portion of medical school requirements in general physics. Credit not allowed for both PHSX 205N-207N and 215N-217N. **Course Attributes:** Natural Science Lab Course
Natural Science Course

- **PHSX 206N - College Physics I Laboratory**

Credits: 1. Offered autumn and spring. Prereq. or coreq., PHSX 205N. Mechanics, sound, and heat. For non-physical science majors. This course satisfies the laboratory portion of medical school requirements in general physics. Credit not allowed for both PHSX 206N-208N and 216N-218N. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **PHSX 207N - College Physics II**

Credits: 4. Offered autumn and spring. Prereq. PHSX 205N and prereq. or coreq., PHSX 208N. Electricity, magnetism, light, and modern physics. For non-physical science majors. This course satisfies the lecture portion of medical school requirements in general physics. Credit not allowed for both PHSX 205N-207N and 215N-217N. **Course Attributes:** Natural Science Lab Course
Natural Science Course

- **PHSX 208N - College Physics II Laboratory**

Credits: 1. Offered autumn and spring. Prereq., PHSX 206N, prereq. or coreq., PHSX 207N. Electricity, magnetism, light and modern physics. For non-physical science majors. This course satisfies the laboratory portion of medical school requirements in general physics. Credit not allowed for both PHSX 206N-208N and 216N-218N. **Course Attributes:**
Natural Science Lab Course Natural Science Course

- **PHSX 215N - Fund of Physics w/Calc I**

Credits: 4. Offered autumn. Prereq. or coreq., PHSX 216N and M 171 or equiv. This course satisfies the lecture portion of medical and technical school requirements in general physics. Mechanics, fluids, waves and sound. Credit not allowed for both PHSX 215N-216N-217N-218N and 205N-206N-

207N-208N. **Course Attributes:** Natural Science Course

- **PHSX 216N - Physics Laboratory I w/Calc**

Credits: 1. Offered autumn. Coreq., PHSX 215N. This course satisfies the laboratory portion of medical and technical school requirements in general physics. Mechanics, fluids, waves, and sound. Credit not allowed for both PHSX 215N-216N-217N-218N and 205N-206N-207N-208N. **Course Attributes:** Natural Science Course Natural Science Lab Course

- **PHSX 217N - Fund of Physics w/Calc II**

Credits: 4. Offered spring. Prereq., PHSX 215N, and prereq. or coreq. PHSX 218, and prereq. or coreq., M 172 or equivalent. This course satisfies the lecture portion of medical and technical school requirements in general physics. Heat, electricity, magnetism, and light. Credit not allowed for both PHSX 215N-216N-217N-218N and 205N-206N-207N-208N. **Course Attributes:** Natural Science Course

- **PHSX 218N - Physics Laboratory II w/Calc**

Credits: 1. Offered spring. Prereq., PHSX 215N, coreq., PHSX 217N. This course satisfies the laboratory portion of medical and technical school requirements in general physics. Heat, electricity, magnetism, and light. Credit not allowed for both PHSX 215N-216N-217N-218N and 205N-206N-207N-208N. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **PHSX 225N - Gen Science: Phys & Chem Sci**

Credits: 5. Offered autumn. Prereq., M 095 or equiv. Integrated lectures, discussions, laboratory exercises, and demonstrations on topics in chemical and physical science for prospective elementary school teachers and the non-scientist. A two-hour laboratory session is required each week. **Course Attributes:** Natural Science Lab Course

- **PHSX 291 - Special Topics**

Credits: 1 TO 9. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHSX 292 - Independent Study**

Credits: 1 TO 9. (R-9) Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Omnibus Course

- **PHSX 301 - Intro Theoretical Physics**

Credits: 3. Offered spring. Prereq., M 273; coreq., PHSX 217N-218N. Selected topics from applied linear algebra, ordinary and partial differential equations, vector analysis, complex variables, and Fourier series. Applications to classical mechanics, electromagnetism, and quantum mechanics.

- **PHSX 311 - Oscillations and Waves**

Credits: 2. Offered autumn. Prereq., PHSX 217N-218N or 207N-208N; Prereq. or coreq. M 273. Detailed study of oscillations and waves at the intermediate level, to develop physical intuition and mathematical skills needed for analyzing a wide range of periodic phenomena encountered in physics.

- **PHSX 320 - Classical Mechanics**

Credits: 3. Offered autumn. Prereq., PHSX 301, M 311. Topics in classical mechanics at the intermediate level, emphasizing Lagrangian and Hamiltonian dynamics.

- **PHSX 323 - Intermediate Physics Lab**

Credits: 3. Offered spring. Prereq., PHSX 217N-218N or PHSX 207N-208N and PHSX 311. Laboratory course in the application of analog and digital electronics to experimental physics, with additional emphasis on data analysis techniques.

- **PHSX 327 - Optics**

Credits: 3. Offered spring. Prereq., PHSX 311. Intermediate level study of light and optics, including

geometrical optics, wave optics, optical instruments, coherence, polarization, and special topics.

- **PHSX 330 - Communicating Physics**

Credits: 3. Offered spring even-numbered years. Prereq., PHSX 217N-218N or PHSX 207N-208N. Oral and written communication skills in physics, to include teaching high school and college physics, presenting seminars, and writing technical and non-technical physics articles. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **PHSX 333 - Computational Physics**

Credits: 3. Offered spring odd-numbered years. Prereq., PHSX 217N-218N; coreq., any upper-division PHSX course. Solution of advanced problems in physics using computational methods. Students will learn a variety of numerical methods, including FORTRAN programming techniques.

- **PHSX 343 - Modern Physics**

Credits: 3. Offered autumn. Prereq., one year of college physics; coreq., M 273. Includes historical background for development of modern physics and an introduction to quantum mechanics, atomic and nuclear physics. Credit not allowed for graduate degree in physics.

- **PHSX 391 - Special Topics**

Credits: 1 TO 12. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PHSX 392 - Honors Physics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Independent research in topics of current interest in physics.

- **PHSX 423 - Electricity & Magnetism I**

Credits: 3. Offered autumn. Prereq, PHSx 301. Electricity and magnetism at the intermediate level.

- **PHSX 425 - Electricity & Magnetism II**

Credits: 3. Offered spring. Prereq., PHSX 423. Continuation of PHSX 423. Electricity and magnetism at the intermediate level.

- **PHSX 444 - Advanced Physics Lab**

Credits: 3. Offered autumn. Prereq., PHSX 343 or equiv., PHSX 327 or equiv.; PHSX 322 suggested but not required. Advanced experiments in classical and modern physics, including optics, spectroscopy, laser science, atomic, nuclear, and particle physics, Data analysis techniques for experimental scientists. Recommended for students entering graduate school in any experimental science.

- **PHSX 446 - Thermodyn & Stat Mech**

Credits: 3. Offered spring even-numbered years. Prereq., PHSX 343; coreq., M 311. Topics in thermodynamics and statistical mechanics.

- **PHSX 461 - Quantum Mechanics I**

Credits: 3. Offered autumn. Prereq., PHSX 311, PHSX 343; prereq. or coreq., M 311. Introduction to quantum mechanics. Topics include Schroedinger equation, piecewise constant potential, harmonic oscillator, hydrogen atom, angular momentum theory, electron spin.

- **PHSX 462 - Quantum Mechanics II**

Credits: 3. Offered spring. Prereq., PHSX 461 or consent of instr. Advanced topics in quantum mechanics including linear vector spaces and Dirac notation, quantum dynamics, time-dependent perturbation theory, and scattering theory.

- **PHSX 491 - Special Topics**

Credits: 3. (R-6) Offered intermittently. Prereq., PHSX 461 or consent of instr. Studies of a topic in advanced modern physics including nuclear physics, solid state physics, and quantum optics. The topic chosen will vary according to instructor.

- **PHSX 492 - Independent Study**
Credits: 1 TO 9. (R-9) Offered intermittently. University omnibus option for independent work.
Course Attributes: Omnibus Course
- **PHSX 499 - Senior Capstone Seminar**
Credits: 1. Offered autumn. Prereq., junior or senior standing in physics. Each student will present a seminar on research performed prior to or during their senior year.
- **PHSX 595 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums
- **PHSX 597 - Research**
Credits: 1 TO 6. (R-9) Offered intermittently. Prereq., consent of instr. Research in selected physics topics. Level: Graduate
- **PHSX 598 - Internship**
Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate
Course Attributes: Internships/Practicums
- **PHSX 599 - Thesis**
Credits: 1 TO 9. (R-9) Offered intermittently. Thesis preparation and execution. Level: Graduate

Physics B.A.

Bachelor of Arts - Physics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 61

Required Cumulative GPA: 2.0

Lower Division Physics

Rule: Must complete all of the courses in one of the two options:

Note: Calculus-based Physics sequence is strongly recommended.

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

Minimum Required Grade: C-

10 Total Credits Required

College Physics

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Physics

Rule: Complete the following courses

—	Course	Credits
	PHSX 301 - Intro Theoretical Physics	3 Credits
	PHSX 311 - Oscillations and Waves	2 Credits
	PHSX 320 - Classical Mechanics	3 Credits
	PHSX 323 - Intermediate Physics Lab	3 Credits
	PHSX 327 - Optics	3 Credits

	PHSX 343 - Modern Physics	3 Credits
	PHSX 423 - Electricity & Magnetism I	3 Credits
	PHSX 444 - Advanced Physics Lab	3 Credits
	PHSX 461 - Quantum Mechanics I	3 Credits
	PHSX 499 - Senior Capstone Seminar	1 Credits
Minimum Required Grade: C-		27 Total Credits Required

Physics Electives

Rule: Choose any 2 courses designated with PHSX prefix, for 6 total credits

Note: PHSX 425 and PHSX 462 are strongly recommended

—	Course	Credits
	PHSX 141N - Einstein's Relativity	3 Credits
	PHSX 330 - Communicating Physics	3 Credits
	PHSX 333 - Computational Physics	3 Credits
	PHSX 425 - Electricity & Magnetism II	3 Credits
	PHSX 446 - Thermodyn & Stat Mech	3 Credits
	PHSX 462 - Quantum Mechanics II	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Math Requirements

Rule: Complete all of the following courses

Note: M 317, M 412, and M 418 are recommended as well

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Computer Science Requirements

Rule: Choose 1 of the following

Note: PHSX 333 or CSCI 250 is strongly recommended

Course	Credits
CSCI 100 - Intro to Programming	3 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 250 - Computer Mdlng/Science Majors	3 Credits
PHSX 333 - Computational Physics	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Foreign Language

Note: Students must also complete a 2 semester language sequence or have equivalent placement.

Astronomy B.A.

The astronomy option provides a thorough study of astronomy and astrophysics as well as a solid background in physics and mathematics. Graduates from this program have gone on to graduate programs in astronomy and astrophysics while others have found career opportunities at national astronomical observatories.

Bachelor of Arts - Physics; Astronomy Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 65

Required Cumulative GPA: 2.0

Lower Division Physics Core

Rule: Must complete all of the courses in one of the two options:

Note: Calculus-based physics sequence is strongly recommended.

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

10 Total Credits Required

College Physics

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses:

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Lower Division Astronomy Core

Rule: Must complete all of the courses in one of the two options:

4 Total Credits Required

Astronomy Core: Option 1

Rule: May complete all of the following courses

—	Course	Credits

	ASTR 132N - Elementary Astronomy II	3 Credits
	ASTR 135N - Elementary Astronomy Lab II	1 Credits
Minimum Required Grade: C-		4 Total Credits Required

Astronomy Core: Option 2

Rule: May complete the following course

—	Course	Credits
	ASTR 142N - The Evolving Universe	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Upper Division Physics Core

Rule: Must complete the following courses

—	Course	Credits
	PHSX 301 - Intro Theoretical Physics	3 Credits
	PHSX 311 - Oscillations and Waves	2 Credits
	PHSX 343 - Modern Physics	3 Credits
	PHSX 461 - Quantum Mechanics I	3 Credits
	PHSX 499 - Senior Capstone Seminar	1 Credits
Minimum Required Grade: C-		12 Total Credits Required

Upper Division Astronomy Core

Rule: Must complete the following courses

Note: ASTR 351 and ASTR 362 are recommended as well

—	Course	Credits
	ASTR 353 - Galactic Astrophysics	3 Credits
	ASTR 363 - Stellar Astr & Astrophys I	3 Credits
	ASTR 365 - Stellar Ast & Astrophys II	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Major Electives

Rule: Complete the following subcategories of courses

12 Total Credits Required

Physics Electives

Rule: Choose 3 of the following courses

—	Course	Credits
	PHSX 320 - Classical Mechanics	3 Credits
	PHSX 327 - Optics	3 Credits
	PHSX 423 - Electricity & Magnetism I	3 Credits
	PHSX 425 - Electricity & Magnetism II	3 Credits
	PHSX 446 - Thermodyn & Stat Mech	3 Credits
	PHSX 462 - Quantum Mechanics II	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Physics Laboratory Electives

Rule: Choose 1 of the following laboratory courses

—	Course	Credits
	ASTR 362 - Observational Astronomy	3 Credits
	PHSX 323 - Intermediate Physics Lab	3 Credits
	PHSX 444 - Advanced Physics Lab	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Math Requirements

Rule: Complete the following courses

Note: M 317, M 412, and M 418 are recommended as well

—	Course	Credits
	M 171 - Calculus I	4 Credits

	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Computer Science Electives

Rule: Choose 1 of the following courses

Note: PHSX 333 or CSCI 250 is strongly recommended.

Course	Credits
CSCI 100 - Intro to Programming	3 Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 250 - Computer Mdlng/Science Majors	3 Credits
PHSX 333 - Computational Physics	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Foreign Language

Note: Students must also complete a 2 semester language sequence or have equivalent placement

Computational Physics

The computational physics option provides a thorough study of computer science and computational physics as well as a solid background in physics and mathematics. Graduates from this program have gone on to graduate programs in physics and computer science while others have found career opportunities in technical fields.

Bachelor of Arts - Physics; Computational Physics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.0

Lower Division Physics Core

Rule: Must complete all of the courses in one of the two options:

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

10 Total Credits Required

College Physics

Rule: may complete all of the following courses

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Physics

Rule: Complete the following courses

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Course	Credits
PHSX 301 - Intro Theoretical Physics	3 Credits
PHSX 311 - Oscillations and Waves	2 Credits
PHSX 320 - Classical Mechanics	3 Credits
PHSX 333 - Computational Physics	3 Credits
PHSX 343 - Modern Physics	3 Credits
PHSX 423 - Electricity & Magnetism I	3 Credits
PHSX 499 - Senior Capstone Seminar	1 Credits
Minimum Required Grade: C-	18 Total Credits Required

Physics Elective

Rule: Choose 1 of the following courses

Note: PHSX 322, 425, and 461 are strongly recommended

Course	Credits
PHSX 141N - Einstein's Relativity	3 Credits
PHSX 323 - Intermediate Physics Lab	3 Credits
PHSX 327 - Optics	3 Credits
PHSX 330 - Communicating Physics	3 Credits
PHSX 425 - Electricity & Magnetism II	3 Credits
PHSX 444 - Advanced Physics Lab	3 Credits
PHSX 446 - Thermodyn & Stat Mech	3 Credits
PHSX 461 - Quantum Mechanics I	3 Credits
PHSX 462 - Quantum Mechanics II	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Math Requirements

Rule: Complete the following courses

Note: M 307, STAT 341, and STAT 458 are recommended as well

Course	Credits
M 171 - Calculus I	4 Credits
M 172 - Calculus II	4 Credits
M 225 - Intro to Discrete Mathematics	3 Credits
M 273 - Multivariable Calculus	4 Credits
M 311 - Ordinary Diff Equations/System	3 Credits
M 325 - Discrete Mathematics	3 Credits
	21 Total Credits Required

Computer Science Requirements

Rule: Complete the following subcategories of courses

20 Total Credits Required

Computer Science Core Courses

Rule: Must complete all of the following courses

Course	Credits
CSCI 135 - Fund of Computer Science I	3 Credits
CSCI 136 - Fund of Computer Science II	3 Credits
CSCI 232 - Data Structures and Algorithms	4 Credits
CSCI 332 - Design/Analysis of Algorithms	3 Credits
Minimum Required Grade: C-	13 Total Credits Required

Computer Science Electives

Rule: Choose an additional 7 credits from any CSCI courses number 200 and above

Note: CSCI 205, 250, 361, 415, and 477 are recommended

Foreign Language

Note: Students must also complete a 2 semester language sequence or have equivalent placement.

Teaching Physics

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Physics; Track: Teaching Physics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Lower Division Physics

Rule: Must complete all of the courses in one of the two options:

Note: Calculus-based Physics sequence is strongly recommended.

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

Minimum Required Grade: C-

10 Total Credits Required

College Physics

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits

	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Physics

Rule: Must complete the following subcategories

Minimum Required Grade: C-

22 Total Credits Required

Required Upper Division Courses

Rule: All courses are required

—	Course	Credits
	PHSX 301 - Intro Theoretical Physics	3 Credits
	PHSX 320 - Classical Mechanics	3 Credits
	PHSX 327 - Optics	3 Credits
	PHSX 330 - Communicating Physics	3 Credits
	PHSX 343 - Modern Physics	3 Credits
	PHSX 423 - Electricity & Magnetism I	3 Credits
	PHSX 461 - Quantum Mechanics I	3 Credits

	PHSX 499 - Senior Capstone Seminar	1 Credits
Minimum Required Grade: C-		22 Total Credits Required

Upper Division Elective Courses

Rule: Must take 3 additional upper division elective courses

Math Requirements

Rule: Complete all of the following courses

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Computer Science Requirements

Rule: Choose 1 of the following

Note: PHSX 333 is strongly recommended

—	Course	Credits
	CSCI 100 - Intro to Programming	3 Credits
	CSCI 135 - Fund of Computer Science I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Statistics

Rule: Must complete 1 of the following courses

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Allied Science

Rule: Must complete the following subcategories

20-21 Total Credits Required

Astronomy

Rule: Must complete the following courses

—	Course	Credits
	ASTR 131N - Elementary Astronomy I	3 Credits
	ASTR 132N - Elementary Astronomy II	3 Credits
	Minimum Required Grade: C-	6 Total Credits Required

Chemistry

Rule: Must complete the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 485 - Laboratory Safety	1 Credits
	Minimum Required Grade: C-	4 Total Credits Required

Biology

Rule: Must complete 1 of the following courses

—	Course	Credits

	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Geology

Rule: Must complete the following courses

—	Course	Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
Minimum Required Grade: C-		4 Total Credits Required

Environmental

Rule: Must complete 1 of the following courses

—	Course	Credits
	ENSC 105N - Environmental Science	3 Credits
	ENST 472 - Gen Sci: Conserv Ed	3 Credits
	GEO 105N - Oceanography	3 Credits
	GEO 108N - Climate Change	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Teaching Licensure Course

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits

Teaching Broadfield Science

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Bachelor of Arts - Physics; Teaching Broadfield Science Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 79

Required Cumulative GPA: 2.0

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Physics Requirements

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

24 Total Credits Required

Required Physics Courses

Rule: All courses are required

	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits

	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
	PHSX 301 - Intro Theoretical Physics	3 Credits
	PHSX 311 - Oscillations and Waves	2 Credits
	PHSX 330 - Communicating Physics	3 Credits
	PHSX 343 - Modern Physics	3 Credits
Minimum Required Grade: C-		21 Total Credits Required

Physics Elective

Rule: Must complete 1 additional upper division Physics course

Math Requirements

Rule: All courses are required

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Statistics Requirements

Rule: Must complete 1 of the following courses

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Astronomy Requirements

Rule: All courses are required

—	Course	Credits

	ASTR 131N - Elementary Astronomy I	3 Credits
	ASTR 134N - Elementary Astronomy Lab I	1 Credits
Minimum Required Grade: C-		4 Total Credits Required

Geology Requirements

Rule: Must complete the following subcategories

7 Total Credits Required

Required Geology Courses

Rule: All courses are required

—	Course	Credits
	GEO 101N - Intro to Physical Geology	3 Credits
	GEO 102N - Intro to Physical Geology Lab	1 Credits
Minimum Required Grade: C-		4 Total Credits Required

Geology Electives

Rule: Must complete 1 of the following courses

—	Course	Credits
	ASTR 351 - Planetary Science	3 Credits
	GEO 105N - Oceanography	3 Credits
	GEO 108N - Climate Change	3 Credits
	GEO 200 - Historical Geology	2 Credits
Minimum Required Grade: C-		3 Total Credits Required

Biology Requirements

Rule: Must complete all of the following courses

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits

	BIOB 260 - Cellular and Molecular Biology	4 Credits
	BIOB 272 - Genetics and Evolution	4 Credits
Minimum Required Grade: C-		12 Total Credits Required

Chemistry Requirements

Rule: Must complete all of the following courses

—	Course	Credits
	CHMY 141N - College Chemistry I	5 Credits
	CHMY 143N - College Chemistry II	5 Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		11 Total Credits Required

Teaching Methods Requirement

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Physics Minor

Minor - Physics (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Note: Mathematics prerequisites for the physics minor are M 171, 172, 273, and 311

Required Lower Division Courses

Rule: Must complete all of the following courses in one of the two options:

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

10 Total Credits Required

College Physics

Rule: May complete all of the following courses:

—	Course	Credits
	PHSX 205N - College Physics I	4 Credits
	PHSX 206N - College Physics I Laboratory	1 Credits
	PHSX 207N - College Physics II	4 Credits
	PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses:

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Core Course

Rule: Must complete the following course:

—	Course	Credits
	PHSX 301 - Intro Theoretical Physics	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Elective Courses

Rule: Must complete 11 credits from the following courses

Note: Eight of the eleven required credits must be upper division courses.

Course	Credits
PHSX 141N - Einstein's Relativity	3 Credits
PHSX 291 - Special Topics	1 To 9 Credits
PHSX 311 - Oscillations and Waves	2 Credits
PHSX 320 - Classical Mechanics	3 Credits
PHSX 323 - Intermediate Physics Lab	3 Credits
PHSX 327 - Optics	3 Credits
PHSX 330 - Communicating Physics	3 Credits
PHSX 333 - Computational Physics	3 Credits
PHSX 343 - Modern Physics	3 Credits
PHSX 423 - Electricity & Magnetism I	3 Credits
PHSX 444 - Advanced Physics Lab	3 Credits
PHSX 446 - Thermodyn & Stat Mech	3 Credits
PHSX 461 - Quantum Mechanics I	3 Credits
PHSX 462 - Quantum Mechanics II	3 Credits
Minimum Required Grade: C-	11 Total Credits Required

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Astronomy Minor

Minor - Astronomy (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Note: Mathematics prerequisites for the Astronomy minor are M 171, M 172, and M 273

Lower Division Physics Courses

Rule: Must complete all of the courses in one of the two options:

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

10 Total Credits Required

College Physics

Rule: May complete all of the following courses:

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses:

Course	Credits
PHSX 215N - Fund of Physics w/Calc I	4 Credits
PHSX 216N - Physics Laboratory I w/Calc	1 Credits
PHSX 217N - Fund of Physics w/Calc II	4 Credits
PHSX 218N - Physics Laboratory II w/Calc	1 Credits

Lower Division Astronomy Courses

Rule: Complete the following subcategories of courses

6-7 Total Credits Required

Core Course

Rule: Complete all of the following courses

—	Course	Credits
	ASTR 131N - Elementary Astronomy I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Core Elective

Rule: Choose 1 of the following courses

—	Course	Credits
	ASTR 132N - Elementary Astronomy II	3 Credits
	ASTR 142N - The Evolving Universe	4 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Electives

Rule: Must complete 3 of the following courses

—	Course	Credits
	ASTR 351 - Planetary Science	3 Credits
	ASTR 353 - Galactic Astrophysics	3 Credits
	ASTR 362 - Observational Astronomy	3 Credits
	ASTR 363 - Stellar Astr & Astrophys I	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Teaching Physics Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Minor - Physics (Minor); Track: Teaching Physics

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 56

Required Cumulative GPA: 2.0

Lower Division Physics

Rule: Must complete all of the courses in one of the two options:

Note: Calculus-based Physics sequence is strongly recommended.

Note: The Physics with Calculus series (PHSX 215N - 218N) is strongly recommended.

Minimum Required Grade: C-

10 Total Credits Required

College Physics

Rule: May complete all of the following courses

Course	Credits
PHSX 205N - College Physics I	4 Credits
PHSX 206N - College Physics I Laboratory	1 Credits
PHSX 207N - College Physics II	4 Credits
PHSX 208N - College Physics II Laboratory	1 Credits
Minimum Required Grade: C-	10 Total Credits Required

Physics with Calculus

Rule: May complete all of the following courses

—	Course	Credits
	PHSX 215N - Fund of Physics w/Calc I	4 Credits
	PHSX 216N - Physics Laboratory I w/Calc	1 Credits
	PHSX 217N - Fund of Physics w/Calc II	4 Credits
	PHSX 218N - Physics Laboratory II w/Calc	1 Credits
Minimum Required Grade: C-		10 Total Credits Required

Upper Division Physics

Rule: Complete the following courses

—	Course	Credits
	PHSX 320 - Classical Mechanics	3 Credits
	PHSX 327 - Optics	3 Credits
	PHSX 330 - Communicating Physics	3 Credits
	PHSX 343 - Modern Physics	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Math Requirements

Rule: Complete all of the following courses

—	Course	Credits
	M 171 - Calculus I	4 Credits
	M 172 - Calculus II	4 Credits
	M 273 - Multivariable Calculus	4 Credits
	M 311 - Ordinary Diff Equations/System	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Computer Science Requirements

Rule: Choose 1 of the following

Note: PHSX 333 is strongly recommended

—	Course	Credits
	CSCI 100 - Intro to Programming	3 Credits
	CSCI 135 - Fund of Computer Science I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Statistics

Rule: Must complete 1 of the following courses

—	Course	Credits
	STAT 216 - Introduction to Statistics	4 Credits
	STAT 341 - Intro to Probability and Stat	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching. Individuals completing a teaching minor must also complete a teaching major in another content area.

Allied Science

Rule: Must complete the following subcategories

10-11 Total Credits Required

Astronomy

Rule: Must complete 1 of the following courses

—	Course	Credits
	ASTR 131N - Elementary Astronomy I	3 Credits
	ASTR 132N - Elementary Astronomy II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Chemistry

Rule: Must complete the following courses

—	Course	Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 485 - Laboratory Safety	1 Credits
Minimum Required Grade: C-		4 Total Credits Required

Biology

Rule: Must complete 1 of the following courses

—	Course	Credits
	BIOB 160N - Principles of Living Systems	4 Credits
	BIOB 170N - Princpls Biological Diversity	3 Credits
	BIOE 172N - Introductory Ecology	3 Credits
	BIOO 105N - Introduction to Botany	3 Credits
Minimum Required Grade: C-		3-4 Total Credits Required

Teaching Licensure Course

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Political Science Department

Ramona Grey, Chair

Political Science is the systematic study of politics. Politics influence how people and institutions exercise and resist power. Political Science, therefore, is concerned with how nations and communities are governed and who governs them. The departmental faculty members have as their mission the engagement and enlightenment of their students, professional colleagues, and fellow citizens about the nature of politics.

The department offers a varied undergraduate curriculum covering domestic, foreign, and international politics. By meeting the requirements outlined below, a student may earn a bachelor's degree in political science or in political science-history; a minor in political science or global public health; or a bachelor's degree in political science with an option in one of the following: American politics, international relations and comparative politics, public administration, non-profit administration, international development studies, or public law. A Master of Arts degree in political science and a Master of Public Administration degree are also offered.

The scope of the faculty's interest and research is wide. They bring special insights gained through study and residence in Europe, Russia, Africa, Central Asia, India, the Far East and Latin America, as well as in Montana and Washington, D.C.

Courses offered in the department are designed to: (1) assist students to secure a broad liberal education and to equip them with the foundations for American citizenship; (2) provide undergraduate preparation for those students who propose to continue study at the graduate level with the ultimate goal of college teaching and research; (3) offer a broad program of training for those students who plan careers in government or politics; (4) assist in preparing students for careers in teaching at both the elementary and secondary levels; (5) provide a sound background for those students who intend to enroll in law and other professional schools.

The major fields of political science are (1) American government and politics with national, state and local government, and public law as sub-fields; (2) public administration; (3) political theory; (4) comparative government; (5) international relations, organization and law. Majors are eligible for membership in Pi Sigma Alpha, the national political science honorary and are active in student political activities. The Department of Political Science secures a number of legislative and administrative internships in state and local government each year. Internships and other learning opportunities in Washington, D.C., are also available.

Department Faculty

Professors

Jeffrey Greene, American Government & Public Administration
Ramona Grey, Chair & Co-coordinator of the Grad Program
Paul Haber, Globalization, Latin America, Environmental Politics, Social Movements
Peter Koehn, Comparative Government & Politics & Public Administration

Associate Professors

Karen Ruth Adams, Associate Professor, International Relations
Christopher Muste, American Politics, Public Opinion, Political Psychology, News Media & Co-coordinator of the M.A. Program
Robert Saldin, American Government & Politics

Assistant Professors

Abhishek Chatterjee, International & Comparative Politics, International Political Economy
Sara Rinfret, Political Science and Public Administration

Adjunct Faculty

Eric Hines, Adjunct Assistant Professor
Jesse Munro, Adjunct Instructor
Patrick Peel, Visiting Assistant Professor

Affiliates

Abraham Kim, Director
Brock Tessman, Dean, Davidson Honors College
Andrea Vernon, Director of Office of Civic Engagement

Emeritus Professors

Forest Grieves, Comparative Government & Politics & International Relations
Louis Hayes, Comparative Government & Politics & International Relations
James Lopach, American Government & Public Law
Jon Tompkins, American Government & Public Administration
Terry Weidner, International Relations & Comparative Politics

Political Sciences B.A.

Bachelor of Arts - Political Science

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 37

Required Cumulative GPA: 2.5

Note: Students pursuing a general political science degree must take a minimum of 37 credits of political science, including one 300-400 level course in four of the five major fields. 21 of the 37 credits must be in upper-division courses. No more than 7 credits of independent study (PSCI 492) and internship (PSCI 498) combined may count toward the 37 required credits. In addition, no more than 15 total credits in special topics courses (e.g., PSCI 320, 391) may count toward the 37 required credits. A maximum of 60 PSCI credits can count towards the Political Science Major.

Required Lower Division Courses

Rule: Must complete all of the following courses:

Course	Credits
PSCI 210S - Intro to American Government	3 Credits
PSCI 220S - Intro to Comparative Govt	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Upper Division Writing

Rule: Must complete the following course

—	Course	Credits
	PSCI 400 - Adv Writing in Pol Science	1 Credits
Minimum Required Grade: C		1 Total Credits Required

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political science option. Student must take an additional four courses from the following options.

Minimum Required Grade: C

12 Total Credits Required

Public Administration

Rule: May select one of the following courses:

—	Course	Credits
	PSCI 344 - State and Local Government	3 Credits
	PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
	PSCI 361 - Public Administration	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
	PSCI 391 - Special Topics	1 To 9 Credits
	PSCI 448 - Health Care Policy	3 Credits
	PSCI 449 - Environmental Health Policy	3 Credits
	PSCI 461 - Administrative Law	3 Credits
	PSCI 462 - Human Resource Management	3 Credits
	PSCI 463 - Development Administration	3 Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits

	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 326 - Politics of Africa	3 Credits
	PSCI 327 - Politics of Mexico	3 Credits

	PSCI 328 - Politics of China	3 Credits
	PSCI 329 - Politics of Japan	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

	Course	Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

	Course	Credits
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PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

Degree Electives

Rule: Must complete 12 additional elective credits from PSCI courses numbered 300 and above

Note: PSCI courses may only count toward one category of requirements.

Minimum Required Grade: C

12 Total Credits Required

Course Descriptions

Political Science

- **PSCI 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PSCI 191S - Special Topics**

Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors,

experimental offerings of new courses, or one time offerings of current topics. **Course Attributes:**
Internships/Practicums Social Sciences Course

- **PSCI 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **PSCI 210S - Intro to American Government**

Credits: 3. Offered every term. Not open to senior level political science majors except with consent of instructor. Constitutional principles, structures, and the political processes of the national government. **Course Attributes:** Social Sciences Course American and European

- **PSCI 220S - Intro to Comparative Govt**

Credits: 3. Offered every term. Not open to senior level political science majors except with consent of instr. Introduction to the basic political concepts, themes, values and dilemmas as they apply to the world's diverse societies and cultures. **Course Attributes:** Social Sciences Course

- **PSCI 227 - Global Health Issues**

Credits: 3. Offered spring. Treats current public-health challenges in industrialized and low-income countries, including chronic and infectious illnesses. In comparative perspective, the course explores the individual, environmental, resource, and governance context of public-health policy, interventions, and outcomes and address questions of human rights and ethics, health equity and justice, regional problems and contributors, and the concerns of vulnerable populations along with possibilities for health advocacy.

- **PSCI 230X - Intro to International Rel**

Credits: 3. Offered every term. Not open to senior level political science majors except with consent of instr. Review of the evolution of the nation-state system and survey of contemporary international actors, issues and forces for stability and change. **Course Attributes:**
Indigenous and Global

- **PSCI 250E - Intro to Political Theory**

Credits: 3. Offered spring. Analysis of the various attempts (from Plato to Marx) to explain, instruct, and justify the distribution of political power in society. Emphasis is placed upon those theories whose primary concern is to define the nature of the "good" society. **Course Attributes:**
Ethical & Human Values Course

- **PSCI 320 - Exp Offering: Comp Politics**

Credits: 1 TO 6. (R- 6) Offered intermittently. Experimental or one-time offerings in the subfield of comparative politics. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 321 - Post-Communist Politics**

Credits: 3. Offered spring. Prereq junior standing or consent of instructor. Historical and contemporary analysis of politics in post-communist states with an emphasis on Eastern Europe and Russia.

- **PSCI 322 - Politics of Europe**

Credits: 3. Offered autumn. Prereq., junior standing or consent of instr. Comparative analysis of parliamentary forms of government and politics with emphasis on Great Britain, France and Germany.

- **PSCI 324 - Climate Policies: China & U.S.**

Credits: 3. Offered every other year. Prereq., CCS 203 or consent of instructor. Explores historic, current, and future greenhouse-gas emissions of the United States and China, reasons why both are the two largest CO2 emitters, and prevailing national and subnational government policies and nongovernmental actions that affect emissions mitigation and adaptation.

- **PSCI 325 - Politics of Latin America**

Credits: 3. Offered autumn. Prereq., junior standing. Latin American politics from both historical and contemporary perspectives.

- **PSCI 326 - Politics of Africa**

Credits: 3. Offered autumn. Prereq., junior standing or consent of instr. Development of the political systems of sub-Saharan Africa. Analysis of the interaction between African and Western social, political, and economic forces. Consideration of African political thought.

- **PSCI 327 - Politics of Mexico**

Credits: 3. Offered spring. Prereq., junior standing or consent of instr. A review of contemporary politics of Mexico from the Revolution to the present.

- **PSCI 328 - Politics of China**

Credits: 3. Prereq., junior standing or consent of instr. Institutions and political development in China. **Course Attributes:** Historical & Cultural Course Non-Western Course

- **PSCI 330 - Exp Offering: Intrnt Relations**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., junior standing. Experimental or one-time offerings in the subfield of international relations. **Course Attributes:**
15 cr grad limit/Spec Topics

- **PSCI 332 - Global Environmental Pol.**

Credits: 3. Offered fall. Prereq. PSCI 230X and junior standing or consent of instructor. This course focuses on the unique set of collective action problems faced by global actors in the governance of the environment and the institutions they use to overcome those problems. Themes include the tragedy of the commons, climate change, and environmental security.

- **PSCI 334 - International Security**

Credits: 3. Offered Spring. Prereq. PSCI 230 and junior standing or consent of instr. Explores the meaning, sources, and future of human, national, and international security. Considers a range of historical and contemporary threats (interstate war, civil war, terrorism, crime, natural disaster, human accident, disease, and deprivation), assesses the vulnerability of individuals and states to each threat, and evaluates national and international strategies to reduce them.

- **PSCI 335 - American Foreign Policy**

Credits: 3. Prereq., PSCI 230X and junior standing or consent of instr. American diplomatic, economic and defense policies since World War II and their significance in international politics.

- **PSCI 336 - European Union**

Credits: 3. Offered spring. Prereq junior standing or consent of instructor. Historical and contemporary analysis of political and economic integration in Europe with a focus on the political system of the European Union.

- **PSCI 337 - Model United Nations**

Credits: 3. Offered autumn. Prereq., sophomore standing or consent of instr. History and structure of the UN. Contemporary global problems, and the UN's role in addressing them. Class has both active learning and service learning dimensions. Students plan, organize and run the annual Montana Model UN high school conference.

- **PSCI 340 - Exp Offering: American Govt**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental or one-time offerings in the subfield of American government. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 341 - Political Parties and Election**

Credits: 3. Offered spring even-numbered years. Prereq., PSCI 210S and junior standing. Political party organization, nominations, campaigns and elections in the United States.

- **PSCI 342 - Media, Public Opinion, Polling**

Credits: 3. Offered intermittently. Prereq., PSCI 210S. Study of the role played by mass media in shaping public opinion, policy agendas, and governmental institutions.

- **PSCI 344 - State and Local Government**

Credits: 3. Offered intermittently. Prereq., PSCI 210S and junior standing. Analysis of American state and local government with emphasis on governmental organization, intergovernmental relations, local government powers, and self-government charters. Special attention to Montana.

- **PSCI 346 - American Presidency**

Credits: 3. Offered autumn. Prereq., PSCI 210S. The constitutional foundation and evolution of the executive branch, the structure of the office and executive functions and powers.

- **PSCI 347 - U.S. Congress**

Credits: 3. Offered spring. Prereq., PSCI 210S. Structure, processes, and politics of U.S. Congress and state legislatures. During legislative years, special emphasis will be devoted to the Montana Legislature.

- **PSCI 348 - US Multicultural Politics**

Credits: 3. Offered intermittently. Examines the politics of diversity in the U.S., including national community, identity, citizenship, immigration, assimilation, and racial issues such as voting rights, affirmative action, segregation and integration, and public opinion.

- **PSCI 350 - Exp Offering: Political Theory**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental or one-time offerings in the subfield of political theory. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 352 - American Political Thought**

Credits: 3. Offered spring. Prereq., PSCI 250E or consent of instr. The study of representative political thinkers is used to illustrate the theme of American democracy as a multifaceted experiment with self-government.

- **PSCI 354 - Contemp Issues in Pol Theory**

Credits: 3. (R-6) Offered intermittently in autumn. Prereq., PSCI 250E or consent of instr. and junior standing. Topics variable. Research and assessment of current political and social issues through the study of a representative text and related literature.

- **PSCI 357 - Ancient & Medieval Pol Phil**

Credits: 3. Offered autumn. Prereq., Junior standing. The classical western tradition, beginning with the ancient Greeks, spanning the Christian era, and ending with the high Renaissance period. Examination of the political ideas/values of these different times, exploring broad questions concerning human nature, the origins of the state, and the meaning of legitimate authority. **Course Attributes:** Ethical & Human Values Course

- **PSCI 360 - Exp Offering: Public Admin**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental or onetime offerings in the subfield of public administration or policy. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 361 - Public Administration**

Credits: 3. Offered autumn. Prereq., PSCI 210S and junior standing. Legal and institutional setting of the administrative system; dynamics of organization and processes of public management.

- **PSCI 365 - Pub Policy Issues and Analysis**

Credits: 3. Examines a variety of public policy issues including economic, social welfare, health care, environmental and criminal justice policy. Emphasis is placed on substantive policies and policy analysis.

- **PSCI 370 - Courts and Judicial Politics**

Credits: 3. Offered spring. Prereq., PSCI 210S and junior standing. Introduction to American courts

with emphasis on judicial policy making.

- **PSCI 391 - Special Topics**

Credits: 1 TO 9. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 400 - Adv Writing in Pol Science**

Credits: 1. (R-3) Offered every term. Coreq., any upper-division political science course. Designed for political science students to satisfy their upper-division writing expectation for the major or for students desiring additional experience in writing. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **PSCI 401 - Nonprofit Hum Resource Mgt**

Credits: 2. On-line course offered every year. Addresses human resource needs specific to nonprofits, including payroll, employment law, and other legal issues.

- **PSCI 402 - Nonprofit Volunteer Mgt**

Credits: 2. On-line course offered every year. Addresses the process of recruiting and retaining volunteers at a nonprofit organization, including case studies and hands-on projects.

- **PSCI 403 - Nonprofit Prog Plan & Eval**

Credits: 2. On-line course offered every year. Explores program planning for nonprofits from top-to-bottom, including needs assessment and evaluation.

- **PSCI 405 - Nonprofit Advocacy**

Credits: 2. On-line course offered every year. Explores and reviews the role of nonprofit organizations in advocacy.

- **PSCI 406 - Nonprofit Board Management**

Credits: 2. Online course offered every year. Explores policymaking and fundraising roles and responsibilities of the board; strategies for board recruitment, orientation, and evaluation; and executive director/board relationships.

- **PSCI 410 - Nonprofit Strategic Plan**

Credits: 2. Online course offered every year. This course explores the importance of visionary leadership and strategic planning to the success of nonprofit agencies.

- **PSCI 411 - Nonprofit Grant Writing**

Credits: 2. Online course offered every year. Students learn how to write the essential parts of a grant proposal and how to search for appropriate funding sources.

- **PSCI 412 - Nonprofit Fundraising**

Credits: 2. Online course offered every year. The course will cover all major aspects of a fundraising plan including: annual fund, major gifts, capital campaigns, planned giving, grants and special events. The course will also give students the foundation and tools needed to implement these plans into action.

- **PSCI 413 - Nonprofit Financial Mgt**

Credits: 2. Online course offered every year. This course explores special issues related to nonprofit financials including accounting basics, budgeting, financial statement ratios, management controls and nonprofit income tax reporting processes.

- **PSCI 420 - Exp Offering: Comp Politics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental or one-time offerings in the subfield of comparative politics. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 422 - Revolution & Reform in China**

Credits: 3. Offered autumn. A history of the rise and fall of the Maoist regime and the complicated impact of the epochal post Mao reform movement.

- **PSCI 430 - Exp Offering: Intrnt Relations**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing. Experimental or one-time offerings in the subfield of international relations. **Course Attributes:**
15 cr grad limit/Spec Topics

- **PSCI 431 - Politics of Global Migration**

Credits: 3. Prereq., junior standing or consent of instr. Exploration of the elective and forced migration of peoples within countries and across national boundaries. Geographical coverage includes Asia, North and Central America, Africa, and Europe. Attention to policy and gender issues surrounding economic and political migration.

- **PSCI 432 - Inter-American Relations**

Credits: 3. Offered intermittently. Prereq., PSCI 325 or consent of instr. Examination of problems, issues and concepts in the international relations of nations of the western hemisphere.

- **PSCI 433 - International Law & Org**

Credits: 3. Offered fall. Prereq. PSCI 230 and junior standing or consent of instr. Introduction to classical principles and contemporary issues of the law of nations and the organizations created to facilitate international cooperation.

- **PSCI 440 - Exp Offering: American Govt**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental or one-time offerings in the subfield of American government. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 443 - Politics of Social Movements**

Credits: 3. Offered spring. Prereq., junior standing or consent of instr. The role of social movements in shaping the politics of power, reflected in public policy, electoral politics, relations of class, race, and gender, and people's understanding of the world and their place in it.

- **PSCI 444 - Am Political Participation**

Credits: 3. Offered intermittently. Prereq., PSCI 210S. Examination of the individual and institutional factors affecting voter turnout, the influences on voter decision making, and non-electoral forms of participation in the United States.

- **PSCI 445 - Political Psychology**

Credits: 3. Offered intermittently. Applies psychological theories such as personality, emotion, cognition, and social influence to political attitudes and actions, including political opinion formation, conformity, prejudice, genocide, and political leadership.

- **PSCI 448 - Health Care Policy**

Credits: 3. offered autumn. Focuses on sociopolitical environment influencing health policy in the United States including health politics and policy development, political structure and process, health care financing, public opinion and special interest groups, political leadership, policy reform and global health.

- **PSCI 449 - Environmental Health Policy**

Credits: 3. Offered spring. Focuses on environmental health policy in the U.S., its evolution, current status, and areas of change.

- **PSCI 450 - Exp Offering: Political Theory**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental or one-time offerings in the subfield of political theory. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 452 - Utopianism and its Critics**

Credits: 3. Offered intermittently. Prereq., junior standing. Examination of classic and

contemporary utopias, from Plato's Republic to Barbara Goodwin's Justice by Lottery as well as their critics.

- **PSCI 453 - Modern Political Theory**

Credits: 3. Offered autumn. Prereq., PSCI 250E or consent of instr. Analysis of Hobbes, Locke, Rousseau, Burke, James and John Stuart Mill, Marx and Lenin with regard to their "modern" views of the purpose(s) of political inquiry, the nature of citizenship and popular sovereignty. Particular attention to contemporary implications of ideas.

- **PSCI 460 - Exp Offering: Public Admin**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., junior standing. Experimental or onetime offerings in the subfield of public administration or policy. **Course Attributes:**
15 cr grad limit/Spec Topics

- **PSCI 461 - Administrative Law**

Credits: 3. Offered autumn. Prereq., PSCI 210S and junior standing. The legal foundations of public administration with emphasis on legislative delegation, administrative rulemaking and adjudication, judicial review, and public participation.

- **PSCI 462 - Human Resource Management**

Credits: 3. Offered spring. Study of the essential elements of human resource management, including analysis and evaluation of work, and the selection, management, and evaluation of public employees.

- **PSCI 463 - Development Administration**

Credits: 3. Offered autumn. Prereq., junior standing or consent of instr. Study of the functions and processes of public administration in the Third World. Focus on alleviating poverty and underdevelopment. Includes project design and development planning activities.

- **PSCI 466 - Nonprofit Adm & Pub Svc**

Credits: 3. Offered autumn. Prereq., junior standing. Investigation of the aspects involved in nonprofit management and public service and the complexity of the role of nonprofit organizations in society.

- **PSCI 467 - Adv Nonprofit Adm**

Credits: 3. Offered spring. Prereq., PSCI 466. In-depth exploration of the special issues related to nonprofit management including fund raising, budgeting, and program planning.

- **PSCI 468 - Public Policy Cycle**

Credits: 3. Offered intermittently. Follows specific policy problem through each stage of the public policy cycle, including how policy is formulated in the legislative branch, implemented by the executive branch and reviewed by the judicial branch.

- **PSCI 469 - Ethics and Public Policy**

Credits: 3. Offered spring. Focuses on the ethical challenges faced by public servants in government agencies.

- **PSCI 471 - American Constitutional Law**

Credits: 3. Offered autumn. Prereq., junior standing or consent of instr. Survey of U.S. Supreme Court's interpretation of the U.S. Constitution's provisions on separation of powers, federalism, civil rights, and civil liberties.

- **PSCI 474 - Civil Rights Seminar**

Credits: 3. Offered spring. Prereq., PSCI 471 or consent of instr. Intensive analysis, discussion, and writing about key U.S. Supreme Court constitutional cases on expression, religion, privacy, criminal justice, and discrimination.

- **PSCI 480 - Research Goals and Strategies**

Credits: 3. We explore the main methods used in political science research, focusing on research design, best research practices, and pitfalls in research. Students develop their own research design as the final course project.

- **PSCI 491 - Special Topics**

Credits: 1 TO 3. (R-9) Offered intermittently. Prereq., consent of instr. and junior standing. Experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** 15 cr grad limit/Spec Topics

- **PSCI 492 - Independent Study**

Credits: 1 TO 3. (R-6) Offered every term. Prereq., nine credits in political science courses numbered at the 300- or 400-level and consent of instr. Research in fields appropriate to the needs and objectives of the individual student. **Course Attributes:** 7 cr grad limit/In Study/Intern

- **PSCI 498 - Intern/coop education/omnibus**

Credits: 1 TO 6. Offered every term. Prereq., sophomore standing and consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Offered credit/no credit only. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6 7 cr grad limit/In Study/Intern

- **PSCI 501 - Public Administration**

Credits: 3. Offered autumn. Advanced analysis of processes of public management; examination of public administrators' involvement in policy making. Level: Graduate

- **PSCI 503 - Policy Analysis**

Credits: 3. Offered spring. The role of public administrators in the policymaking process with emphasis on methods of policy analysis and program evaluation. Level: Graduate

- **PSCI 504 - Organization Theory**

Credits: 3. Offered spring. Concepts and theories relevant to the administration of complex organizations, including administrative structure, behavior, process and functions. Level: Graduate

- **PSCI 505 - Budgeting & Finance**

Credits: 3. Offered spring. Seminar focusing on principles of public finance and analysis of budgeting as a primary tool of public sector management. Level: Graduate

- **PSCI 520 - Comparative Government**

Credits: 3. Offered autumn. Prereq., consent of instr. Concentrated reading and examination of selected subject areas in the field of comparative government. Level: Graduate

- **PSCI 521 - Globalization**

Credits: 3. Offered spring. Prereq., senior or graduate standing or consent of instr. Critical examination of contemporary globalization topics from a number of theoretical and political perspectives. Topics include but are not limited to international political economy, security, social movements, democratization, international development, climate change, immigration, and global governance. Level: Graduate

- **PSCI 522 - Human Resource Management**

Credits: 3. Offered autumn. Study of the essential elements of human resource management, including analysis and evaluation of work, and the selection, management, and evaluation of public employees. Level: Graduate

- **PSCI 523 - Administrative Law**

Credits: 3. Offered autumn. The legal foundations of public administration with emphasis on legislative delegation, administrative rulemaking and adjudication, judicial review, and public participation. Level: Graduate

- **PSCI 524 - Management Skills**

Credits: 3. Offered spring. Focus on developing the skills required of managers in nonprofit and government organizations, such as competency in self-assessment, oral and written presentations, managing stress, communicating supportively, motivating, managing conflict, empowering and delegating, succeeding in multicultural contexts, and participating in interviews. Level: Graduate

- **PSCI 525 - Strategic Planning**

Credits: 3. Focus on the means by which public and nonprofit agencies can carry out their missions effectively. Level: Graduate

- **PSCI 526 - Issues in State Government**

Credits: 3. Examination of the evolution and development of state governments since the founding period by focusing on the basic political institutions and a broad range of public policy issues that affect governing in the states. Level: Graduate

- **PSCI 527 - Performance Measurement**

Credits: 3. Offered intermittently. Focus on the process by which organizations routinely and systematically gather data to assess progress in achieving their goals. Level: Graduate

- **PSCI 528 - Strategic Hum Res Mgt**

Credits: 3. Offered online alternate summers. This course explores the value of strategic human resource management as a means for enhancing agency performance. Level: Graduate

- **PSCI 529 - Intro to Nonprofit Orgs**

Credits: 3. This course is one of the core courses required for MPA students completing the Nonprofit Administration Track. The course provides an introduction to nonprofit organizations and the nonprofit sector within which they are embedded. It investigates such topics as the nature of the nonprofit sector, the diverse kinds of nonprofits in existence, the phenomenon of charitable giving, philanthropy, and volunteering, and the legal framework that establishes nonprofit organizations and regulates their activities. This course is appropriate for graduate students from many disciplines in addition to MPA students due to the diverse nature of the nonprofit sector in fields such as environmental studies, communication studies, sociology, social work and law. Level: Graduate

- **PSCI 530 - International Relations**

Credits: 3. Offered autumn. Prereq., consent of instr. Concentrated reading and examination of selected subject areas in the field of international relations. Level: Graduate

- **PSCI 540 - American Government**

Credits: 3. Offered spring. Prereq., consent of instr. Concentrated reading and examination of selected subject areas in the field of American government. Level: Graduate

- **PSCI 547 - Legislative Relations**

Credits: 3. Online course offered every other year. Focuses on the methods and issues involved in establishing effective working relationships between agencies and the legislative process. Level: Graduate

- **PSCI 550 - Political Theory**

Credits: 3. Offered spring. Prereq., consent of instr. Concentrated reading and examination of selected subject areas in the field of political theory. Level: Graduate

- **PSCI 561 - Ethics in Public Admin**

Credits: 3. Online course offered every other year. Explores the role of ethics and integrity in public administration and the moral obligations of citizenship. Level: Graduate

- **PSCI 563 - Improving Work Culture**

Credits: 3. Online course offered every other year. Focuses on the complexity of the core components of strategic management: program culture and work process management and the

considerations necessary to institutionalize positive change. Level: Graduate

- **PSCI 586 - MA Research Project**

Credits: 1 TO 4. (R-6) Offered every term. Prereq., consent of instructor. Offered as Credit/No Credit only. Level: Graduate

- **PSCI 594 - Seminar**

Credits: 1 TO 9. (R-9) Offered intermittently. Topic varies. Level: Graduate

- **PSCI 595 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums

- **PSCI 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
Course Attributes: Service Learning/Volunteer

- **PSCI 598 - Internship**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Offered credit/no credit only. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate
Course Attributes: Internships/Practicums

- **PSCI 599 - Thesis**

Credits: 1 TO 6. (R-6) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

- **PSCI 875X - Tribal Sovereignty**

Credits: 3. Offered alternate years. Same as NASX 475X. An examination of the evolution of tribal governments from a historical and political perspective. Particular attention is devoted to the issues of tribal sovereignty and tribal state conflicts. **Course Attributes:** Indigenous and Global

American Politics

Bachelor of Arts - Political Science; American Politics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 40

Required Cumulative GPA: 2.5

Note: Students majoring in Political Science with an option in American Politics option must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields. 21 of the 40 credits must be in upper-division courses. No more than 7 credits of independent study (PSCI 492) and internship (PSCI 498) combined may count toward the 40 required credits. In addition, no more than 15 total credits in special topics courses (e.g., PSCI 320, 391) may count toward the 40 required credits. A maximum of

60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both the upper-division core and the option requirements, but may not double-count the course credits.

Required Lower Division Courses

Rule: Must complete all of the following courses:

—	Course	Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
	PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Required Upper Division Courses

Rule: Must complete the following course:

—	Course	Credits
	PSCI 400 - Adv Writing in Pol Science	1 Credits
Minimum Required Grade: C		1 Total Credits Required

Degree Electives

Rule: Must complete 5 of the following courses

—	Course	Credits
	PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
	PSCI 341 - Political Parties and Election	3 Credits
	PSCI 342 - Media, Public Opinion, Polling	3 Credits
	PSCI 344 - State and Local Government	3 Credits
	PSCI 346 - American Presidency	3 Credits
	PSCI 347 - U.S. Congress	3 Credits
	PSCI 348 - US Multicultural Politics	3 Credits

	PSCI 352 - American Political Thought	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
	PSCI 370 - Courts and Judicial Politics	3 Credits
	PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
	PSCI 444 - Am Political Participation	3 Credits
	PSCI 445 - Political Psychology	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political science option. Student must take an additional four courses from the following options.

Minimum Required Grade: C

12 Total Credits Required

Public Administration

Rule: May select one of the following courses:

—	Course	Credits
	PSCI 344 - State and Local Government	3 Credits
	PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
	PSCI 361 - Public Administration	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
	PSCI 391 - Special Topics	1 To 9 Credits
	PSCI 448 - Health Care Policy	3 Credits
	PSCI 449 - Environmental Health Policy	3 Credits
	PSCI 461 - Administrative Law	3 Credits

	PSCI 462 - Human Resource Management	3 Credits
	PSCI 463 - Development Administration	3 Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits

PSCI 324 - Climate Policies: China & U.S.	3 Credits
PSCI 325 - Politics of Latin America	3 Credits
PSCI 326 - Politics of Africa	3 Credits
PSCI 327 - Politics of Mexico	3 Credits
PSCI 328 - Politics of China	3 Credits
PSCI 329 - Politics of Japan	3 Credits
PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
PSCI 421 - Comparative Legal Systems	3 Credits
PSCI 422 - Revolution & Reform in China	3 Credits
PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

Course	Credits
PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
PSCI 332 - Global Environmental Pol.	3 Credits
PSCI 334 - International Security	3 Credits
PSCI 335 - American Foreign Policy	3 Credits
PSCI 336 - European Union	3 Credits
PSCI 337 - Model United Nations	3 Credits
PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
PSCI 431 - Politics of Global Migration	3 Credits
PSCI 432 - Inter-American Relations	3 Credits
PSCI 433 - International Law & Org	3 Credits

PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

International Relations and Comparative Politics

Bachelor of Arts - Political Science; Internat Rel & Compar Politics Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 40

Required Cumulative GPA: 2.5

Note: Students majoring in Political Science with an option in International Relations and Comparative Politics must take a minimum of 40 credits of political science. 21 of the 40 credits must be in upper-division courses. No more than 7 credits of independent study (PSCI 492) and internship (PSCI 498) combined may count toward the 40 required credits. In addition, no more than 15 total credits in special topics courses (e.g., PSCI 320, 391) may count toward the 40 required credits. A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both the upper-division core and the option requirements, but may not double-count the course credits.

It is strongly recommended that a student complete either a) a minimum of two years of foreign language study or b) an internship or study-abroad program.

Required Lower Division Courses

Rule: Must complete all of the following courses:

—	Course	Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
	PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Required Upper Division Course

Rule: Must complete the following course:

—	Course	Credits
	PSCI 400 - Adv Writing in Pol Science	1 Credits
Minimum Required Grade: C		1 Total Credits Required

Degree Electives

Rule: Must complete the following subcategories

Note: 3 of these credits can be counted toward fulfilling the upper-division core.

*International Relations Field Courses***Rule:** Must complete 3 of the following courses

—	Course	Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
	Minimum Required Grade: C-	9 Total Credits Required

*Comparative Politics Field Courses***Rule:** Must complete 3 of the following courses

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits

PSCI 326 - Politics of Africa	3 Credits
PSCI 327 - Politics of Mexico	3 Credits
PSCI 328 - Politics of China	3 Credits
PSCI 329 - Politics of Japan	3 Credits
PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
PSCI 422 - Revolution & Reform in China	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political Science option.

Minimum Required Grade: C

12 Total Credits Required

Public Administration

Rule: May select 1 of the following courses:

Course	Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
PSCI 361 - Public Administration	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 391 - Special Topics	1 To 9 Credits
PSCI 448 - Health Care Policy	3 Credits
PSCI 449 - Environmental Health Policy	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 463 - Development Administration	3 Credits
PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits

	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits

PSCI 326 - Politics of Africa	3 Credits
PSCI 327 - Politics of Mexico	3 Credits
PSCI 328 - Politics of China	3 Credits
PSCI 329 - Politics of Japan	3 Credits
PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
PSCI 422 - Revolution & Reform in China	3 Credits
PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

Course	Credits
PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
PSCI 332 - Global Environmental Pol.	3 Credits
PSCI 334 - International Security	3 Credits
PSCI 335 - American Foreign Policy	3 Credits
PSCI 336 - European Union	3 Credits
PSCI 337 - Model United Nations	3 Credits
PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
PSCI 431 - Politics of Global Migration	3 Credits
PSCI 432 - Inter-American Relations	3 Credits
PSCI 433 - International Law & Org	3 Credits
PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Public Administration

Bachelor of Arts - Political Science; Public Administration Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 40

Required Cumulative GPA: 2.5

Note: Students majoring in Political Science with an option in Public Administration must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields. 21 of the 40 credits must be in upper-division courses. No more than 7 credits of independent study (PSCI 492) and internship (PSCI 498) combined may count toward the 40 required credits. In addition, no more than 15 total credits in special topics courses (e.g., PSCI 320), 391) may count toward the 40 required credits. A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both the upper-division core and the option requirements, but may not double-count the course credits.

A legislative or administrative internship is strongly recommended.

Required Lower Division Courses

Rule: Must complete all of the following courses:

Course	Credits
PSCI 210S - Intro to American Government	3 Credits
PSCI 220S - Intro to Comparative Govt	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Required Upper Division Courses

Rule: Must complete the following courses

Course	Credits
PSCI 361 - Public Administration	3 Credits
PSCI 400 - Adv Writing in Pol Science	1 Credits
Minimum Required Grade: C	4 Total Credits Required

Degree Electives

Rule: Must complete 4 of the following courses

Course	Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits

	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
	PSCI 460 - Exp Offering: Public Admin	1 To 9 Credits
	PSCI 461 - Administrative Law	3 Credits
	PSCI 462 - Human Resource Management	3 Credits
	PSCI 463 - Development Administration	3 Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political science option.

Minimum Required Grade: C

12 Total Credits Required

Public Administration

Rule: May select 1 of the following courses:

	Course	Credits
	PSCI 344 - State and Local Government	3 Credits
	PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
	PSCI 361 - Public Administration	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits
	PSCI 391 - Special Topics	1 To 9 Credits
	PSCI 448 - Health Care Policy	3 Credits
	PSCI 449 - Environmental Health Policy	3 Credits
	PSCI 461 - Administrative Law	3 Credits

	PSCI 462 - Human Resource Management	3 Credits
	PSCI 463 - Development Administration	3 Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits

	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 326 - Politics of Africa	3 Credits
	PSCI 327 - Politics of Mexico	3 Credits
	PSCI 328 - Politics of China	3 Credits
	PSCI 329 - Politics of Japan	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
	Minimum Required Grade: C	0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits

PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

Public Law

Bachelor of Arts - Political Science; Public Law Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 40

Required Cumulative GPA: 2.5

Note: Students majoring in Political Science with an option in Public Law must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields. 21 of the 40 credits must be in upper-division courses. No more than 7 credits of independent study (PSCI 492) and internship (PSCI 498) combined may count toward the 40 required credits. In addition, no more than 15 total credits in special topics courses (e.g., PSCI 320, 391) may count toward the 40 required credits. A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both the upper-division core and the option requirements, but may not double-count the course credits.

Required Lower Division Courses

Rule: Must complete all of the following courses:

—	Course	Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
	PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Required Upper Division Courses

Rule: Must complete all of the following courses:

—	Course	Credits
	PSCI 370 - Courts and Judicial Politics	3 Credits
	PSCI 400 - Adv Writing in Pol Science	1 Credits
Minimum Required Grade: C		4 Total Credits Required

Degree Electives

Rule: Must complete 4 of the following courses

—	Course	Credits
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PSCI 352 - American Political Thought	3 Credits
PSCI 433 - International Law & Org	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 471 - American Constitutional Law	3 Credits
PSCI 474 - Civil Rights Seminar	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political science option.

Minimum Required Grade: C

12 Total Credits Required

Public Administration

Rule: May select 1 of the following courses:

Course	Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
PSCI 361 - Public Administration	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 391 - Special Topics	1 To 9 Credits
PSCI 448 - Health Care Policy	3 Credits
PSCI 449 - Environmental Health Policy	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 463 - Development Administration	3 Credits
PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits

	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 326 - Politics of Africa	3 Credits

	PSCI 327 - Politics of Mexico	3 Credits
	PSCI 328 - Politics of China	3 Credits
	PSCI 329 - Politics of Japan	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

	Course	Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

Teaching Government

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Political Science; Track: Teaching Government

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 40

Required Cumulative GPA: 2.5

Note: Students with a teaching major in political science must also complete a teaching major or minor in a second field. For the political science teaching major, students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Political science major requirements include: a minimum of 37 credits of political science, including one 300-400 level course in four of the five major fields. 21 of the 37 credits must be in upper-division courses. No more than 7 credits of independent study (PSCI 492) and internship (PSCI 498) combined may count toward the 37 required credits. In addition, no more than 15 total credits in special topics courses (e.g., PSCI 320, 391) may count toward the 37 required credits. A maximum of 60 PSCI credits can count towards the Political Science Major. PSCI courses may only count toward one category of requirements.

Lower Division Core

Rule: Must complete all of the following courses:

Course	Credits
PSCI 210S - Intro to American Government	3 Credits
PSCI 220S - Intro to Comparative Govt	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Upper Division Core

Rule: Must complete the following course:

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

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Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
PSCI 400 - Adv Writing in Pol Science	1 Credits
Minimum Required Grade: C	4 Total Credits Required

Rule: Complete four upper-division electives.

Minimum Required Grade: C

12 Total Credits Required

Upper Division Field Courses

Rule: Must complete 1 course in 4 of the following 5 fields:

Note: Any field course can also be counted toward a Political science option. Student must take an additional four courses from the following options.

Minimum Required Grade: C

12 Total Credits Required

Public Administration

Rule: May select 1 of the following courses:

Course	Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
PSCI 361 - Public Administration	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 391 - Special Topics	1 To 9 Credits
PSCI 448 - Health Care Policy	3 Credits
PSCI 449 - Environmental Health Policy	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 463 - Development Administration	3 Credits
PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits

	PSCI 467 - Adv Nonprofit Adm	3 Credits
	PSCI 468 - Public Policy Cycle	3 Credits
	PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 326 - Politics of Africa	3 Credits

	PSCI 327 - Politics of Mexico	3 Credits
	PSCI 328 - Politics of China	3 Credits
	PSCI 329 - Politics of Japan	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
	PSCI 421 - Comparative Legal Systems	3 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

	Course	Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C		0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C	0-3 Total Credits Required

Teaching Social Studies

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Political Science-History; Track: Teaching Social Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students who complete the history/political science combined major are eligible for a teaching license in social studies broadfield. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Lower Division Core Courses

Rule: Must complete the following subcategories

28 Total Credits Required

Core Courses

Rule: Must complete all of the following courses:

Course	Credits
HSTA 255 - Montana History	3 Credits
HSTR 200 - Intro: Historical Methods	1 Credits
PSCI 210S - Intro to American Government	3 Credits
PSCI 220S - Intro to Comparative Govt	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C-	16 Total Credits Required

American History Introductory Courses

Rule: Must complete 2 of the following courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

Course	Credits
HSTA 101H - American History I	4 Credits
HSTA 102H - American History II	4 Credits
HSTA 103H - Honors American History I	4 Credits
HSTA 104H - Honors American History II	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Western History Introductory Courses

Rule: Must complete 1 of the following courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

Course	Credits
HSTR 101H - Western Civilization I	4 Credits
HSTR 102H - Western Civilization II	4 Credits
HSTR 103H - Honors Western Civilization I	4 Credits
HSTR 104H - Honors Western Civilization II	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Upper Division History Elective

Rule: Must complete at least 3 credits of upper division HSTA or HSTA electives

Minimum Required Grade: C-

3 Total Credits Required

American History Elective

Rule: Choose at least 3 credits from the following courses

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, 392, 491, 492 and HSTA 391 and 491 may apply to this requirement depending on the course content.

Course	Credits
HSTA 311 - Early America	3 Credits
HSTA 314 - Nature, Knowledge & Empire	3 Credits
HSTA 315 - Early American Republic	3 Credits
HSTA 316 - American Civil War Era	3 Credits
HSTA 320 - Birth of Modern US	3 Credits
HSTA 321 - America in Crisis	3 Credits
HSTA 322 - American History: WWII to Pres	3 Credits
HSTA 323 - U.S. in the 1950s	3 Credits
HSTA 324 - U.S. in the 1960s	3 Credits
HSTA 327 - Atlantic World Slavery	3 Credits
HSTA 333 - Key Events in American Militar	3 Credits
HSTA 335 - Movie America	3 Credits
HSTA 342H - Afr Amer Hist to 1865	3 Credits
HSTA 343H - Afr Amer Hist Since 1865	3 Credits
HSTA 347 - Voodoo, Muslim, Church	3 Credits
HSTA 354X - Ind MT Since Reserv Era	3 Credits
HSTA 358 - Images of the Amer West	3 Credits
HSTA 361 - The American South	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 372 - The American Revolution	3 Credits
HSTA 380 - AmericanConstitutional History	3 Credits
HSTA 382H - History of American Law	3 Credits
HSTA 385 - Families & Children in America	3 Credits

	HSTA 415 - The Black Radical Tradition	3 Credits
	HSTA 417 - Prayer & Civil Rights	3 Credits
	HSTA 418 - Women and Slavery	3 Credits
	HSTA 419 - Southern Women	3 Credits
	HSTA 420 - America Divided, 1848-1865	3 Credits
	HSTA 422 - Research: U.S. After WWII	3 Credits
	HSTA 455 - Indian, Bison, & Horse	3 Credits
	HSTA 461 - Research in Montana History	3 Credits
	HSTA 462 - Regionalism & Rocky Mtn West	3 Credits
	HSTA 469 - Atlantic America Research	3 Credits
	HSTA 471 - Writing Women's Lives	3 Credits
	HSTA 494 - Seminar	1 To 6 Credits
	HSTR 364 - Environmental History	3 Credits
	HSTR 367 - 19th Cent Amer West	3 Credits
	HSTR 369 - 20th Cent Amer West	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

World History Elective

Rule: Choose at least 3 credits from the following courses

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 191, 291, 391, 392, 491, 492 may apply to this requirement depending on the course content.

Course	Credits
HSTR 146H - The Silk Road	3 Credits
HSTR 230H - Colonial Latin America	3 Credits
HSTR 231H - Modern Latin America	3 Credits
HSTR 240 - East Asian Civilizations	3 Credits

	HSTR 241H - Central Asian Cult & Civ	3 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits
	HSTR 264 - Islamic Civ: Modrn Era	3 Credits
	HSTR 272E - Terrorism:Viol Mod Wrld	3 Credits
	HSTR 334 - Latin America: Reform and Revo	3 Credits
	HSTR 345H - Modern China	3 Credits
	HSTR 380H - Foreign Relations of the Great	3 Credits
	HSTR 384 - Hist Internat Human Rights	3 Credits
	HSTR 435 - Lat Am Human Rgts & Memory	3 Credits
	HSTR 437 - US-Latin America Relations	3 Credits
	HSTR 449 - Revolution & Reform in China	3 Credits
	HSTR 472 - Problems of Peace and Security	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

European History Elective

Rule: Choose at least 3 credits from the following courses

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, 392, 491, 492 may apply to this requirement depending on the course content.

Course	Credits
HSTR 302 - Ancient Greece	3 Credits
HSTR 312 - Age of Absolut 1648-1789	3 Credits
HSTR 320 - Europ Social & Intellect Hist	3 Credits
HSTR 323 - Europ Social & Intellect Hist:	3 Credits
HSTR 348 - Britain 1485-1688	3 Credits
HSTR 349 - Britain from Rev - Reform 1688	3 Credits
HSTR 352 - France Revol 1789-1848	3 Credits
HSTR 353 - Modern France	3 Credits

	HSTR 354 - Italy: 1300-1800	3 Credits
	HSTR 355 - Italy: 1800-Present	3 Credits
	HSTR 357 - Russia to 1881	3 Credits
	HSTR 358 - Russia Since 1881	3 Credits
	HSTR 361 - Germ:Augsburg-Bismarck	3 Credits
	HSTR 363 - Eastern Europe	3 Credits
	HSTR 418 - Britain 1500 - 1800	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

American Government/Public Law Electives

Rule: Must complete 9 credits in the following courses

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 433 - International Law & Org	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits

PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
PSCI 471 - American Constitutional Law	3 Credits
PSCI 474 - Civil Rights Seminar	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Comparative/International Relations Electives

Rule: Must complete 9 credits in the following courses

Course	Credits
PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
PSCI 321 - Post-Communist Politics	3 Credits
PSCI 322 - Politics of Europe	3 Credits
PSCI 324 - Climate Policies: China & U.S.	3 Credits
PSCI 325 - Politics of Latin America	3 Credits
PSCI 326 - Politics of Africa	3 Credits
PSCI 327 - Politics of Mexico	3 Credits
PSCI 328 - Politics of China	3 Credits
PSCI 329 - Politics of Japan	3 Credits
PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
PSCI 332 - Global Environmental Pol.	3 Credits
PSCI 334 - International Security	3 Credits
PSCI 335 - American Foreign Policy	3 Credits
PSCI 336 - European Union	3 Credits

	PSCI 337 - Model United Nations	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Additional Electives

Rule: Must complete 9 credits in 1 of the following fields

9 Total Credits Required

Economics

Rule: May complete 9 credits

Note: ECNS 191, 391, 392, 491, and 492 may apply to this requirement depending on the course content.

	Course	Credits
	ECNS 101S - Economic Way of Thinking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	ECNS 202S - Principles of Macroeconomics	3 Credits
	ECNS 217X - Issues in Economic Development	3 Credits
	ECNS 301 - Intermediate Micro with Calc	3 Credits
	ECNS 302 - Intermediate Macroeconomics	3 Credits
	ECNS 310 - Intro Health Economics	3 Credits
	ECNS 312 - Labor Economics	3 Credits

ECNS 313 - Money and Banking	3 Credits
ECNS 315 - History of Economic Thought	3 Credits
ECNS 320 - Public Finance	3 Credits
ECNS 374 - Comparative Economics	3 Credits
ECNS 403 - Introduction to Econometrics	4 Credits
ECNS 405 - Game Theory	3 Credits
ECNS 406 - Industrial Organization	3 Credits
ECNS 431 - International Trade	3 Credits
ECNS 433 - Economics of the Environment	3 Credits
ECNS 445 - Int Env Econ & Clim Change	3 Credits
ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
ECNS 486 - Economic Research Seminar	1 To 15 Credits
ECNS 488 - Res Meth & Thesis Design	2 Credits
Minimum Required Grade: C-	9 Total Credits Required

Geography

Rule: May complete 9 credits

Note: GPHY 391, 491, and 492 may apply to this requirement depending on the course content.

Course	Credits
GPHY 111N - Intro to Physical Geography	3 Credits
GPHY 112N - Intro to Phys Geography Lab	1 Credits
GPHY 121S - Human Geography	3 Credits
GPHY 141S - Geography of World Regions	3 Credits
GPHY 144 - Montana's Mountains	3 Credits
GPHY 241 - Montana	3 Credits
GPHY 243S - Africa	3 Credits

GPHY 245X - The Middle East	3 Credits
GPHY 284 - Intro to GIS and Cartography	3 Credits
GPHY 291 - Special Topics	1 To 6 Credits
GPHY 314 - Global Mountain Environments	3 Credits
GPHY 317 - Geomorphology	3 Credits
GPHY 323S - Econ. Geog. of Rural Areas	3 Credits
GPHY 335 - Water Policy	3 Credits
GPHY 336 - Exploration & Discovery	3 Credits
GPHY 338 - Mountains and Society	3 Credits
GPHY 342 - North America	3 Credits
GPHY 344 - Crown of the Continent	3 Credits
GPHY 347 - Regional Geography (Mult Reg)	3 Credits
GPHY 348 - Field Studies in Geography	3 Credits
GPHY 378 - Preceptorship in Geography	1 To 3 Credits
GPHY 385 - Field Techniques	3 Credits
GPHY 421 - Sustainable Cities	3 Credits
GPHY 423 - Migration & Population Change	3 Credits
GPHY 432 - Human Role Environ Change	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
GPHY 434 - Food and Famine	3 Credits
GPHY 438 - Mountain Field Study	3 Credits
GPHY 442 - Regionalism & Rocky Mtn West	3 Credits
GPHY 443 - Cultural & Global Competence	3 Credits
GPHY 444 - High Asia	3 Credits
GPHY 445 - Regional Geography	3 Credits

GPHY 465 - Planning Princ & Processes	3 Credits
GPHY 466 - Environmental Planning	3 Credits
GPHY 468 - Community & Regional Analysis	3 Credits
GPHY 469 - Planning & Analysis Laboratory	1 Credits
GPHY 481 - Advanced Cartographic Design	3 Credits
GPHY 482 - Spatial Analysis & GIS	3 Credits
GPHY 485 - Internet GIS	3 Credits
GPHY 486 - Transport, Planning & GIS	3 Credits
GPHY 487 - Remote Sensing/Raster GIS	3 Credits
GPHY 488 - Thematic Cartography & GIS	3 Credits
GPHY 489 - Cartography/GIS Laboratory	1 Credits
GPHY 497 - Workshop in Teaching Geography	2 To 3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Psychology

Rule: May complete 9 credits

Note: PSYX 191, 192, 290, 291, 292, 390, 391, 392, and 491 may apply to this requirement depending on the course content.

Course	Credits
PSYX 100S - Intro to Psychology	4 Credits
PSYX 105 - Careers in Psychology	1 Credits
PSYX 107 - Intergroup Dialog	1 Credits
PSYX 120 - Research Methods I	3 Credits
PSYX 161S - Fund of Organizational Psych	3 Credits
PSYX 222 - Psychological Statistics	3 Credits
PSYX 230 - Developmental Psychology	3 Credits

PSYX 233 - Fund of Psychology of Aging	3 Credits
PSYX 238 - Adolescent Psychology	3 Credits
PSYX 240 - Fund of Abnormal Psychology	3 Credits
PSYX 250N - Fund of Biological Psychology	3 Credits
PSYX 270 - Fund Psychology of Learning	3 Credits
PSYX 280 - Fund of Memory and Cognition	3 Credits
PSYX 320 - Research Methods III	3 Credits
PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
PSYX 340 - Abnormal Psychology	3 Credits
PSYX 345 - Child & Adolescent Psych Dis	3 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
PSYX 352 - Comparative Psychology	3 Credits
PSYX 356 - Human Neuropsychology	3 Credits
PSYX 360 - Social Psychology	3 Credits
PSYX 362 - Multicultural Psychology	3 Credits
PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 377 - Personalized Student Instr	3 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
PSYX 385 - Psychology of Personality	3 Credits
PSYX 400 - History & System in Psychology	3 Credits
PSYX 435 - Clinic Topic Rural Bioethics	3 Credits
PSYX 436 - Ethical Foundation Qual Impov	3 Credits
PSYX 437 - Intro Emp Research Bioethics	3 Credits
PSYX 438 - Bioethics Health Policy	3 Credits
PSYX 441 - Addiction Studies	3 Credits

PSYX 442 - Counseling Theories in Context	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Sociology

Rule: May complete 9 credits

Note: SOCI 191, 291, 391, 491, and 492 may apply to this requirement depending on the course content.

Course	Credits
SOCI 101S - Introduction to Sociology	3 Credits
SOCI 130S - Soc of Alternative Religions	3 Credits
SOCI 202 - Social Statistics	3 Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 212S - Social Issues Southeast Asia	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 221 - Criminal Justice System	3 Credits
SOCI 270 - Intro Development Sociology	3 Credits
SOCI 275S - Gender and Society	3 Credits
SOCI 306 - Sociology of Work	3 Credits
SOCI 308 - Soc of Education	3 Credits
SOCI 312 - Criminal Adjudication	3 Credits
SOCI 314 - Extraordinary Group Behavior	3 Credits
SOCI 318 - Sociological Research Methods	3 Credits
SOCI 325 - Social Stratification	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 335 - Juvenile Justice System	3 Credits

SOCI 342 - Urban/Metropolitan Soc	3 Credits
SOCI 345 - Sociology of Organizations	3 Credits
SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 362 - Sociology of Law Enforcement	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 382 - Soc Psych and Social Structure	3 Credits
SOCI 386 - Preceptorship in Sociology	2 To 3 Credits
SOCI 423 - Sociology of Corrections	3 Credits
SOCI 435 - Law and Society	3 Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits
SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
SOCI 442 - ISJ Service Learning	3 To 4 Credits
SOCI 443 - Sociology of Poverty	3 Credits
SOCI 444 - Issues in Inequality	3 Credits
SOCI 455 - Classical Sociological Theory	3 Credits
SOCI 460 - Capstone: Rural and Env Change	3 Credits
SOCI 470 - Environmental Sociology	3 Credits
SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Education Methods

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
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EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Upper Division Writing Requirement

Rule: Must choose one of the following courses:

Course	Credits
HSTA 420 - America Divided, 1848-1865	3 Credits
HSTA 461 - Research in Montana History	3 Credits
HSTA 469 - Atlantic America Research	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
HSTR 400 - Historical Research Seminar	3 Credits
HSTR 418 - Britain 1500 - 1800	3 Credits
HSTR 437 - US-Latin America Relations	3 Credits
	3 Total Credits Required

Global Public Health Minor

Minor - Global Public Health (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Note: Students must take all core courses from The University of Montana's curriculum, but can receive content credit for relevant practicum and internships experience and for relevant courses taken at other universities if approved by the program director.

Required Courses

Rule: Must complete all of the following:

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Course	Credits
BIOM 227 - Vectors and Parasites	3 Credits
PSCI 227 - Global Health Issues	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Core Electives

Rule: Must complete 9 credits from the following courses:

Note: The student should select the Ethnobotany of Amerindians section of PHAR 391 Special Topics.
The student should select the Public Health Genetics section of PHAR 491 Special Topics.

Course	Credits
AHHS 430 - Health Aspects of Aging	3 Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
ANTY 426 - Culture, Health and Healing	3 Credits
BIOM 400 - Medical Microbiology	3 Credits
BIOM 427 - General Parasitology	2 Credits
BIOM 428 - General Parasitology Lab	2 Credits
CHTH 355 - Theory Pract Comm Hlth Ed	3 Credits
CHTH 445 - Prgrm Plan in Comm Health	3 Credits
COMX 425 - Comm in Health Organizations	3 Credits
ECNS 310 - Intro Health Economics	3 Credits
PHAR 320 - Am Ind Health Issues	2 Credits
PHAR 391 - Special Topics	1 To 9 Credits
PHAR 491 - Special Topics	1 To 9 Credits
PHL 321E - Philosophy & Biomedical Ethics	3 Credits
PSCI 431 - Politics of Global Migration	3 Credits
PSCI 463 - Development Administration	3 Credits
S W 465 - Social Work Global Context	3 Credits

SOCI 355 - Population and Society	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

Content Electives

Rule: Must complete 6 credits from the following courses

Course	Credits
ANTY 227 - Human Sexuality	3 Credits
ANTY 333 - Culture and Population	3 Credits
ANTY 391 - Special Topics	1 To 9 Credits
ANTY 402 - Quan Ethnographic Field Methds	3 Credits
ANTY 418 - Ecol Genet Var Human Pops	3 Credits
ANTY 422 - Mind, Culture and Society	3 Credits
ANTY 431 - Ethnographic Field Methods	3 Credits
ANTY 435 - Drugs, Culture and Society	3 Credits
BIOB 130N - Evolution and Society	3 Credits
BIOH 112 - Human Form and Function I	3 Credits
BIOH 113 - Human Form and Function II	3 Credits
BIOH 462 - Principles Medical Physiology	3 Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
BIOM 402 - Medical Bacteriology& Mycology	3 Credits
BIOM 435 - Virology	3 Credits
COMX 204X - International & Dvlpmnt Comm	3 Credits
COMX 415 - Intercultural Communication	3 Credits
COMX 485 - Communication and Health	3 Credits
ECNS 217X - Issues in Economic Development	3 Credits
HTH 430 - Hlth and Mind/Body/Spirit	3 Credits

NASX 303E - Ecol Persp in Nat Amer Trad	3 Credits
NASX 304E - Native American Beliefs/Philos	3 Credits
NASX 388 - Native Amer Health & Healing	3 Credits
NUTR 221N - Basic Human Nutrition	3 Credits
PSCI 324 - Climate Policies: China & U.S.	3 Credits
PSCI 326 - Politics of Africa	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSYX 362 - Multicultural Psychology	3 Credits
PUBH 595 - Special Topics	1 To 12 Credits
S W 300 - Hum Behav & Soc Environ	3 Credits
S W 310 - S W Policy & Services	3 Credits
S W 323 - Women & Soc Action Amer	3 Credits
S W 324 - Gender and Welfare	3 Credits
S W 410E - Social Work Ethics	3 Credits
S W 455 - Social Gerontology	3 Credits
S W 475 - Death, Dying and Grief	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 443 - Sociology of Poverty	3 Credits
WGSS 263S - Women's and Gender Studies	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Nonprofit Administration Minor

Minor - Nonprofit Administration (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Upper Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

9 Total Credits Required

Required Courses

Rule: Both courses are required

—	Course	Credits
	PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
	PSCI 467 - Adv Nonprofit Adm	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Core Elective Credits

Rule: Choose 1 of the following courses

—	Course	Credits
	HONR 398 - Internship	1 To 6 Credits
	PSCI 498 - Intern/coop education/omnibus	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Degree Elective Courses

Rule: Must complete 12 credits from at least 4 of the following 6 areas:

Minimum Required Grade: C-

12 Total Credits Required

Communication Skills

Rule: May complete 3 credits from the following courses:

—	Course	Credits
	BMGT 420 - Leadership and Motivation	3 Credits
	COMX 115S - Intro to Interpersonal Communc	3 Credits
	COMX 210 - Communication in Small Groups	3 Credits
	COMX 415 - Intercultural Communication	3 Credits
	COMX 421 - Comm in Non-Profit Organizatns	3 Credits
	COMX 422 - Communication and Technology	3 Credits
	COMX 423 - Org Comm Consult	3 Credits
	COMX 424 - Risk Crisis & Comm	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Youth and Adult Development

Rule: May complete 3 credits from the following courses:

—	Course	Credits
	PSYX 230 - Developmental Psychology	3 Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
	SOCI 330 - Juvenile Delinquency	3 Credits
	SOCI 335 - Juvenile Justice System	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Human Resources Development and Supervision

Rule: May complete 3 credits from the following courses:

—	Course	Credits
	COMX 220S - Intro to Organizational Comm	3 Credits

	PSCI 462 - Human Resource Management	3 Credits
	PTRM 380 - Rec Admin & Leadership	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Nonprofit Program Planning

Rule: May complete 3 credits from the following courses:

—	Course	Credits
	BMKT 411 - Service/Relationship Marketing	3 Credits
	PTRM 485 - Recreation Planning	4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Nonprofit Marketing

Rule: May complete 3 credits from the following courses:

—	Course	Credits
	BMKT 343 - Integrated Marketing Comm	3 Credits
	BMKT 412 - Non Profit Marketing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Nonprofit Accounting/Financial Management

Rule: May complete 3 credits from the following courses:

—	Course	Credits
	ACTG 201 - Principles of Fin Acct	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Political Science Minor

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Note: Nine of the 21 required credits must be in 300-400-level courses.

Required Lower Division Courses

Rule: Must complete all of the following courses:

—	Course	Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
	PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Required Upper Division Field Courses

Rule: Must complete 1 course in 3 of the 5 following options:

Minimum Required Grade: C-

9 Total Credits Required

Public Administration

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 344 - State and Local Government	3 Credits
	PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
	PSCI 361 - Public Administration	3 Credits
	PSCI 365 - Pub Policy Issues and Analysis	3 Credits

PSCI 391 - Special Topics	1 To 9 Credits
PSCI 448 - Health Care Policy	3 Credits
PSCI 449 - Environmental Health Policy	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 463 - Development Administration	3 Credits
PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
PSCI 467 - Adv Nonprofit Adm	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

Course	Credits
PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 354 - Contemp Issues in Pol Theory	3 Credits
PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
PSCI 452 - Utopianism and its Critics	3 Credits
PSCI 453 - Modern Political Theory	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

Course	Credits
PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
PSCI 321 - Post-Communist Politics	3 Credits
PSCI 322 - Politics of Europe	3 Credits
PSCI 324 - Climate Policies: China & U.S.	3 Credits
PSCI 325 - Politics of Latin America	3 Credits
PSCI 326 - Politics of Africa	3 Credits
PSCI 327 - Politics of Mexico	3 Credits
PSCI 328 - Politics of China	3 Credits
PSCI 329 - Politics of Japan	3 Credits
PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits
PSCI 422 - Revolution & Reform in China	3 Credits
PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

Course	Credits
PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
PSCI 332 - Global Environmental Pol.	3 Credits
PSCI 334 - International Security	3 Credits
PSCI 335 - American Foreign Policy	3 Credits
PSCI 336 - European Union	3 Credits
PSCI 337 - Model United Nations	3 Credits
PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits

PSCI 431 - Politics of Global Migration	3 Credits
PSCI 432 - Inter-American Relations	3 Credits
PSCI 433 - International Law & Org	3 Credits
PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

Course	Credits
PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
PSCI 341 - Political Parties and Election	3 Credits
PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Teaching Government Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Political Science (Minor); Track: Teaching Government

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Note: Nine of the 21 required credits must be in 300-400-level courses.

Required Lower Division Courses

Rule: Must complete all of the following courses:

Course	Credits
PSCI 210S - Intro to American Government	3 Credits
PSCI 220S - Intro to Comparative Govt	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 250E - Intro to Political Theory	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Required Upper Division Field Courses

Rule: Must complete 1 course in 3 of the 5 following options:

Minimum Required Grade: C-

9 Total Credits Required

Public Administration

Rule: May select 1 of the following courses:

Course	Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 360 - Exp Offering: Public Admin	1 To 6 Credits
PSCI 361 - Public Administration	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 391 - Special Topics	1 To 9 Credits
PSCI 448 - Health Care Policy	3 Credits
PSCI 449 - Environmental Health Policy	3 Credits
PSCI 461 - Administrative Law	3 Credits
PSCI 462 - Human Resource Management	3 Credits
PSCI 463 - Development Administration	3 Credits
PSCI 466 - Nonprofit Adm & Pub Svc	3 Credits
PSCI 467 - Adv Nonprofit Adm	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
PSCI 469 - Ethics and Public Policy	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Political Theory

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 350 - Exp Offering: Political Theory	1 To 6 Credits
	PSCI 352 - American Political Thought	3 Credits
	PSCI 354 - Contemp Issues in Pol Theory	3 Credits
	PSCI 450 - Exp Offering: Political Theory	1 To 9 Credits
	PSCI 451 - Ancient & Medieval Pol Phil	3 Credits
	PSCI 452 - Utopianism and its Critics	3 Credits
	PSCI 453 - Modern Political Theory	3 Credits
	Minimum Required Grade: C-	0-3 Total Credits Required

Comparative Government

Rule: May select 1 of the following courses:

—	Course	Credits
	PSCI 320 - Exp Offering: Comp Politics	1 To 6 Credits
	PSCI 321 - Post-Communist Politics	3 Credits
	PSCI 322 - Politics of Europe	3 Credits
	PSCI 324 - Climate Policies: China & U.S.	3 Credits
	PSCI 325 - Politics of Latin America	3 Credits
	PSCI 326 - Politics of Africa	3 Credits
	PSCI 327 - Politics of Mexico	3 Credits
	PSCI 328 - Politics of China	3 Credits
	PSCI 329 - Politics of Japan	3 Credits
	PSCI 420 - Exp Offering: Comp Politics	1 To 9 Credits

	PSCI 421 - Comparative Legal Systems	3 Credits
	PSCI 422 - Revolution & Reform in China	3 Credits
	PSCI 443 - Politics of Social Movements	3 Credits
Minimum Required Grade: C-		0-3 Total Credits Required

International Relations

Rule: May select 1 of the following courses:

	Course	Credits
	PSCI 330 - Exp Offering: Intrnt Relations	1 To 6 Credits
	PSCI 332 - Global Environmental Pol.	3 Credits
	PSCI 334 - International Security	3 Credits
	PSCI 335 - American Foreign Policy	3 Credits
	PSCI 336 - European Union	3 Credits
	PSCI 337 - Model United Nations	3 Credits
	PSCI 430 - Exp Offering: Intrnt Relations	1 To 9 Credits
	PSCI 431 - Politics of Global Migration	3 Credits
	PSCI 432 - Inter-American Relations	3 Credits
	PSCI 433 - International Law & Org	3 Credits
	PSCI 463 - Development Administration	3 Credits
Minimum Required Grade: C-		0-3 Total Credits Required

American Politics

Rule: May select 1 of the following courses:

	Course	Credits
	PSCI 340 - Exp Offering: American Govt	1 To 6 Credits
	PSCI 341 - Political Parties and Election	3 Credits

PSCI 342 - Media, Public Opinion, Polling	3 Credits
PSCI 344 - State and Local Government	3 Credits
PSCI 346 - American Presidency	3 Credits
PSCI 347 - U.S. Congress	3 Credits
PSCI 348 - US Multicultural Politics	3 Credits
PSCI 352 - American Political Thought	3 Credits
PSCI 365 - Pub Policy Issues and Analysis	3 Credits
PSCI 370 - Courts and Judicial Politics	3 Credits
PSCI 440 - Exp Offering: American Govt	1 To 9 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PSCI 444 - Am Political Participation	3 Credits
PSCI 445 - Political Psychology	3 Credits
PSCI 468 - Public Policy Cycle	3 Credits
Minimum Required Grade: C-	0-3 Total Credits Required

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Psychology Department

Christine Fiore, Chair

Psychology is the science of the behavior of humans and other animals. The psychologist, using scientific methods, seeks to understand the causes and purposes of behavior. Psychologists pursue their research and its application in academia, business, government, health, military and social service. The department offers training that leads to the Bachelor of Arts, Master of Arts, Educational Specialist, and Doctor of Philosophy degrees.

»Admission Requirements

To be admitted to either option of the psychology major, a student must satisfy the following requirements:

1. completion of 30 credits overall
2. completion of 6 credits in psychology courses, including PSYX 100S (PYSC 100S).
In addition, to be admitted to the research option of the psychology major, students also should have:
3. a minimum overall GPA of 3.0

Students who intend to major in psychology but who have not yet met the credit hour requirements are admitted to the program as pre-psychology majors. Prior to meeting the above requirements for admission pre-psychology students should go to the Undergraduate Graduate Advising Center for advising.

Department Faculty

Professors

Christine Fiore, Ph.D., Professor and Department Chair
Stuart Hall, Professor Physiological Psychology and Clinical Neuropsychology
Lois Muir, Professor Developmental Psychology
David Schuldberg, Professor of Psychology; Director of Evaluation, National Native Children's Trauma Center
Tom Seekins, Professor Developmental Psychology
Paul Silverman, Professor Developmental Psychology; Chair, Interdisciplinary Minor in Human and Family Development
Allen Szalda-Petree, Professor, Animal Learning/Comparative
Arlene Walker-Andrews, Associate Provost and Professor of Psychology
Jennifer Waltz, Professor Clinical Psychology

Associate Professors

Duncan G Campbell, Associate Professor Clinical Psychology
Bryan Cochran, Associate Professor of Psychology and Director of Clinical Training
Lucian Conway, Associate Professor Social Psychology
Daniel J. Denis, Associate Professor of Quantitative Psychology
Greg Machek, Associate Professor of School Psychology
Cameo Stanick, Associate Professor Clinical Psychology
Gyda Swaney, Associate Professor Clinical Psychology

Assistant Professors

Jacqueline Brown, Ph.D. Assistant Professor of School Psychology
Anisa Goforth, Assistant Professor of Psychology and Director of the School Psychology Graduate Training Program
Yoonhee Jang, Assistant Professor Cognitive Psychology
Craig McFarland, Assistant Professor, Clinical Neuropsychology
Rachel Severson, Assistant Professor Developmental Psychology

Adjunct Faculty

Shannon Houck, Adjunct Faculty
Nicole McCray, Adjunct Instructor

Research Faculty

Ann Cook, Research Professor Bioethics
Rosemary Hughes, Research Professor
Craig Ravesloot, Research Associate Professor Clinical Psychology

Affiliates

Janet Allison
Diana Bjorgen
Timothy Casey
J. William Cook
Scott Cramton
Dudley Dana
Patrick Davis
Susan Day
Kevin Dohr
Blaise Favara
Gordon Gerrish
Shan Guisinger
M. Joan Hess-Homeier
Joyce Hocker
Mary Jenni
Stephen Langer
Joanna Legerski
Colleen Murphy
Melissa Neff
Theresa Reed
Brenda Roche
Wendy Shields
Marianne Spitzform
Linda Thomas
Kathryn Whipple-Kilmer
Nadine Wisniewski
Danette Wollersheim
Yemataw Yehualashet

Emeritus Professors

Charles Allen
Margaret Beebe-Frankenberger, Associate Professor of Psychology
Laurence Berger
George Camp
Nabil Haddad, Emeritus
Frances Hill
Lynne Koester, Professor Developmental Psychology
John Means
David Strobel
James Walsh
Herman Walters
Janet Wollersheim

Course Descriptions

Biology-Human

- **BIOH 380 - Cellular and Molecular Neuroscience**

Credits: 3. The material covered will give students a practical knowledge of the subcellular organization and function of the nervous system. Students will learn how brain energy metabolism is a dynamic, and highly regulated process. We will explore the variety forms of neuronal chemical communication that may not conform to basic concepts of synaptic signaling. We will study processes that are involved in the growth and guidance of axons leading to the formation as well as the elimination of synapses. We will learn about the processes that are involved in the regulation of sexual differentiation of the nervous system. We will explore the basic mechanisms involved in learning and memory. Finally, Students will learn about the molecular and cellular mechanisms associated with neurodegenerative disease.

- **BIOH 441 - CNS Diseases**

Credits: 3. This course is designed as a special topics course within the new neuroscience major that focuses on developing an understanding of common diseases affecting the Central Nervous System (CNS), such as stroke, traumatic brain injury, Alzheimer disease, Parkinson's disease, schizophrenia, amyotrophic lateral sclerosis, epilepsy, etc.) For each of the CNS disorders surveyed (which will vary from year to year), an emphasis will be placed on framing the symptoms and etiology of the disease within the context of the normal neuronal function at the anatomical, cellular and molecular levels. Where feasible, lectures will be supplemented with presentations by clinicians with expertise in the field. Students will also develop an appreciation for the linkages between basic and translational research in neurological diseases as well as the importance of disease models in the development of new therapies.

Psychology

- **PSYX 100S - Intro to Psychology**

Credits: 4. Offered every term. Introduction to the scientific study of behavior in humans and other animals. Credit not allowed for both PSY 100S and PSYC 100S. **Course Attributes:**

Social Sciences Course Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **PSYX 105 - Careers in Psychology**

Credits: 1. Offered intermittently. Exploration of the various careers available in the general area of mental health research and practice.

- **PSYX 107 - Intergroup Dialog**

Credits: 1. Offered autumn. Reflective dialogue about issues of identity, diversity, and social justice.

- **PSYX 120 - Research Methods I**

Credits: 3. Offered every term. Prereq., PSYX 100S. Experimental and other quantitative methods employed in the scientific study of behavior.

- **PSYX 191 - Special Topics**

Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **PSYX 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **PSYX 222 - Psychological Statistics**

Credits: 3. Offered every term. Prereq., PSYX 120; M 115, M 162 or 171. Application of statistical techniques to psychological data. Credit not allowed for both PSYX 222 and SOCI 202.

- **PSYX 233 - Fund of Psychology of Aging**

Credits: 3. Offered intermittently. An overview of theories and research findings in the psychology

of adulthood and aging.

- **PSYX 250N - Fund of Biological Psychology**
Credits: 3. Offered every term. Prereq., PSYX 100S. Introduction to the relationships between biological structures and mechanisms and their corresponding psychological processes and events. Origins and adaptations of structures and behaviors as well as the methods used to study these relationships. **Course Attributes:** Natural Science Course
- **PSYX 270 - Fund Psychology of Learning**
Credits: 3. Offered autumn. Prereq., PSYX 100S. Basic theory and research on the nature of animal learning and behavior.
- **PSYX 280 - Fund of Memory and Cognition**
Credits: 3. Offered intermittently. Prereq., PSYX 100S. The acquisition and uses of knowledge. An examination of research and theories of human learning, memory, and thinking.
- **PSYX 290 - Supervised Research**
Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. **Course Attributes:** Research & Creative Schlrshp
- **PSYX 291 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums
- **PSYX 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr.
- **PSYX 294 - Seminar/Workshop**
Credits: 1. (R 3) Offered intermittently. Prereq., consent of instr.; coreq., another psychology course. Taken in conjunction with another psychology course to provide additional content and discussion for honors students. Consent of the corequisite course instructor is required for this course.
- **PSYX 298 - Internship**
Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements off-campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internship graduation limit 6
- **PSYX 320 - Research Methods III**
Credits: 3. Offered every term. Prereq., PSYX 222. An appreciation of the experimental approach to the scientific study of behavior through student-conducted experiments. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced
- **PSYX 340 - Abnormal Psychology**
Credits: 3. Offered every term. Prereq., PSYX 100S. Description and classification of abnormal behavior.
- **PSYX 345 - Child & Adolescent Psych Dis**
Credits: 3. Offered intermittently. Prereq., PSYX 100S and 230. Study of causes, characteristics, assessment and treatment of emotional, social and intellectual disorders. The age span studied will range from infancy through adolescence.
- **PSYX 348 - Psychology of Family Violence**
Credits: 3. Offered spring. Prereq., PSYX 100S. Same as WGS 385. Exploration of theoretical explanations for the presence of violence in American families; research and interventions in such areas as child physical and sexual abuse, battering of women, marital rape, spousal homicide, etc.

- **PSYX 352 - Comparative Psychology**
 Credits: 3. Offered autumn. Prereq., PSYX 250N. Advanced evaluation and analysis of animal behavior through the synthesis of theory, research, and methods found in comparative psychology, behavioral biology, ethology, and sociobiology.
- **PSYX 356 - Human Neuropsychology**
 Credits: 3. Offered spring. Prereq., PSYX 250N. Study of the organization of the nervous system, functional neuroanatomy, neuropathology, neurological disorders, behavioral neurology, and clinical neuropsychology.
- **PSYX 360 - Social Psychology**
 Credits: 3. Offered every term. Individual behavior as a function of interpersonal interaction.
- **PSYX 362 - Multicultural Psychology**
 Credits: 3. Offered autumn even-numbered years. Current theories and research on culture, race, and ethnicity, and how the sociocultural context influences psychological processes.
- **PSYX 376 - Prin Cognit Behav Mod**
 Credits: 3. Offered intermittently. Prereq., PSYX 270S. Study of basic principles, assumptions, methodology and applications of behavior modification. Discussion of current literature relevant to behavioral assessment and treatment of major psychological disorders.
- **PSYX 377 - Personalized Student Instr**
 Credits: 3. Offered every term. Prereq., consent of instr. Experience with the personalized student instruction method of teaching, gained through participating as a proctor in the introductory psychology course.
- **PSYX 378 - Intro to Clinical Psyc**
 Credits: 3. Offered intermittently. Prereq., PSYX 340. Clinical psychology as a science and a profession. Theoretical models and techniques of assessment and intervention. Case illustrations.
- **PSYX 383 - Health Psychology**
 Credits: 3. Prereq., PSYX 100S and PSYX 250N. This course will provide an overview of the growing field of health psychology, with particular attention to the biological, psychological, and social determinants of health. The course will also provide overviews of major illnesses for which psychologists can and do play a major role and will examine the tools and techniques that clinical health psychologists employ in medical settings.
- **PSYX 385 - Psychology of Personality**
 Credits: 3. Offered intermittently Prereq., PSYX 100S. Introduction to theories and research in personality. Intensive survey of theoretical concepts and a detailed examination of experimental methods and experiments in the field of personality.
- **PSYX 390 - Adv Supervised Research**
 Credits: 1 TO 3. (R-3) Offered every term. Prereq., 12 credits in psychology including PSYX 297 and consent of instr. **Course Attributes:** Research & Creative Schlrshp
- **PSYX 391 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., nine credits in psychology and consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **PSYX 392 - Independent Study**
 Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instr.
- **PSYX 398 - Internship**
 Credits: 1 TO 3. (R-3) Offered every term. Prereq., consent of instructor. Extended classroom experience which provides practical application of classroom learning during placements off

campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Course Attributes: Internships/Practicums Internship graduation limit 6

- **PSYX 400 - History & System in Psychology**

Credits: 3. Offered every term. Prereq., 15 credits in psychology. Origin and development of basic concepts and methods in scientific psychology. **Course Attributes:**
Writing Course-Upper-Division Writing Course-Advanced

- **PSYX 441 - Addiction Studies**

Credits: 3. Offered intermittently. Same as SOCI 433 and SW 423. Examination of chemical dependency and behavioral compulsion, including alcohol and other drugs, gambling, eating disorders, sexual addictions. Ecosystems perspective on etiology, treatment, prevention, family dynamics, community response, and societal contributors.

- **PSYX 442 - Counseling Theories in Context**

Credits: 3. Offered autumn. Prereq., PSYX 100S. Same as COUN 485 and SW 485. This course introduces students to the primary theories that constitute the intellectual foundation for common counseling and psychotherapy techniques, with a special focus on gender, interpersonal influence strategies and diversity issues.

- **PSYX 491 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., 12 credits in psychology and consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **PSYX 494 - Seminar/Workshop**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., nine credits in psychology and consent of instr. Topics of current interest with critical examination of the literature. **Course Attributes:**
Omnibus Course

- **PSYX 499 - Senior Thesis**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., junior or senior standing and consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication.

- **PSYX 501 - Teaching of Psychology**

Credits: 3. Offered autumn. Prereq., graduate standing in psychology and consent of instr. Exploration and practice of effective teaching techniques. Level: Graduate

- **PSYX 510 - Trends Psyc Research**

Credits: 1. Offered autumn. Brief survey of the departmental faculty's ongoing research interests. Level: Graduate

- **PSYX 511 - Professional Issues**

Credits: 1. Offered autumn. Prereq., graduate standing in clinical psychology. Introduction to the professional role and skills in the clinical psychology field. Level: Graduate

- **PSYX 512 - Field Placement-Clinical**

Credits: 1 TO 12. (R-12) Offered every term. Prereq., graduate standing in psychology and consent of instr. Supervised assessment and intervention experience in applied clinical settings. Level: Graduate

- **PSYX 520 - Adv Psyc Stat I**

Credits: 3. Offered autumn. Prereq., undergraduate statistics and consent of instr. Introduction to descriptive and inferential statistics, probability distributions, null hypothesis significance testing, one and two sample techniques, analysis of variance and the general linear model. Level: Graduate

- **PSYX 521 - Adv Psyc Stat II**

Credits: 4. Offered spring. Prereq., PSYX 520 or consent of instr. Multiple comparisons among means, factorial ANOVA, random effects and mixed models, correlation, simple and multiple regression, analysis of covariance. Level: Graduate

- **PSYX 522 - Multivariate Statistics**

Credits: 3. Offered autumn. Prereq., PSYX 520 and 521. Introduction to matrix algebra, multivariate analysis of variance, multivariate analysis of covariance, simple slopes in multiple regression, discriminant analysis, canonical correlation, principal components analysis, factor analysis, cluster analysis. Level: Graduate

- **PSYX 523 - Research Design**

Credits: 3. Offered spring. Prereq., graduate standing in psychology. The examination and application of the principles and methods of experimental and quasi-experimental research design in psychology. Level: Graduate

- **PSYX 524 - Tests & Measurement**

Credits: 3. Offered autumn. Prereq., graduate standing in psychology or education. Introduction to measurement emphasizing correspondence between research and practice. Provides a theoretical and practical basis for evaluating and using measurement data. Level: Graduate

- **PSYX 525 - Psyc Evaluation I**

Credits: 3. Offered autumn. Prereq., undergraduate statistics and consent of instr. Individual tests of aptitudes and intellectual abilities; psychometric considerations in clinical assessment; objective personality assessment. Level: Graduate

- **PSYX 526 - Psyc Eval II:App and Obj**

Credits: 3. Offered spring. Prereq., enrollment in doctoral program in psychology and consent of instr. Objective methods in psychological assessment; psychological evaluation techniques in the clinical context. Level: Graduate

- **PSYX 530 - Clin and Diag Interviewing**

Credits: 3. Offered autumn. Prereq., graduate standing in clinical psychology, school psychology, or counseling. Microcounseling skills development through interactive practice and feedback. Level: Graduate

- **PSYX 531 - Prin of Psychotherapy**

Credits: 3. Offered autumn. Prereq., enrollment in doctoral program in clinical psychology. The philosophical and scientific bases of major systems of psychotherapy are reviewed. Psychotherapy research methods, issues, and findings are introduced. Level: Graduate

- **PSYX 532 - Adv Psychopathology**

Credits: 3. Offered autumn. Prereq., graduate standing in psychology or consent of instr. Symptoms, etiology, diagnostic criteria and treatment of the major psychological disorders, with an emphasis on current research findings. Level: Graduate

- **PSYX 534 - Applied Clinical Methods**

Credits: 1 TO 4. (R-24) Offered every term. Prereq., graduate standing in the clinical program and consent of instr. Theoretical and applied work in a supervised clinical setting. Level: Graduate

- **PSYX 535 - Child Interventions**

Credits: 3. (R-12) Offered every term. Prerequisite: graduate standing in the clinical psychology program and consent of instructor. Review of clinical research and methodology in youth mental health. Specific treatment interventions are explored for the practitioner and also may serve as a valuable base for engaging in psychological consultation with youth and families. Level: Graduate

- **PSYX 536 - AdvcdChld/Adol Psychopathology**

Credits: 3. Offered spring. Prereq., graduate standing in psychology or consent of instr. Advanced study of the characteristics, etiology, assessment, and treatment of the emotional, social, and

intellectual problems covering the span from infancy through adolescence. DSM and Education Code criteria will be compared. Level: Graduate

- **PSYX 537 - Child Assessment**

Credits: 3. Offered every other year spring semester. Provides an intensive introduction to diagnostic, behavioral, and personality assessment of children and adolescents. Level: Graduate

- **PSYX 540 - Adv Development Psyc**

Credits: 3. Offered intermittently. Prereq., undergraduate course in developmental psychology or consent of instr. Psychological and behavioral development through the life span. Level: Graduate

- **PSYX 545 - Field Placement Humn Devel**

Credits: 1 TO 6. (R-9) Offered autumn and spring. Prereq., PSYX 540 or equiv. Individualized, applied experience working with and/or observing a particular population of interest, including children, adolescents, or older adults. Involves the completion of an independent project, which may comprise program assessment, research proposal development, etc. Level: Graduate

- **PSYX 550 - Ad Social Psychology**

Credits: 3. Offered spring even-numbered years. Prereq., undergraduate course in social psychology or consent of instr. Theory and experiment in the analysis of individual behavior in relation to social stimuli. Level: Graduate

- **PSYX 551 - Advanced Personality**

Credits: 3. Offered autumn odd-numbered years. Prereq., undergraduate course in personality or consent of instr. Theory and research on human personality and behavior. Emphasis on issues and topics of contemporary importance. Level: Graduate

- **PSYX 560 - Advanced Learning & Cognition**

Credits: 3. Offered spring odd-numbered years. Prereq., undergraduate course in perception, cognition, or learning, or consent of instr. A survey of principles, theories, and methods pertaining to how humans and animals learn and represent the world. Level: Graduate

- **PSYX 565 - Advanced Cognition**

Credits: 3. Offered autumn odd-numbered years. Prereq., undergraduate course in perception, cognition, or learning, or consent of instr. Examination of the acquisition of knowledge through perception and learning, the retention of knowledge, and the use of knowledge through thinking and reasoning. Level: Graduate

- **PSYX 571 - Adv Physiological Psyc**

Credits: 3. Offered autumn even-numbered years. Prereq., consent of instr. Brain mechanisms and behavior; electrophysiological correlates of behavior. Level: Graduate

- **PSYX 580 - Professional School Psych**

Credits: 3. Offered autumn. Prereq., graduate standing in school psychology. The theory, role, and function of school psychology as a profession; includes historical precursors and fit with current systems of psychology. Level: Graduate

- **PSYX 582 - Behav Assmnt & Intervention**

Credits: 3. Offered autumn. Prereq., graduate standing in psychology or consent of instr. Introduces theoretical and practical applications of behavioral assessment and intervention. Students develop skills using behavioral observation, sampling and intervention design/implementation through supervised experience in applied settings. Level: Graduate

- **PSYX 583 - Ed Assmnt & Intervention**

Credits: 4. Offered spring. Prereq., graduate standing in psychology or education. Develops educational assessment and intervention skills using problem-solving strategies to make educational decisions. Students develop assessment and intervention design/implementation through supervised experience in applied settings. Level: Graduate

- **PSYX 587 - School Psyc Methods**
 Credits: 3. (R-9) Offered every term. Prereq., graduate standing in school psychology and consent of instr. Applied school psychology work in a supervised setting. Level: Graduate
- **PSYX 588 - School Psyc Internship**
 Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., enrollment in school psychology program or consent of instr. Supervised work experience in the role and functions of school psychologists. Level: Graduate
- **PSYX 594 - Seminar**
 Credits: 1 TO 12. (R-12) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate
- **PSYX 595 - Special Topics**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
 Course Attributes: Internships/Practicums
- **PSYX 596 - Independent Study**
 Credits: 1 TO 9. (R-9) Offered autumn and spring Prereq., consent of instr. Assigned readings and other special study projects. Level: Graduate Course Attributes: Service Learning/Volunteer
- **PSYX 597 - Research**
 Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Independent supervised research projects, other than thesis or dissertation. Level: Graduate
- **PSYX 599 - Thesis/Research Project**
 Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. M.A. thesis or M.A. Research project Level: Graduate
- **PSYX 625 - Clinical Assessment**
 Credits: 2. Offered annually. Prereq., advanced graduate standing in clinical psychology program and consent of instructor. Students will conduct a variety of clinical assessments, including personality and neuropsychological testing. Students will gain experience with all phases of clinical assessment (e.g., interviewing, test administration, report writing, etc.) Level: Graduate
- **PSYX 630 - Ethics, Prof & Cult Iss**
 Credits: 3. Offered spring. Prereq., enrollment in doctoral program in clinical or experimental psychology. Review of ethical principles and professional standards of psychologists. Analysis of the influence of cultural factors upon professional conduct. Level: Graduate
- **PSYX 631 - Intervention**
 Credits: 3. (R-12) Offered every term. Prereq., graduate standing in the clinical psychology program and consent of instr. Review of clinical research and methodology. Specific treatment interventions are explored for the practitioner and also may serve as a valuable base for engaging in psychological consultation. Each offering will have a unique title. Level: Graduate
- **PSYX 632 - Curr Clinical Topics**
 Credits: 3. (R-12) Offered intermittently. Prereq., graduate standing in psychology and consent of instr. Current topics in clinical psychology with reviews of theory, research, and methodology. Each offering will have a unique title. Level: Graduate
- **PSYX 634 - Adv App Clinical Methods**
 Credits: 1 TO 4. (R-6) Offered every term. Prereq., PSYX 534 and consent of instr. Advanced clinical work in a supervised setting. Level: Graduate
- **PSYX 638 - Clin Psyc Internship**
 Credits: 1 TO 3. (R-6) Offered every term. Prereq., proficiency in clinical techniques. Clinical

internship offered by the psychology staff of a hospital, clinic or other approved agency in coordination with The University of Montana Clinical Psychology Program. Level: Graduate

- **PSYX 680 - Consultation**

Credits: 3 TO 4. Offered spring even-numbered years. Prereq., graduate standing in school psychology. Theoretical background and case conceptualization in academic and behavioral consultation. Doctoral level also includes a supervised direct experience in applied settings. Level: Graduate

- **PSYX 694 - Seminar**

Credits: 1 TO 12. (R-12) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

- **PSYX 697 - Advanced Research**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Prereq., consent of instr. Independent research projects, other than thesis or dissertation. Level: Graduate

- **PSYX 699 - Dissertation**

Credits: 1 TO 18. (R-18) Offered every term. Prereq., consent of instr. Doctoral dissertation research activities. Level: Graduate

Psychology Research

Bachelor of Arts - Psychology; Research Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 3.0

Note: The 3.0 GPA requirement is to gain admittance into the Research Emphasis. A minimum of 60 credits must be in non-psychology courses.

Lower Core Courses

Rule: Must complete all of the following: courses

Course	Credits
PSYX 100S - Intro to Psychology	4 Credits
PSYX 120 - Research Methods I	3 Credits
PSYX 222 - Psychological Statistics	3 Credits
Minimum Required Grade: C	10 Total Credits Required

Foundation Courses

Rule: Must complete 4 of the following courses

Course	Credits
PSYX 230 - Developmental Psychology	3 Credits
PSYX 233 - Fund of Psychology of Aging	3 Credits
PSYX 340 - Abnormal Psychology	3 Credits
PSYX 360 - Social Psychology	3 Credits
PSYX 385 - Psychology of Personality	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Fundamentals Courses

Rule: Must complete 2 of the following courses

Course	Credits
PSYX 250N - Fund of Biological Psychology	3 Credits
PSYX 270 - Fund Psychology of Learning	3 Credits
PSYX 280 - Fund of Memory and Cognition	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Clinical Courses

Rule: Must complete 1 of the following courses

Course	Credits
PSYX 345 - Child & Adolescent Psych Dis	3 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Theory Courses

Rule: Must complete 2 of the following courses

—	Course	Credits
	PSYX 352 - Comparative Psychology	3 Credits
	PSYX 356 - Human Neuropsychology	3 Credits
	PSYX 377 - Personalized Student Instr	3 Credits
	PSYX 400 - History & System in Psychology	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Research Courses

Rule: Must complete all of the following courses:

Note: PSYX 290 must be taken for 2 credits

—	Course	Credits
	PSYX 290 - Supervised Research	1 To 6 Credits
	PSYX 320 - Research Methods III	3 Credits
Minimum Required Grade: C		5 Total Credits Required

Mathematics Core Courses

Rule: Must complete 1 of the following courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C		3 Total Credits Required

Psychology B.A.

Bachelor of Arts - Psychology; General Psychology Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Note: A minimum of 60 credits must be in non-psychology courses.

Lower Core Courses

Rule: Must complete all of the following courses

Course	Credits
PSYX 100S - Intro to Psychology	4 Credits
PSYX 120 - Research Methods I	3 Credits
PSYX 222 - Psychological Statistics	3 Credits
Minimum Required Grade: C	10 Total Credits Required

Foundation Courses

Rule: Must complete 4 of the following courses

Course	Credits
PSYX 230 - Developmental Psychology	3 Credits
PSYX 233 - Fund of Psychology of Aging	3 Credits
PSYX 340 - Abnormal Psychology	3 Credits
PSYX 360 - Social Psychology	3 Credits
PSYX 385 - Psychology of Personality	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Fundamentals Courses

Rule: Must complete 2 of the following courses

Course	Credits
PSYX 250N - Fund of Biological Psychology	3 Credits
PSYX 270 - Fund Psychology of Learning	3 Credits
PSYX 280 - Fund of Memory and Cognition	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Upper Division Electives

Rule: Must complete 4 3-credit courses from the following list

Note: May not include PSYX 392, PSYX 398, or PSYX 499.

Course	Credits
COUN 485 - Counseling Theories	3 Credits
PSYX 320 - Research Methods III	3 Credits
PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
PSYX 345 - Child & Adolescent Psych Dis	3 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
PSYX 352 - Comparative Psychology	3 Credits
PSYX 356 - Human Neuropsychology	3 Credits
PSYX 362 - Multicultural Psychology	3 Credits
PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 377 - Personalized Student Instr	3 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
PSYX 383 - Health Psychology	3 Credits
PSYX 390 - Adv Supervised Research	1 To 3 Credits
PSYX 391 - Special Topics	1 To 6 Credits
PSYX 400 - History & System in Psychology	3 Credits

	PSYX 441 - Addiction Studies	3 Credits
	PSYX 442 - Counseling Theories in Context	3 Credits
	PSYX 491 - Special Topics	1 To 6 Credits
	PSYX 494 - Seminar/Workshop	1 To 6 Credits
	S W 423 - Addiction Studies	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Math Electives

Rule: Must complete 1 of the following courses

Course	Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 151 - Precalculus	4 Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
Minimum Required Grade: C	3 Total Credits Required

Teaching Psychology

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Teacher Preparation in Psychology

Students who want to be licensed to teach psychology at the high school level must complete the BA degree requirements in psychology (general option). They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a

teaching minor in psychology. See the Department of Curriculum and Instruction for information about admission to the Teacher Education Program and completion of these licensure programs.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Psychology; Track: Teaching Psychology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 46

Required Cumulative GPA: 2.0

Note: A minimum of 60 credits must be in non-psychology courses. Students who want to be licensed to teach psychology at the high school level must complete the BA degree requirements in psychology (general option). This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Lower Core Courses

Rule: Must complete all of the following courses

—	Course	Credits
	PSYX 100S - Intro to Psychology	4 Credits
	PSYX 120 - Research Methods I	3 Credits
	PSYX 222 - Psychological Statistics	3 Credits
	Minimum Required Grade: C	10 Total Credits Required

Foundation Courses

Rule: Must complete 4 of the following courses

—	Course	Credits
	PSYX 230 - Developmental Psychology	3 Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
	PSYX 340 - Abnormal Psychology	3 Credits

	PSYX 360 - Social Psychology	3 Credits
	PSYX 385 - Psychology of Personality	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Fundamentals Courses

Rule: Must complete 2 of the following courses

—	Course	Credits
	PSYX 250N - Fund of Biological Psychology	3 Credits
	PSYX 270 - Fund Psychology of Learning	3 Credits
	PSYX 280 - Fund of Memory and Cognition	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Upper Division Electives

Rule: Must complete 4 3-credit courses from the following list

Note: May not include PSYX 392, PSYX 398, or PSYX 499.

—	Course	Credits
	COUN 485 - Counseling Theories	3 Credits
	PSYX 320 - Research Methods III	3 Credits
	PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
	PSYX 345 - Child & Adolescent Psych Dis	3 Credits
	PSYX 348 - Psychology of Family Violence	3 Credits
	PSYX 352 - Comparative Psychology	3 Credits
	PSYX 356 - Human Neuropsychology	3 Credits
	PSYX 362 - Multicultural Psychology	3 Credits
	PSYX 376 - Prin Cognit Behav Mod	3 Credits
	PSYX 377 - Personalized Student Instr	3 Credits
	PSYX 378 - Intro to Clinical Psyc	3 Credits
	PSYX 383 - Health Psychology	3 Credits

	PSYX 390 - Adv Supervised Research	1 To 3 Credits
	PSYX 391 - Special Topics	1 To 6 Credits
	PSYX 400 - History & System in Psychology	3 Credits
	PSYX 441 - Addiction Studies	3 Credits
	PSYX 442 - Counseling Theories in Context	3 Credits
	PSYX 491 - Special Topics	1 To 6 Credits
	PSYX 494 - Seminar/Workshop	1 To 6 Credits
	S W 423 - Addiction Studies	3 Credits
Minimum Required Grade: C		12 Total Credits Required

Teaching Psychology

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C		3 Total Credits Required

Math Electives

Rule: Must complete 1 of the following courses

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 151 - Precalculus	4 Credits
	M 162 - Applied Calculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C		3 Total Credits Required

Human and Family Development Minor

Minor - Human and Family Development (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Note: To earn a minor the student must complete 24 credits, with 11 at the 300 level or above. All students are required to take a 12-credit core curriculum and, with the help of a faculty advisor, to develop a written statement of goals and interests along with a planned curriculum that includes 12 additional credits of electives consistent with the stated goals and interests. At least 6 credits of electives must be outside of the student's major.

Core Courses

Rule: Must complete the following subcategories

12 Total Credits Required

Subcategory 1

Rule: Must complete 1 of the following courses

—	Course	Credits
	PSYX 230 - Developmental Psychology	3 Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Subcategory 2

Rule: Must complete all of the following courses:

Note: HFD 494 may be taken for 1 credit. HFD 498 must be taken for a minimum of 2 credits. Education majors may take EDEC 396 to fulfill this requirement.

—	Course	Credits
	HFD 494 - Seminar in Human Development	1 To 3 Credits

HFD 498 - Internship	1 To 4 Credits
Minimum Required Grade: C	3 Total Credits Required

Subcategory 3

Rule: Must complete 1 of the following courses

Course	Credits
COMX 311 - Family Communication	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Subcategory 4

Rule: Must complete 1 of the following courses

Course	Credits
C&I 520 - Educational Research	3 Credits
COMX 460 - Research Methods	3 Credits
PSYX 120 - Research Methods I	3 Credits
PSYX 320 - Research Methods III	3 Credits
S W 400 - Social Work Research	3 Credits
SOCI 318 - Sociological Research Methods	3 Credits
Minimum Required Grade: C	3 Total Credits Required

Elective Courses

Rule: Must complete 12 credits from any of the courses listed in the subcategories below; at least 6 credits must be taken outside of the student's major

Note: The list of electives is categorized to assist the student wishing to focus on one of these areas. Students may plan curricula which do not correspond to these categories, but should choose among courses from this list. Occasionally "special topics" courses are offered. Students may use these as electives with the consent of their advisors.

Check with departments regarding variable-credit 395 and 495-Special Topics listings.

12 Total Credits Required

Early Childhood

Rule: May complete any of the following courses

Note: Must complete all course work prior to taking HFD 498

Course	Credits
C&I 421 - Issues in Early Intervention	3 Credits
CSD 210 - Speech & Lang Devel	3 Credits
EDEC 310 - Child in the Family	3 Credits
EDEC 330 - Early Childhood Education	3 Credits
EDEC 396 - EC Fieldwork/Practicum	3 Credits
EDSP 403 - Curric/Mthds Early Spec Educ	3 Credits
EDSP 462 - Spec Ed Law, Policy, Practice	3 Credits
EDU 345 - Excptnlty & Clsrm Mgmt	3 Credits
EDU 491 - Special Topics/Exp Courses	1 To 6 Credits
EDU 494 - Seminar:Refl Pract & App Rsrch	1 To 9 Credits
HFD 498 - Internship	1 To 4 Credits
PSYX 290 - Supervised Research	1 To 6 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
Minimum Required Grade: C	0-12 Total Credits Required

School-Age

Rule: May complete any of the following courses

Course	Credits
EDU 221 - Ed Psych & Measuremnt	3 Credits
EDU 345 - Excptnlty & Clsrm Mgmt	3 Credits
PHAR 110N - Use & Abuse of Drugs	3 Credits
PSYX 339 - Curr Tpcs/Development Psyc	3 Credits

PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
S W 300 - Hum Behav & Soc Environ	3 Credits
S W 420 - Child Abuse/Child Welfare	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C	0-12 Total Credits Required

Adolescence

Rule: May complete any of the following courses

Course	Credits
EDSP 462 - Spec Ed Law, Policy, Practice	3 Credits
EDU 221 - Ed Psych & Measuremnt	3 Credits
EDU 345 - Excptnlty & Clsrn Mgmt	3 Credits
PHAR 110N - Use & Abuse of Drugs	3 Credits
PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
PSYX 345 - Child & Adolescent Psych Dis	3 Credits
PSYX 376 - Prin Cognit Behav Mod	3 Credits
PSYX 378 - Intro to Clinical Psyc	3 Credits
S W 300 - Hum Behav & Soc Environ	3 Credits
S W 450 - Children and Youth at Risk	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
Minimum Required Grade: C	0-12 Total Credits Required

Gerontology

Rule: May complete any of the following courses

—	Course	Credits
	AHHS 325 - Introduction to Gerontology	3 Credits
	AHHS 327 - MGS Meeting	1 Credits
	AHHS 430 - Health Aspects of Aging	3 Credits
	PSYX 233 - Fund of Psychology of Aging	3 Credits
	PSYX 339 - Curr Tpcs/Development Psyc	3 Credits
	S W 455 - Social Gerontology	3 Credits
Minimum Required Grade: C		0-12 Total Credits Required

Family Development

Rule: May complete any of the following courses

—	Course	Credits
	COMX 311 - Family Communication	3 Credits
	COMX 414 - Comm in Personal Relationships	3 Credits
	EDEC 310 - Child in the Family	3 Credits
	PSYX 348 - Psychology of Family Violence	3 Credits
	S W 423 - Addiction Studies	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
Minimum Required Grade: C		0-12 Total Credits Required

Psychology Minor

Minor - Psychology (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Lower Division Core Requirements

Rule: Must complete the following courses

—	Course	Credits
	PSYX 100S - Intro to Psychology	4 Credits
	PSYX 120 - Research Methods I	3 Credits
Minimum Required Grade: C		7 Total Credits Required

Minor Electives

Rule: Complete the following subcategories, taking at least 6 upper division credits

Minimum Required Grade: C

12 Total Credits Required

Subcategory 1

Rule: Must complete 1 course

—	Course	Credits
	PSYX 230 - Developmental Psychology	3 Credits
	PSYX 360 - Social Psychology	3 Credits
	PSYX 385 - Psychology of Personality	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 2

Rule: Must complete 1 course

—	Course	Credits
	PSYX 340 - Abnormal Psychology	3 Credits
	PSYX 345 - Child & Adolescent Psych Dis	3 Credits

	PSYX 376 - Prin Cognit Behav Mod	3 Credits
	PSYX 378 - Intro to Clinical Psyc	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 3

Rule: Must complete 2 courses

	Course	Credits
	PSYX 250N - Fund of Biological Psychology	3 Credits
	PSYX 270 - Fund Psychology of Learning	3 Credits
	PSYX 280 - Fund of Memory and Cognition	3 Credits
	PSYX 352 - Comparative Psychology	3 Credits
	PSYX 356 - Human Neuropsychology	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Additional Electives

Rule: Must complete additional Psychology electives to achieve 21 degree credits

Minimum Required Grade: C-

2 Total Credits Required

Teaching Psychology Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program
- Licensure Degree Requirements

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Psychology (Minor); Track: Teaching Psychology

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Lower Division Core Requirements

Rule: Must complete the following courses

—	Course	Credits
	PSYX 100S - Intro to Psychology	4 Credits
	PSYX 120 - Research Methods I	3 Credits
Minimum Required Grade: C		7 Total Credits Required

Minor Electives

Rule: Complete the following subcategories, taking at least 6 upper division credits

Minimum Required Grade: C

12 Total Credits Required

Subcategory 1

Rule: Must complete 1 course

—	Course	Credits
	PSYX 230 - Developmental Psychology	3 Credits
	PSYX 360 - Social Psychology	3 Credits
	PSYX 385 - Psychology of Personality	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 2

Rule: Must complete 1 course

—	Course	Credits
	PSYX 340 - Abnormal Psychology	3 Credits

	PSYX 345 - Child & Adolescent Psych Dis	3 Credits
	PSYX 376 - Prin Cognit Behav Mod	3 Credits
	PSYX 378 - Intro to Clinical Psyc	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Subcategory 3

Rule: Must complete 2 courses

	Course	Credits
	PSYX 250N - Fund of Biological Psychology	3 Credits
	PSYX 270 - Fund Psychology of Learning	3 Credits
	PSYX 280 - Fund of Memory and Cognition	3 Credits
	PSYX 352 - Comparative Psychology	3 Credits
	PSYX 356 - Human Neuropsychology	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Additional Degree Electives

Rule: Must complete additional Psychology electives to achieve 21 degree credits

Minimum Required Grade: C-

2 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Sociology Department

Kathy Kuipers, Chairs

"Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since human behavior is shaped by social factors, the subject matter of sociology ranges from the intimate family to the hostile mob; from organized crime to religious cults; from the divisions of race, gender and social class to the shared beliefs of a common culture" (American Sociological Association 2002:1). The Sociology faculty at UM bring diverse theoretical perspectives to their courses and use a wide array of methodological strategies in their research and teaching. Their interests range from social issues facing our local community and the Northern Rocky Mountain region, to national and global concerns. Faculty research addresses both theoretical issues, such as the causes of criminal behavior, and practical matters, such as the effectiveness of prison rehabilitation programs or the impact of legislation on family policy and poverty programs.

In addition to a general sociology major, students may choose one of three options for structuring their course work. The general Sociology major provides a broad foundation in sociological theory and research, together with exposure to a variety of courses in the main substantive areas of the discipline. Students interested in crime and criminal justice can choose an option in Criminology, while students concerned with the causes and consequences of social inequality can select an option Inequality and Social Justice. Students interested in rural and environmental issues can pursue an option in Rural and Environmental Change. These options allow students to concentrate their studies in a particular area of interest while still acquiring a solid foundation in the discipline of Sociology.

Department Faculty

Course Descriptions

Chemical Addiction Studies

- **CAS 433 - Adv Addiction Studies**

Credits: 3. Offered spring. Same as PSYX 441 and SW 423. Examination of chemical dependency and behavioral compulsion, including alcohol and other drugs, gambling, eating disorders, sexual addictions. Ecosystems perspective on etiology, treatment, prevention, family dynamics, community response, and societal contributors.

Sociology

- **SOCI 101S - Introduction to Sociology**

Credits: 3. Offered every term. Overview of the principles and concepts used in the study of human social interaction, groups, communities and societies. Required of all majors. **Course Attributes:**

Social Sciences Course

- **SOCI 130S - Soc of Alternative Religions**
Credits: 3. Offered spring. Unconventional religious groups in American society. Topics include recruitment, conversion, commitment, defection, leadership, belief systems, organizational structure and change. **Course Attributes:** Social Sciences Course
- **SOCI 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **SOCI 191S - Special Topics**
Credits: 1 TO 6. (R 6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. **Course Attributes:** Internships/Practicums Social Sciences Course
- **SOCI 202 - Social Statistics**
Credits: 3. Offered every term. Prereq., or coreq. M 115, Sociology majors only, or consent of instr. Application of descriptive and inferential statistical techniques to sociological data. Required of all majors.
- **SOCI 211S - Introduction to Criminology**
Credits: 3. Offered autumn. Prereq., or coreq., SOCI 101S. A critical examination of crime in society: how crime is defined, the extent and distribution of crime, theoretical explanations of criminal behavior, and crime control efforts. **Course Attributes:** Social Sciences Course
- **SOCI 212S - Social Issues Southeast Asia**
Credits: 3. Offered every other year. Same as SSEA 212S and LS 212S. Introduction to the cultures, societies, and contemporary social problems of Southeast Asia. **Course Attributes:** Social Sciences Course Indigenous and Global
- **SOCI 220S - Race, Gender & Class**
Credits: 3. Offered autumn. Same as WGS 220S. Analysis of the intersecting structure and dynamics of race, gender and class. Focus on power relationships, intergroup conflict and minority-group status. **Course Attributes:** Social Sciences Course
- **SOCI 221 - Criminal Justice System**
Credits: 3. Offered spring. A systematic survey of crime and the administration of justice in the United States, including the organizational structures, processes, and dynamics of law enforcement, criminal adjudication, and corrections.
- **SOCI 270 - Intro Development Sociology**
Credits: 3. Offered autumn. Introduction to sociological perspectives on international development, globalization, and sustainability. Rural and environmental issues emphasized.
- **SOCI 275S - Gender and Society**
Credits: 3. Offered spring. Same as WGS 275S. Exploration of the social construction of gender, especially in western, post-industrial societies such as the U.S. How gender ideologies affect the social definition and position of men and women in work, family, sexual relationships, sexual divisions of labor, and social movements. **Course Attributes:** Social Sciences Course
- **SOCI 291 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **SOCI 306 - Sociology of Work**
Credits: 3. Offered intermittently. An introduction to contemporary sociological debates on work including overwork, working poor, housework, globalization, mechanization, routinization,

surveillance, and unions. Special focus on gender and class impacts on working life.

- **SOCI 312 - Criminal Adjudication**

Credits: 3. Offered spring odd-numbered years. Prereq., SOCI 101S, 221 and either 211S or 330. An examination of adjudicatory processes applied to the criminally accused. Includes pretrial, trial, and sentencing practices and procedures. Special attention to the sociological dimensions of criminal adjudication: its cultural underpinnings, structural characteristics and interactional dynamics.

- **SOCI 314 - Extraordinary Group Behavior**

Credits: 3. Offered intermittently. Prereq., SOCI 101S. The study of emergent social behavior including rumors, crowds, crazes, riots, panics, terrorism, revolutions and social movements.

- **SOCI 318 - Sociological Research Methods**

Credits: 3. Offered every term. Prereq., SOCI 101S, Sociology majors only, or consent of instr. Methods of research in the social sciences including naturalistic observation, interviewing, measurement, experiments, surveys, content analysis, and basic data analysis. Required of all majors.

- **SOCI 325 - Social Stratification**

Credits: 3. Offered intermittently. Prereq., SOCI 101S or SOCI 220S or SOCI 275S. The origins, institutionalization and change of class, status, prestige, power and other forms of social inequality. Special attention to the effects of stratification on individuals.

- **SOCI 330 - Juvenile Delinquency**

Credits: 3. Offered spring. Prereq., SOCI 101S. The study of juvenile delinquency as a social phenomenon, including the emergence of "juvenile delinquency" as a social and legal concept, the nature of delinquency, and theoretical explanations of delinquent behavior.

- **SOCI 332 - Sociology of the Family**

Credits: 3. Offered autumn. Prereq., SOCI 101S. Same as WGS 300. Historical, cross-cultural, and analytical study of the family. Emphasis on ideology, social structures, and agency affecting family composition and roles.

- **SOCI 335 - Juvenile Justice System**

Credits: 3. Offered autumn. Prereq., SOCI 101S and 211S or 330. An analysis of the juvenile justice system in the United States, including the historical development of policies and practices. The role of various social agencies in defining, preventing, and responding to delinquency.

- **SOCI 342 - Urban/Metropolitan Soc**

Credits: 3. Offered intermittently. Prereq., SOCI 101S. Classical social theories of urban growth. Contemporary urbanization in local, regional, national and global contexts. Internal urban/metropolitan social organization in terms of race, ethnicity, social class and gender.

- **SOCI 345 - Sociology of Organizations**

Credits: 3. Offered intermittently. Prereq., SOCI 101S. Historical and analytical study of organizations as social systems, with an emphasis on applying theoretical models to analyzing organizational behavior and change.

- **SOCI 346 - Rural Sociology**

Credits: 3. Offered intermittently. Prereq., SOCI 101S recommended. Demographic, economic and sociocultural change in rural communities with an emphasis on global economy, political structure, urbanization, and economic and social infrastructure. Special attention given to the rural west and Montana.

- **SOCI 350 - The Community**

Credits: 3. Offered intermittently. Prereq., SOCI 101S. The study of families, peer groups, neighborhoods, voluntary associations, power structures, social classes and large scale

organizations as they come together in local communities.

- **SOCI 355 - Population and Society**

Credits: 3. Offered spring. Prereq., SOCI 101S. An introduction to contemporary world population problems including population growth, trafficking, fertility, mortality, population policy, and the relationship between population and environment. Emphasizes gender issues in international context.

- **SOCI 362 - Sociology of Law Enforcement**

Credits: 3. Offered autumn even-numbered years. Prereq., SOCI 101S, 221 and either 211S or 330. An examination of policing in society, with emphasis on the cultural context in which it occurs, its structural characteristics, and social psychological processes.

- **SOCI 371 - Gender and Global Development**

Credits: 3. Offered every other year. Prereq., SOCI 270 or consent of instructor. Intermediate level perspectives on colonization, international development, and globalization, with an emphasis on gender issues and impacts. **Course Attributes:** Non-Western Course
Social Sciences Course

- **SOCI 382 - Soc Psych and Social Structure**

Credits: 3. Offered autumn. Prereq., SOCI 101S. The study of the behavior of individuals in social contexts ranging from small groups to societies. Topics include attitude change, conformity, aggression, helping behavior, self-concept formation, and group cohesion and decision-making.

- **SOCI 386 - Preceptorship in Sociology**

Credits: 2 TO 3. Offered autumn and spring. Prereq., SOCI 101S and consent of instr. Assisting a faculty member by tutoring, conducting review sessions, helping students with research projects, and carrying out other class-related responsibilities. Open to juniors and seniors with instructor's consent. Proposals must be approved by department chair.

- **SOCI 391 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of new courses or one time offerings of current topics.

- **SOCI 398 - Internship**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums
Internship graduation limit 6

- **SOCI 423 - Sociology of Corrections**

Credits: 3. Offered spring. Prereq., SOCI 101S, 221 and either 211S or 330. An examination of the purposes, structures, and processes of jails, prisons, and community corrections, including probation and parole. Emphasis on historical development and current trends and issues in corrections.

- **SOCI 435 - Law and Society**

Credits: 3. Offered spring even-numbered years. Prereq., SOCI 101S. The study of the law and society, including the origin, institutionalization, and impact of law and legal systems.

- **SOCI 438 - Seminar in Crime & Deviance**

Credits: 3. Offered every term. Consent of instructor. Advanced studies in criminology theory, research, and practice. This course will meet the upper-division writing expectation for sociology majors only. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **SOCI 441 - Capstone: Inequal and Soc Just**

Credits: 3. Offered spring. SOCI 101S and two inequality and social justice courses and consent of instr. Research and writing on Inequity and Social Justice. Students bring together readings from other inequality content courses and/or independent readings, research methods training, and data and/or internship experience to write a final research paper on a topic of their choice within the ISJ area. Meets upper-division writing expectation for sociology majors only. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **SOCI 442 - ISJ Service Learning**

Credits: 3 TO 4. Prereq, consent of instr. Supervised fieldwork and research in settings relevant to Inequality and Social Justice, building participatory research and critical thinking skills; relationships with people in groups marginalized by systems of inequality; citizenship awareness. **Course Attributes:** Service Learning

- **SOCI 443 - Sociology of Poverty**

Credits: 3. Offered autumn. Prereq. SOCI 101S, or consent of instr. An examination of the roots, prevalence, and social characteristics of poverty. Analysis of policies intended to end poverty.

- **SOCI 455 - Classical Sociological Theory**

Credits: 3. Offered autumn and spring. Prereq., SOCI 101S, or consent of instr. Focus on the historical development of the field of sociology from 1850 to World War I. The classical writings of Marx, Durkheim, and Weber emphasized. Required of all sociology majors.

- **SOCI 460 - Capstone: Rural and Env Change**

Credits: 3. Offered spring. Prereq., SOCI 101S and consent of instr. Advanced study of issues in rural, environmental, and development sociology with an emphasis on theoretical perspectives and applications. Meets upper-division writing expectation for sociology majors only. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **SOCI 470 - Environmental Sociology**

Credits: 3. Offered autumn. Introduction to environmental sociology and the social dimensions of environmental change. Case studies of major environmental problems as applications of environmental sociological perspectives.

- **SOCI 485 - Political Sociology**

Credits: 3. Offered spring odd-numbered years. Prereq., junior or senior standing. Analysis of political theory and behavior; social bases of power and policy determination; institutional interrelationships; intellectuals and ideologies; political trends and change; political participation and membership.

- **SOCI 488 - Writing for Sociology**

Credits: 3. Offered autumn and spring. Consent of instr. Advanced study of variable topics or issues in sociology, with emphasis on writing for the discipline. This course satisfies the upper-division writing expectation for sociology majors only. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **SOCI 491 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., SOCI 101S. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **SOCI 492 - Independent Study**

Credits: 1 TO 3. (R-9) Offered every term. Prereq., SOCI 101S and consent of instr. Individual work with a faculty supervisor in an area of special interest. Proposals must be approved by department chair.

- **SOCI 494 - Seminar/Workshop**

Credits: 2 TO 3. Offered intermittently. Prereq., SOCI 101S and at least junior standing. Selected sociological topics.

- **SOCI 498 - Internship**
 Credits: 1 TO 6. (R-6) Offered every term. Prereq., SOCI 101S, 318 and 202; 2.75 GPA; junior standing and consent of instr. Supervised placement in an agency or business which involves work experience related to criminology, sociology, rural and environmental change and/or inequality and social justice. **Course Attributes:** Internships/Practicums
- **SOCI 520 - Contemp Social Theory**
 Credits: 3. Offered autumn. Sociology Graduate Student or consent of instr. The major sociological theories developed since World War I, including an examination of the critical issues under debate. Level: Graduate
- **SOCI 530 - Criminological Theory**
 Credits: 3. Offered autumn. Consent of instr. Advanced study of the major theories of crime and criminality; includes the concepts, propositions, and causal logic, together with relevant research findings. Level: Graduate
- **SOCI 538 - Sem in Crime & Deviance**
 Credits: 3. Offered intermittently. Consent of instructor. Graduate-level studies of a specific criminological topic or issue with special emphasis on theory, research, policy, and practice. Level: Graduate
- **SOCI 545 - Sem in Inequality & Soc Justic**
 Credits: 3. Offered spring. Graduate student in Sociology or consent of instr. Advanced study of variable topics in inequality and social justice held in a small group setting that maximizes opportunities for graduate student research, discussion, and writing. Level: Graduate
- **SOCI 561 - Qualitative Methods**
 Credits: 3. Offered spring. Consent of instr. Introduction to the basic methods used to conduct qualitative studies including ethnography, interviewing, observation and/or focus group. Includes hands-on fieldwork projects, data coding and analysis, and research ethics. Draws on examples and literature from sociology. Students should have had undergraduate research methods training. Level: Graduate
- **SOCI 562 - Quantitative Methods**
 Credits: 3. Offered autumn. Prereq., SOCI 101S, 318 and 202. Introduction to the basic methods used to conduct quantitative sociological research and program evaluation including proposal development, survey design, sampling techniques, data analysis, and dissemination of findings. Level: Graduate
- **SOCI 563 - Social Data Analysis**
 Credits: 3. Offered spring. Consent of instr. A hands-on introduction to preparing sociological reports and documents, performing research and statistical tasks common to the field. Presumes no previous knowledge of microcomputers. Level: Graduate
- **SOCI 590 - Sociology Internship**
 Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Supervised placement for graduate students in an agency or business which involves work experience related to criminology, sociology, rural and environmental change and/or inequality and social justice.. Level: Graduate
Course Attributes: Research & Creative Schlrshp
- **SOCI 594 - Graduate Seminar**
 Credits: 3. (R-9) Offered intermittently. Selected sociological topics. Level: Graduate
- **SOCI 595 - Special Topics**
 Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums

- **SOCI 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Work with a faculty supervisor in an area of special interest. Level: Graduate **Course Attributes:** Service Learning/Volunteer

- **SOCI 597 - Graduate Research**

Credits: 2 TO 3. (R-9) Offered every term. Directed research. Student must develop a specific research or evaluation proposal which is approved by the instructor prior to registration. Those students electing the professional paper option may apply three credits of 597 toward graduation. Level: Graduate

- **SOCI 598 - Internship**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate **Course Attributes:** Internships/Practicums

- **SOCI 599 - Thesis/Professional Paper**

Credits: 1 TO 6. (R-6) Offered every term. Students may apply six credits of 599 toward graduation. Level: Graduate

Sociology B.A.

General Sociology Major:

Students whose primary interest is in a general sociology major are urged to develop a plan of study with their advisor; they must take three electives in addition to the core courses and major content requirements listed above. Any sociology course, including courses from any of the three options, may be included in your study plan. The general sociology major prepares students for positions which require a bachelor's degree in one of the social science disciplines, including employment in a variety of government and private-sector agencies, or for a graduate program in sociology. It also provides valuable preparation for related fields such as law, social work, education, counseling, politics, and public administration.

Bachelor of Arts - Sociology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Note: No more than 60 sociology credits may count toward graduation.

Lower Division Core Courses

Rule: All courses listed are required

	Course	Credits
—		

	SOCI 101S - Introduction to Sociology	3 Credits
	SOCI 202 - Social Statistics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Division Core Courses

Rule: All courses listed are required

—	Course	Credits
	SOCI 318 - Sociological Research Methods	3 Credits
	SOCI 455 - Classical Sociological Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Major Content Elective Courses

Rule: Choose 4 courses from those listed. 2 must be numbered 300 or above.

Note: SOCI 211S or SOCI 330 will count towards the 12 credits but not both.

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 270 - Intro Development Sociology	3 Credits
	SOCI 275S - Gender and Society	3 Credits
	SOCI 306 - Sociology of Work	3 Credits
	SOCI 308 - Soc of Education	3 Credits
	SOCI 325 - Social Stratification	3 Credits
	SOCI 330 - Juvenile Delinquency	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
	SOCI 345 - Sociology of Organizations	3 Credits
	SOCI 346 - Rural Sociology	3 Credits
	SOCI 350 - The Community	3 Credits
	SOCI 355 - Population and Society	3 Credits

	SOCI 382 - Soc Psych and Social Structure	3 Credits
	SOCI 470 - Environmental Sociology	3 Credits
	SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Upper Division Writing Course

Rule: Must complete 1 of the following courses

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

Course	Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits
SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
SOCI 460 - Capstone: Rural and Env Change	3 Credits
SOCI 488 - Writing for Sociology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

General Sociology Electives

Rule: Choose 5 of the following courses:

Course	Credits
ENST 225 - Community & Environment	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
PSYX 441 - Addiction Studies	3 Credits
SOCI 130S - Soc of Alternative Religions	3 Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 221 - Criminal Justice System	3 Credits
SOCI 312 - Criminal Adjudication	3 Credits
SOCI 314 - Extraordinary Group Behavior	3 Credits

SOCI 335 - Juvenile Justice System	3 Credits
SOCI 362 - Sociology of Law Enforcement	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 386 - Preceptorship in Sociology	2 To 3 Credits
SOCI 423 - Sociology of Corrections	3 Credits
SOCI 435 - Law and Society	3 Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits
SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
SOCI 442 - ISJ Service Learning	3 To 4 Credits
SOCI 443 - Sociology of Poverty	3 Credits
SOCI 444 - Issues in Inequality	3 Credits
SOCI 460 - Capstone: Rural and Env Change	3 Credits
SOCI 488 - Writing for Sociology	3 Credits
SOCI 492 - Independent Study	1 To 3 Credits
SOCI 494 - Seminar/Workshop	2 To 3 Credits
SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-	15 Total Credits Required

Criminology

Criminology Option:

Criminology has been an area of study within sociology since the inception of the discipline at the turn of the twentieth century. Contemporary criminology examines the making of laws, the nature and extent of crime, the causes of crime, and society's efforts to control crime through the juvenile and criminal justice systems. The option builds upon the required course work in sociology and allows students to pursue extended study of crime and the criminal justice system. In addition, the option provides opportunity for practical experience in juvenile and criminal justice systems through internship placement. The criminology option prepares students for employment in public and private criminal justice agencies, as well as graduate study in sociology, criminal justice, and law.

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Note: No more than 60 sociology credits may count toward graduation.

Lower Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 101S - Introduction to Sociology	3 Credits
	SOCI 202 - Social Statistics	3 Credits
	Minimum Required Grade: C-	6 Total Credits Required

Upper Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 318 - Sociological Research Methods	3 Credits
	SOCI 455 - Classical Sociological Theory	3 Credits
	Minimum Required Grade: C-	6 Total Credits Required

Major Content Courses

Rule: Choose 4 of the following courses. 2 must be numbered 300 or above.

Note: Students may count only 1 course from their respective option as a major content course.

Note: SOCI 211S or SOCI 330 can count towards the 12 credits but not both.

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 270 - Intro Development Sociology	3 Credits

	SOCI 275S - Gender and Society	3 Credits
	SOCI 306 - Sociology of Work	3 Credits
	SOCI 308 - Soc of Education	3 Credits
	SOCI 325 - Social Stratification	3 Credits
	SOCI 330 - Juvenile Delinquency	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
	SOCI 345 - Sociology of Organizations	3 Credits
	SOCI 346 - Rural Sociology	3 Credits
	SOCI 350 - The Community	3 Credits
	SOCI 355 - Population and Society	3 Credits
	SOCI 382 - Soc Psych and Social Structure	3 Credits
	SOCI 470 - Environmental Sociology	3 Credits
	SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Upper Division Writing Course

Rule: Must complete 1 of the following courses

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

	Course	Credits
	SOCI 438 - Seminar in Crime & Deviance	3 Credits
	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
	SOCI 460 - Capstone: Rural and Env Change	3 Credits
	SOCI 488 - Writing for Sociology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Criminology Option

Rule: Complete 15 option credits

Option Core

Rule: Complete SOCI 330 and either SOCI 211 or 221.

Note: Students should complete this core before taking any Criminology elective courses. The chosen course cannot count towards the major content course requirement.

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
	SOCI 221 - Criminal Justice System	3 Credits
	SOCI 330 - Juvenile Delinquency	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Option Electives

Rule: Choose 3 of the following courses

—	Course	Credits
	PSYX 441 - Addiction Studies	3 Credits
	SOCI 312 - Criminal Adjudication	3 Credits
	SOCI 335 - Juvenile Justice System	3 Credits
	SOCI 362 - Sociology of Law Enforcement	3 Credits
	SOCI 423 - Sociology of Corrections	3 Credits
	SOCI 435 - Law and Society	3 Credits
	SOCI 438 - Seminar in Crime & Deviance	3 Credits
	SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-		9 Total Credits Required

Inequality is at the core of most sociological inquiries. The option in inequality and social justice examines the causes and consequences of inequalities based on class, gender, race/ethnicity, disability, age, and sexual orientation. Social inequalities at the local, national, and global levels are studied, as are the political, legal, and social processes that contribute to or reduce inequalities. Ethical elements of social justice are considered with regard to inequality. An option in inequality and social justice prepares students for employment in a variety of government and private-sector agencies, especially in social services, or for graduate school in Sociology. It also provides valuable preparation for related fields such as law, social work, education, counseling, politics, and public administration.

Bachelor of Arts - Sociology; Inequality and Social Justice Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Note: No more than 60 sociology credits may count toward graduation.

Lower Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 101S - Introduction to Sociology	3 Credits
	SOCI 202 - Social Statistics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 318 - Sociological Research Methods	3 Credits
	SOCI 455 - Classical Sociological Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Major Content Courses

Rule: Choose 4 courses from those listed. 2 must be numbered 300 or above.

Note: Students may count only 1 course from their respective option as a major content course.

Note: SOCI 211S or SOCI 330 can count towards the 12 credits but not both.

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Course	Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 270 - Intro Development Sociology	3 Credits
SOCI 275S - Gender and Society	3 Credits
SOCI 306 - Sociology of Work	3 Credits
SOCI 308 - Soc of Education	3 Credits
SOCI 325 - Social Stratification	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 345 - Sociology of Organizations	3 Credits
SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 382 - Soc Psych and Social Structure	3 Credits
SOCI 470 - Environmental Sociology	3 Credits
SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Upper Division Writing Course

Rule: Must complete 1 of the following courses

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

Course	Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits
SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
SOCI 460 - Capstone: Rural and Env Change	3 Credits

SOCI 488 - Writing for Sociology	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Inequality and Social Justice Option

Rule: Complete 15 credits in the following categories

Minimum Required Grade: C-

15 Total Credits Required

Option Core

Rule: Complete SOCI 441 and either SOCI 220S or SOCI 275S.

Note: Students should complete SOCI 220S or SOCI 275S first, and complete at least 2 ISJ electives before taking SOCI 441.

—	Course	Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 275S - Gender and Society	3 Credits
	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Option Electives

Rule: Choose 3 of the following courses

Note: It is recommended that students take SOCI 442 or SOCI 498 concurrent with SOCI 441.

—	Course	Credits
	SOCI 314 - Extraordinary Group Behavior	3 Credits
	SOCI 325 - Social Stratification	3 Credits
	SOCI 371 - Gender and Global Development	3 Credits
	SOCI 435 - Law and Society	3 Credits
	SOCI 442 - ISJ Service Learning	3 To 4 Credits
	SOCI 443 - Sociology of Poverty	3 Credits
	SOCI 485 - Political Sociology	3 Credits

SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-	9 Total Credits Required

Rural and Environmental Change

Rural environments, residents and agencies are facing rapid social, economic, demographic and political change. This option develops analytical and practical skills for understanding rural and environmental change globally and in the American West, and its policy implications in such areas as rural health, welfare and work; community development and assessment; native peoples and natural resource management. An option in rural and environmental change prepares students for employment with either a government, private, or non-profit agency concerned with the above topics or for pursuing an advanced degree in sociology.

Requirements, in addition to courses in the core and content areas, include:

Bachelor of Arts - Sociology; Rural and Environmental Change Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Note: No more than 60 sociology credits may count toward graduation.

Lower Core Courses

Rule: All courses are required

Course	Credits
SOCI 101S - Introduction to Sociology	3 Credits
SOCI 202 - Social Statistics	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Upper Core Courses

Rule: All courses are required

Course	Credits
SOCI 318 - Sociological Research Methods	3 Credits

SOCI 455 - Classical Sociological Theory	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

Major Content Courses

Rule: Choose 4 courses from those listed. 2 must be numbered 300 or above.

Note: Students may count only 1 course from their respective option as a major content course.

Note: SOCI 211S or SOCI 330 can count towards the 12 credits but not both.

Course	Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 220S - Race, Gender & Class	3 Credits
SOCI 270 - Intro Development Sociology	3 Credits
SOCI 275S - Gender and Society	3 Credits
SOCI 306 - Sociology of Work	3 Credits
SOCI 308 - Soc of Education	3 Credits
SOCI 325 - Social Stratification	3 Credits
SOCI 330 - Juvenile Delinquency	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 345 - Sociology of Organizations	3 Credits
SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 382 - Soc Psych and Social Structure	3 Credits
SOCI 470 - Environmental Sociology	3 Credits
SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Upper Division Writing Course

Rule: Must complete 1 of the following courses

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

—	Course	Credits
	SOCI 438 - Seminar in Crime & Deviance	3 Credits
	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
	SOCI 460 - Capstone: Rural and Env Change	3 Credits
	SOCI 488 - Writing for Sociology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Rural and Environmental Change Option

Rule: Complete 15 Option Credits

Minimum Required Grade: C-

15 Total Credits Required

Option Core

Rule: The following courses are required

Note: Students should take SOCI 270 first and complete at least 2 Rural and Environmental Change electives prior to taking SOCI 460.

—	Course	Credits
	SOCI 270 - Intro Development Sociology	3 Credits
	SOCI 460 - Capstone: Rural and Env Change	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Option Electives

Rule: Choose 3 of the following courses

—	Course	Credits
	SOCI 346 - Rural Sociology	3 Credits
	SOCI 350 - The Community	3 Credits
	SOCI 355 - Population and Society	3 Credits
	SOCI 371 - Gender and Global Development	3 Credits

SOCI 443 - Sociology of Poverty	3 Credits
SOCI 470 - Environmental Sociology	3 Credits
SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-	9 Total Credits Required

Teaching Sociology

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

Teacher Preparation in Sociology

Students who want to be licensed to teach sociology at the high school level must complete the BA degree requirements in sociology (general sociology, no option required). They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a teaching minor in sociology. See the Department of Curriculum & Instruction for information about admission to the Teacher Education Program and completion of these licensure programs.

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Sociology; Track: Teaching Sociology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: No more than 60 sociology credits may count toward graduation. Students who want to be licensed to teach sociology at the high school level must complete the BA degree requirements in sociology (general sociology, no option required). They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education.

Lower Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 101S - Introduction to Sociology	3 Credits
	SOCI 202 - Social Statistics	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Upper Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 318 - Sociological Research Methods	3 Credits
	SOCI 455 - Classical Sociological Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Major Content Courses

Rule: Choose 4 courses from those listed. 2 must be numbered 300 or above.

Note: SOCI 211S or SOCI 330 will count towards the 12 credits but not both.

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 270 - Intro Development Sociology	3 Credits
	SOCI 275S - Gender and Society	3 Credits
	SOCI 306 - Sociology of Work	3 Credits
	SOCI 308 - Soc of Education	3 Credits
	SOCI 325 - Social Stratification	3 Credits
	SOCI 330 - Juvenile Delinquency	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
	SOCI 345 - Sociology of Organizations	3 Credits

SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 382 - Soc Psych and Social Structure	3 Credits
SOCI 470 - Environmental Sociology	3 Credits
SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

General Sociology Requirements

Rule: Choose 5 of the following courses:

Course	Credits
ENST 225 - Community & Environment	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
PSYX 441 - Addiction Studies	3 Credits
SOCI 130S - Soc of Alternative Religions	3 Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 221 - Criminal Justice System	3 Credits
SOCI 312 - Criminal Adjudication	3 Credits
SOCI 314 - Extraordinary Group Behavior	3 Credits
SOCI 335 - Juvenile Justice System	3 Credits
SOCI 362 - Sociology of Law Enforcement	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 386 - Preceptorship in Sociology	2 To 3 Credits
SOCI 423 - Sociology of Corrections	3 Credits
SOCI 435 - Law and Society	3 Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits

	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
	SOCI 442 - ISJ Service Learning	3 To 4 Credits
	SOCI 443 - Sociology of Poverty	3 Credits
	SOCI 444 - Issues in Inequality	3 Credits
	SOCI 460 - Capstone: Rural and Env Change	3 Credits
	SOCI 488 - Writing for Sociology	3 Credits
	SOCI 492 - Independent Study	1 To 3 Credits
	SOCI 494 - Seminar/Workshop	2 To 3 Credits
	SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-		15 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

—	Course	Credits
	EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-		3 Total Credits Required

Sociology Minor

Minor - Sociology (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 1.7

Note: To earn a minor in sociology the student must complete a minimum of 21 credits in sociology with at least 9 of these credits at the upper-division level.

Lower Division Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 101S - Introduction to Sociology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 318 - Sociological Research Methods	3 Credits
	SOCI 455 - Classical Sociological Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Minor Content Courses

Rule: Choose 2 of the following courses

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 270 - Intro Development Sociology	3 Credits
	SOCI 275S - Gender and Society	3 Credits
	SOCI 306 - Sociology of Work	3 Credits
	SOCI 308 - Soc of Education	3 Credits
	SOCI 325 - Social Stratification	3 Credits

	SOCI 332 - Sociology of the Family	3 Credits
	SOCI 345 - Sociology of Organizations	3 Credits
	SOCI 346 - Rural Sociology	3 Credits
	SOCI 350 - The Community	3 Credits
	SOCI 355 - Population and Society	3 Credits
	SOCI 382 - Soc Psych and Social Structure	3 Credits
	SOCI 470 - Environmental Sociology	3 Credits
	SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

General Sociology Electives

Rule: Choose 2 of the following courses

Course	Credits
ENST 225 - Community & Environment	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
PSYX 441 - Addiction Studies	3 Credits
SOCI 130S - Soc of Alternative Religions	3 Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 221 - Criminal Justice System	3 Credits
SOCI 312 - Criminal Adjudication	3 Credits
SOCI 314 - Extraordinary Group Behavior	3 Credits
SOCI 335 - Juvenile Justice System	3 Credits
SOCI 362 - Sociology of Law Enforcement	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 386 - Preceptorship in Sociology	2 To 3 Credits

	SOCI 423 - Sociology of Corrections	3 Credits
	SOCI 435 - Law and Society	3 Credits
	SOCI 438 - Seminar in Crime & Deviance	3 Credits
	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
	SOCI 442 - ISJ Service Learning	3 To 4 Credits
	SOCI 443 - Sociology of Poverty	3 Credits
	SOCI 444 - Issues in Inequality	3 Credits
	SOCI 460 - Capstone: Rural and Env Change	3 Credits
	SOCI 488 - Writing for Sociology	3 Credits
	SOCI 492 - Independent Study	1 To 3 Credits
	SOCI 494 - Seminar/Workshop	2 To 3 Credits
	SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching Sociology Minor

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Minor - Sociology (Minor); Track: Teaching Sociology

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Note: To earn a minor in sociology the student must complete a minimum of 21 credits in sociology with at least 9 of these credits at the upper-division level.

Lower Division Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 101S - Introduction to Sociology	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core Courses

Rule: All courses are required

—	Course	Credits
	SOCI 318 - Sociological Research Methods	3 Credits
	SOCI 455 - Classical Sociological Theory	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Minor Content Courses

Rule: Choose 2 of the following courses

—	Course	Credits
	SOCI 211S - Introduction to Criminology	3 Credits
	SOCI 220S - Race, Gender & Class	3 Credits
	SOCI 270 - Intro Development Sociology	3 Credits
	SOCI 275S - Gender and Society	3 Credits
	SOCI 306 - Sociology of Work	3 Credits
	SOCI 308 - Soc of Education	3 Credits
	SOCI 325 - Social Stratification	3 Credits
	SOCI 332 - Sociology of the Family	3 Credits
	SOCI 345 - Sociology of Organizations	3 Credits

SOCI 346 - Rural Sociology	3 Credits
SOCI 350 - The Community	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 382 - Soc Psych and Social Structure	3 Credits
SOCI 470 - Environmental Sociology	3 Credits
SOCI 485 - Political Sociology	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

General Sociology Electives

Rule: Choose 2 of the following courses

Course	Credits
ENST 225 - Community & Environment	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
PSYX 441 - Addiction Studies	3 Credits
SOCI 130S - Soc of Alternative Religions	3 Credits
SOCI 211S - Introduction to Criminology	3 Credits
SOCI 221 - Criminal Justice System	3 Credits
SOCI 312 - Criminal Adjudication	3 Credits
SOCI 314 - Extraordinary Group Behavior	3 Credits
SOCI 335 - Juvenile Justice System	3 Credits
SOCI 362 - Sociology of Law Enforcement	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
SOCI 386 - Preceptorship in Sociology	2 To 3 Credits
SOCI 423 - Sociology of Corrections	3 Credits
SOCI 435 - Law and Society	3 Credits
SOCI 438 - Seminar in Crime & Deviance	3 Credits

	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
	SOCI 442 - ISJ Service Learning	3 To 4 Credits
	SOCI 443 - Sociology of Poverty	3 Credits
	SOCI 444 - Issues in Inequality	3 Credits
	SOCI 460 - Capstone: Rural and Env Change	3 Credits
	SOCI 488 - Writing for Sociology	3 Credits
	SOCI 492 - Independent Study	1 To 3 Credits
	SOCI 494 - Seminar/Workshop	2 To 3 Credits
	SOCI 498 - Internship	1 To 6 Credits
Minimum Required Grade: C-		6 Total Credits Required

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course	Credits
EDU 497 - Teaching and Assessing	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

International Development Studies Minor

Minor - International Development Stds (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Note: The IDS minor requires 21 credits. At least twelve of these credits must come from the CORE IDS courses and as many as nine credits can come from CONTENT courses. At least seven credits must be upper division credits.

Core Courses

Rule: Must complete at least 12 credits from the following courses:

Course	Credits
ANTY 349 - Social Change in NnWstrn Socts	3 Credits
COMX 204X - International & Dvlpmnt Comm	3 Credits
ECNS 217X - Issues in Economic Development	3 Credits
ECNS 450 - Adv. Topics in Economic Dev.	3 Credits
ENST 487 - Globalization, Justice & Envir	3 Credits
GPHY 141S - Geography of World Regions	3 Credits
NRSM 170 - International Envir. Change	3 Credits
NRSM 424 - Community Forestry & Conservtn	3 Credits
NRSM 475 - Environment & Development	3 Credits
PSCI 431 - Politics of Global Migration	3 Credits
PSCI 463 - Development Administration	3 Credits
PTRM 451 - Tourism & Sustainability	3 Credits
S W 323 - Women & Soc Action Amer	3 Credits

S W 465 - Social Work Global Context	3 Credits
SOCI 270 - Intro Development Sociology	3 Credits
SOCI 371 - Gender and Global Development	3 Credits
Minimum Required Grade: C-	12 Total Credits Required

Content Courses

Rule: Must complete up to 9 credits from the following courses

Note: Under MANS 495 'Special Topics' please select the section 'Transitions from War to Peace'.

Course	Credits
ANTY 326E - Indigenous Peoples & Globl Dev	3 Credits
ANTY 330X - Peoples and Cultures of World	3 Credits
ANTY 333 - Culture and Population	3 Credits
BGEN 160S - Issues in Sustainability	3 Credits
COMX 415 - Intercultural Communication	3 Credits
COMX 421 - Comm in Non-Profit Organizatns	3 Credits
ECNS 101S - Economic Way of Thinking	3 Credits
ECNS 433 - Economics of the Environment	3 Credits
ECNS 445 - Int Env Econ & Clim Change	3 Credits
ENST 493 - Study Abroad: Envir Justice LA	3 Credits
FORS 320 - Forest Environmental Economics	3 Credits
GPHY 121S - Human Geography	3 Credits
GPHY 243S - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
GPHY 432 - Human Role Environ Change	3 Credits
GPHY 433 - Cultural Ecology	3 Credits
GPHY 434 - Food and Famine	3 Credits

GPHY 444 - High Asia	3 Credits
HSTR 231H - Modern Latin America	3 Credits
HSTR 241H - Central Asian Cult & Civ	3 Credits
HSTR 384 - Hist Internat Human Rights	3 Credits
MANS 495 - Special Topics	1 To 9 Credits
NASX 475X - Tribal Sovereignty	3 Credits
NRSM 352 - Himalayan Environment and Dev	3 Credits
PSCI 220S - Intro to Comparative Govt	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
PSCI 325 - Politics of Latin America	3 Credits
PSCI 326 - Politics of Africa	3 Credits
PSCI 327 - Politics of Mexico	3 Credits
PSCI 432 - Inter-American Relations	3 Credits
PSCI 443 - Politics of Social Movements	3 Credits
PTRM 353 - Tourism & Sustnbility Himalaya	3 Credits
S W 324 - Gender and Welfare	3 Credits
SOCI 212S - Social Issues Southeast Asia	3 Credits
SOCI 346 - Rural Sociology	3 Credits
SOCI 355 - Population and Society	3 Credits
SOCI 443 - Sociology of Poverty	3 Credits
Minimum Required Grade: C-	9 Total Credits Required

South and Southeast Asian Studies

Professor G.G. Weix, Advisor

The Liberal Studies Program offers undergraduates at the University of Montana-Missoula an opportunity to study South and Southeast Asian peoples, cultures, histories, and societies, as well as their literary, artistic and religious traditions. The region includes India, Nepal, Bhutan, Tibet, Sri Lanka, Pakistan, Bangladesh, Myanmar (Burma), Thailand, Laos, Cambodia, Vietnam, Malaysia, Brunei, Singapore, Indonesia, East Timor, and the Philippines.

The South Asianist faculty of Liberal Studies and the Dean of the College of Humanities and Sciences work closely with those faculty from other disciplines at the University of Montana who have research and teaching interests in the area, and competence in regional languages.

Students may choose to minor in South and Southeast Asia with a major in any discipline. They must register with Professor G.G. Weix, the advisor, and are encouraged to plan their course sequence at least one semester in advance, in consultation with an assigned core faculty advisor from those listed below.

Course Descriptions

South/Southeast Asian Studies

- **SSEA 102H - Intro to South & S. East Asia**

Credits: 3. Offered intermittently. Same as ANTY 102H/LS 102H. An introduction to South and Southeast Asian regions, cultures, societies, and histories, with particular emphasis on artistic, religious and literary traditions from prehistory to the present. An overview approach with different materials and emphases. **Course Attributes:** Historical & Cultural Course
Indigenous and Global

- **SSEA 195 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Internships/Practicums

- **SSEA 202X - Introduction to India**

Credits: 3. Offered autumn, even years. Same as LSH 202x. This course introduces students to the history, economy, political and legal system, society, culture, religions, and literary and artistic traditions of India, which is the world's largest secular democracy and the birthplace of four major world religions. **Course Attributes:** Indigenous and Global

- **SSEA 212S - Southeast Asian Cult & Civ**

Credits: 3. Offered intermittently. Introduction to the cultures, social organization, and contemporary events of Southeast Asia. **Course Attributes:** Social Sciences Course
Indigenous and Global

- **SSEA 232H - Buddhism**

Credits: 3. Offered autumn. Same as RLST 232H. A historical introduction to the development of Buddhist thought and practice in the cultures of Asia and the West. **Course Attributes:**
Historical & Cultural Course Indigenous and Global

- **SSEA 234X - Hindu Religious Traditions**

Credits: 3. Offered spring, odd-numbered years. Same as RLST 234X. Critical exploration of selected aspects of Hindu thought, narrative and practice, both in contemporary and historical perspective. Focus primarily on India, but with consideration of Hinduism's transformation and impact beyond South Asia. **Course Attributes:** Indigenous and Global

- **SSEA 295 - Special Topics**

Credits: 1 TO 12. (R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums

- **SSEA 330X - Peoples and Cultures of World**

Credits: 3. Offered intermittently. Same as ANTY 330X. Ethnographic survey of societies and

cultures of Indonesia and the Philippines.

- **SSEA 342 - Topics Comparative Lit & Rel**

Credits: 3. Offered intermittently. Same as LSH 342. These courses compare major traditions, texts and trends in two or more world civilizations or cultures. Works of literature and/or philosophy are examined in their historical contexts, and in relation to each other.

- **SSEA 353 - Topics So. Asian Religions**

Credits: 3. Offered intermittently. No prerequisites. This course will examine select topics of central importance with respect to the history of interaction between the major religions (Hinduism, Islam, Buddhism, Jainism and Sikhism) of South Asia.

- **SSEA 366 - Tibetan Civilization**

Credits: 3. Offered intermittently. No prerequisites. An exploration of the history and culture of a unique civilization that has influenced greatly the cultures of Himalayan, East and South Asia. Special attention will be given to Tibetan religions, modernity, and globalization as they have presented profound challenges to Buddhist traditions.

- **SSEA 368 - Contemporary Buddhism in SSEA**

Credits: 3. Offered intermittently. No prerequisites. Like other major religions, modernity and globalization have presented profound challenges to Buddhist traditions. In this course we will explore various contemporary issues that have affected Theravada Buddhist societies-colonial and post-colonial revivalism, religious nationalism, women's rights and social reform-as case studies of some of the major ways religions have confronted modernity.

- **SSEA 395 - Special Topics**

Credits: 1 TO 12. (R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums

- **SSEA 495 - Special Topics**

Credits: 1 TO 12. (R-12) Seminar designed for students with a minor in South and Southeast Asian Studies. Regional or temporal focus may vary. **Course Attributes:** Internships/Practicums

South and Southeast Asian Studies Minor

Minor - South & Southeast Asian Stds (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

SSEA Minor Lower Division Requirements

Rule: Complete the following subcategories of courses

Note: All substitutions must be approved by the SSEA faculty advisor

Minimum Required Grade: C-

9 Total Credits Required

Introductory Course

Rule: Complete the following course

—	Course	Credits
	SSEA 102H - Intro to South & S. East Asia	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Lower Division Electives

Rule: Choose 2 of the following courses

—	Course	Credits
	SSEA 202X - Introduction to India	3 Credits
	SSEA 212S - Southeast Asian Cult & Civ	3 Credits
	SSEA 232H - Buddhism	3 Credits
	SSEA 234X - Hindu Religious Traditions	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

SSEA minor Upper Division Requirements

Rule: Complete the following subcategories

Note: All substitutions must be approved by the SSEA faculty advisor

Minimum Required Grade: C-

9 Total Credits Required

SSEA Humanities courses

Rule: Choose 3-6 credits from the following courses.

—	Course	Credits
	LSH 328 - Love in Bombay Cinema	3 Credits
	LSH 415 - Same Sex Unions Literature	3 Credits

	LSH 416 - The Bhagavad Gita	3 Credits
	SSEA 342 - Topics Comparative Lit & Rel	3 Credits
	SSEA 353 - Topics So. Asian Religions	3 Credits
	SSEA 366 - Tibetan Civilization	3 Credits
	SSEA 368 - Contemporary Buddhism in SSEA	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

SSEA Social Sciences courses

Rule: Choose 3-6 credits from the following courses.

	Course	Credits
	SSEA 330X - Peoples and Cultures of World	3 Credits
	SSEA 440 - Contemporary Issues of SE Asia	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Women's and Gender Studies

Anya Jabour and Elizabeth Hubble, Co-Directors

Women's and Gender Studies, an interdisciplinary program founded in 1990, encourages the production, discussion, and dissemination of knowledge about women's experiences, oppressions, and achievements in Montana, the U.S., and the world. In the last decade this focus has broadened to include study of the social and cultural construction of gender, sex, and sexualities. By fostering awareness of cultural and international diversity, as well as of the circulations of power mediated by race, class, age, and sexual orientation, Women's and Gender Studies encourages students to think critically and to envision justice for all peoples.

The Women's and Gender Studies program is administered by the co-directors, with assistance from the program coordinator, in consultation with the Women's and Gender Studies Steering Committee, an interdisciplinary group of faculty and professional associates with teaching, research, and scholarly interests in women and gender.

Students may include Women's and Gender Studies in their studies in two ways. They can major in Liberal Studies with an option in Women's and Gender Studies, or they can complete the Women's and Gender Studies minor. Students may select coursework from a wide variety of courses offered in the humanities, social sciences, natural sciences, law, education and other disciplines. Women's and Gender Studies offers scholarships and sponsors or co-sponsors a variety of events including lectures, discussions, and performances that make a vibrant contribution to both the campus and the Missoula community life.

To be admitted, students must register with the Women's and Gender Studies directors, who will explain option or minor requirements and supervise their program.

Department Faculty

Professors

Jill Bergman, Professor
Casey Charles, Professor
M. Ione Crummy, Professor
Paul Dietrich, Professor of Religious Studies and Liberal Studies
Janet Finn, Professor
Christine Fiore, Ph.D., Professor and Department Chair
Linda Gillison, Professor Emeritus
Sara Hayden, Professor
Anya Jabour, Professor of History; Co-Director, Women & Gender Studies
Kathy J. Kuipers, Associate Professor, Chair
Clary Loisel, Professor

Associate Professors

Hiltrud Arens, Professor
Bryan Cochran, Associate Professor of Psychology and Director of Clinical Training
Sarah J. Halvorson, Professor
Teresa Sobieszczyk, Associate Professor, Sociology, and Director of International Development Studies and Peace Corps Prep Programs
Celia Winkler, Professor

Assistant Professors

Tobin Miller Shearer, Associate Professor of History; Director of African-American Studies

Adjunct Faculty

Beth Hubble, Adjunct Assistant Professor of Women's Studies

Course Descriptions

Women's and Gender Studies

- **WGSS 150X - Women's Rights and Women's Roles Around the World**

Credits: 3. Offered autumn in odd-numbered years. This course offers an interdisciplinary perspective on women's participation in family, community, and political life around the world. This course will use a comparative approach to familiarize students with multiple societies in the Americas, Europe, Africa, Asia, and Australia and examine transnational themes that range across time and place. Guest lectures, field trips, and films will expose students to different approaches to the study of women's lives, work, and activism and to the range of women's activities around the world. In the second part of the course, students will collaborate on further research and design a final project presentation. **Course Attributes:** Indigenous and Global

- **WGSS 163L - Hist/Lit Persp Women**

Credits: 3. Offered spring. Formerly PHL 151H, LS 119H, WGS 119H, WGGSS 163H. This is an introduction to the discipline and scope of Western thought from antiquity to the present focusing

on women as the subject rather than men. The objective of the course is to provide an understanding and critical appreciation of seminal texts by and about women through readings, class discussion and written assignments. **Course Attributes:** Literary & Artistic Stds Crse

- **WGSS 250 - Media Representations of Women, Men, and Sexuality**

Credits: 3. Offered autumn in even-numbered years. This course is designed as a survey introduction to a variety of issues related to gender and sexuality in the mass media and pop culture. The goal of the course is to familiarize students with the breadth of these issues while at the same time providing them tools to critically analyze and engage with modern media. The course focuses largely on mass mediated forms such as television, film, music, sports, news, advertising and new media. An underlying understanding within the course is a recognition of the inextricable interconnections between gender, race, ethnicity, class, sexual orientation and so forth. Therefore, the course is invested in exploring the ways in which differences in identity produce different mediated representations and experiences of media. The course is comprised of class discussions based on readings, class presentations, and viewing and interpreting various mediated texts and documentaries. The course readings are both practical and theoretical, and while many of them focus on specific case studies, they are intended to provoke thoughtfulness in each student such that it can be applied to a variety of media.

- **WGSS 263S - Social and Political Perspectives on Women, Men, and Sexuality**

Credits: 3. Offered autumn. Broad overview of gender and women's issues from a social science perspective. Relevant topics related to the sociological and psychological aspects of gender across culture are explored, including masculinity, femininity, violence, reproductive health, cultural diversity in the expression of gender, issues in sexual orientation, and media contributions to these issues. **Course Attributes:** Social Sciences Course

- **WGSS 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **WGSS 294 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. A review and discussion of current research. Topics vary.

- **WGSS 363 - Feminist Theory and Methods**

Credits: 3. Offered spring. In-depth exposure to feminist views and critique of the ethics and methods of scientific, social, and literary inquiry. Includes exposure to primary sources and current societal and global issues and movements, research finding, and literature exemplifying these methods of inquiry and the gendered dimensions of such inquiry. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **WGSS 390 - Undergraduate Research**

Credits: 1 TO 6. (R-6) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student. **Course Attributes:** Research & Creative Schlrshp

- **WGSS 391 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **WGSS 392 - Independent Study**

Credits: 1 TO 12. (R-12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **WGSS 398 - Coop Education/Internship**

Credits: 1 TO 6. R-6) Offered intermittently. Prereq., consent of director. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services

office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Course Attributes: Internships/Practicums

- **WGSS 463 - WGS Capstone**

Credits: 2. Offered spring. Prereq., WGS 119H, WGS 263S, WS 275S. Capstone course for the Women's and Gender Studies minor.

- **WGSS 490 - Undergraduate Research**

Credits: 1 TO 6. (R-6) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student. **Course Attributes:**

Research & Creative Schlrshp

- **WGSS 491 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **WGSS 492 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **WGSS 595 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

Course Attributes: Internships/Practicums

- **WGSS 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate **Course Attributes:**

Service Learning/Volunteer

- **WGSS 598 - Internship**

Credits: 1 TO 6. (R-6) Offered by special arrangement. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. Level: Graduate **Course Attributes:** Internships/Practicums

Women's and Gender Studies

Women's and Gender Studies Option, Professor Elizabeth Hubble and Professor Ione Crummy, Co-Directors of the Women's and Gender Studies Program:

Students who choose the Women's and Gender Studies (WGS) option must register with the WGS advisor, who will supervise their program. The following requirements must be met to complete the WGS option within the liberal studies major.

Bachelor of Arts - Liberal Studies; Women's and Gender Studies Option

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Note: Working closely with a faculty advisor is imperative in Liberal Studies as the programs are unique and substitutions can be approved to meet the student's individual interests.

Women's and Gender Studies Lower Division Core

Rule: 18-20 credits

Minimum Required Grade: C-

18-20 Total Credits Required

Humanities

Rule: Take both of the following courses. (6-8 credits).

Note: Prerequisite or co-requisite: WRIT 101 or equivalent.

These courses are recommended to be taken early in the curriculum as they are foundational. LSH 152L can be taken prior to LSH 151L.

General Education fulfillment through the lower-division core: Both courses fulfill the "approved writing course" and "Literary & Artistic Studies".

—	Course	Credits
	LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
	LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
	Minimum Required Grade: C-	6-8 Total Credits Required

Literary Studies - European or American Literature

Rule: Take one approved 3 credit course.

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

—	Course	Credits
	LIT 210L - American Lit I	3 Credits
	LIT 211L - American Lit II	3 Credits
	LIT 220L - Brit Lit: Med to Renaissance	3 Credits
	LIT 221L - Brit Lit: Enlightenment to Rom	3 Credits
	LIT 222L - Brit Lit: Victorian to Contemp	3 Credits
	RUSS 105H - Intro to Russian Culture	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Historical Studies - European or American History

Rule: Take one approved course that is at least 3 credits.

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

—	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
	HSTA 103H - Honors American History I	4 Credits
	HSTA 104H - Honors American History II	4 Credits
	HSTA 141H - Intro to AfAm Studies	3 Credits
	HSTA 255 - Montana History	3 Credits
	HSTA 262 - Abolitionism	3 Credits
	HSTR 101H - Western Civilization I	4 Credits
	HSTR 102H - Western Civilization II	4 Credits
	HSTR 103H - Honors Western Civilization I	4 Credits
	HSTR 104H - Honors Western Civilization II	4 Credits
	Minimum Required Grade: C-	3 Total Credits Required

Asian Studies

Rule: Take one approved 3 credit course.

—	Course	Credits
	ANTY 141H - The Silk Road	3 Credits
	CHIN 211H - Chinese Culture and Civiliz	3 Credits
	HSTR 240 - East Asian Civilizations	3 Credits
	HSTR 262H - Islamic Civil: Classical Age	3 Credits

HSTR 264 - Islamic Civ: Modrn Era	3 Credits
JPNS 150H - Japanese Cult & Civiliz	3 Credits
SSEA 102H - Intro to South & S. East Asia	3 Credits
SSEA 195 - Special Topics	1 To 6 Credits
SSEA 202X - Introduction to India	3 Credits
SSEA 212S - Southeast Asian Cult & Civ	3 Credits
SSEA 232H - Buddhism	3 Credits
SSEA 234X - Hindu Religious Traditions	3 Credits
SSEA 295 - Special Topics	1 To 12 Credits
Minimum Required Grade: C-	3 Total Credits Required

Religious Studies

Rule: Take one approved 3 credit course.

Course	Credits
RLST 191 - Special Topics	1 To 9 Credits
RLST 204H - Intro to the Hebrew Bible	3 Credits
RLST 205 - Introduction to New Testament	3 Credits
RLST 221 - Judaism	3 Credits
RLST 225 - Christianity	3 Credits
RLST 232H - Buddhism	3 Credits
RLST 233 - Tradtns of Buddhist Meditation	3 Credits
RLST 234X - Hindu Religious Traditions	3 Credits
RLST 236X - Chinese Religions	3 Credits
RLST 238X - Japanese Religions	3 Credits
RLST 281E - Comparative Ethics	3 Credits

RLST 291 - Special Topics

1 To 9 Credits

Minimum Required Grade: C-

3 Total Credits Required

Upper-Division WGSS Coursework

Rule: 21 credits.

Note: Please see WGSS office for course substitution possibilities. LA 138A

Course	Credits
ANTY 427 - Anthropology of Gender	3 Credits
ARTH 436 - The History of Women in Art	3 Credits
CLAS 320 - Women in Antiquity	3 Credits
COMX 380 - Gender and Communication	3 Credits
COMX 449 - Rhetoric of Women's Activism	3 Credits
COUN 485 - Counseling Theories	3 Credits
HSTA 370H - Wmn Amer Colonial to Civil War	3 Credits
HSTA 371H - Wmn Amer Civil War to Present	3 Credits
HSTA 418 - Women and Slavery	3 Credits
HSTA 419 - Southern Women	3 Credits
HSTA 471 - Writing Women's Lives	3 Credits
LSH 327L - Gender & Sexuality in Eng Fict	3 Credits
LSH 329 - Fathers & Daughters in Lit	3 Credits
PSYX 348 - Psychology of Family Violence	3 Credits
RLST 370 - Mysticism	3 Credits
S W 323 - Women & Soc Action Amer	3 Credits
S W 324 - Gender and Welfare	3 Credits
SOCI 332 - Sociology of the Family	3 Credits
SOCI 371 - Gender and Global Development	3 Credits

	SOCI 441 - Capstone: Inequal and Soc Just	3 Credits
	SOCI 545 - Sem in Inequality & Soc Justic	3 Credits
	WGS 336 - American Women Writers	3 Credits
	WGSS 363 - Feminist Theory and Methods	3 Credits
	WGSS 390 - Undergraduate Research	1 To 6 Credits
	WGSS 391 - Special Topics	1 To 6 Credits
	WGSS 392 - Independent Study	1 To 12 Credits
	WGSS 398 - Coop Education/Internship	1 To 6 Credits
	WGSS 463 - WGS Capstone	2 Credits
	WGSS 490 - Undergraduate Research	1 To 6 Credits
	WGSS 490H - Research	3 Credits
	WGSS 491 - Special Topics	1 To 6 Credits
	WGSS 492 - Independent Study	1 To 9 Credits
Minimum Required Grade: C-		21 Total Credits Required

Modern and Classical Language Requirement

Note: Students must demonstrate fourth semester proficiency in a second language either by completing four semesters (recommended to be subsequent) with a grade of C- or better, or by receiving an equivalent score on a competence exam.

WGSS Introductory Course Requirement

Rule: Take the following 3 credit course.

Note: Take this course as early in your education as possible.

	Course	Credits
	WGSS 163L - Hist/Lit Persp Women	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Women's and Gender Studies Minor

Minor - Women's and Gender Studies (Minor)

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 20

Required Cumulative GPA: 1.7

Lower Division Core Requirements

Rule: Must take one or the other

—	Course	Credits
	WGSS 163L - Hist/Lit Persp Women	3 Credits
	WGSS 263S - Women's and Gender Studies	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core Requirements

—	Course	Credits
	WGSS 363 - Feminist Theory and Methods	3 Credits
	WGSS 463 - WGS Capstone	2 Credits
Minimum Required Grade: C-		5 Total Credits Required

Approved Elective Courses

Rule: Additional 12 credits of Women's and Gender Studies, at least one of which is Upper Division (300-400 level)

Note: WGS 398, Co-operative Education Experience internships, may be applied toward these credits

Minimum Required Grade: C-

12 Total Credits Required

School of Journalism

Denise Dowling, Interim Dean

Dennis Swibold, Chair, Department of Print/Photo Journalism

Ray Fanning, Chair, Department of Radio-Television

Courses in the School of Journalism examine the news media emphasizing their history, privileges and responsibilities and provide instruction in skills required for careers with newspapers, radio and television stations, magazines, websites, print and online news services and related agencies. The School of Journalism offers Bachelor of Arts and Master of Arts degrees a Bachelor of Arts in journalism and a Bachelor of Arts in Radio-Television. Students select courses in writing, reporting, producing, directing, editing and still and video photography. They train to work across multiple platforms including online, audio, video, newspaper and magazine.

A quality education in journalism is built on a strong liberal arts foundation. Students at the pre-professional level are required to take courses outside journalism, including courses in Political Science, Business and History. They must complete the University's general education requirements as well.

For further information about the Master's program in Environmental and Natural Resource Journalism, contact the Director of Graduate Studies in Journalism, Henriette Löwisch, School of Journalism, University of Montana, Missoula, MT 59812, or (406) 243-2227.

Pre-Professional Program

In the first three or four semesters of study students are enrolled in pre-journalism or pre-radio-television and take courses in the major and in the liberal arts and sciences. Journalism and radio-television courses in the pre-professional curriculum must be taken at University of Montana-Missoula, though the department chairs may occasionally accept substitutes taught at another schools with programs accredited by the Accrediting Council for Education in Journalism and Mass Communications. All non-journalism courses in the curriculum may be completed at any college or university if transfer credits are accepted by UM. Students may enter the pre-professional program during either autumn or spring semester but must declare their intent to major in order to be allowed into journalism courses.

»Professional Program

Students may apply for admission to the professional programs in journalism and R-TV once they have successfully completed the pre-professional curriculum. Applications are accepted in autumn and spring. Deadlines for applications are October 1 and March 1.

Students may apply for admission to the professional program in either semester, but must have completed at least 45 credits before applying. In addition, applicants must have either completed all courses listed in the pre-professional curriculum or in the semester of application be taking the courses needed to complete the requirements.

An overall grade point average of 2.5, and a GPA of at least 2.5 in the journalism and R-TV core courses, is required of applicants.

Completed applications are evaluated by the School of Journalism Admissions Committee and acceptances are made by the faculty and dean based on the committee's recommendations. The primary admissions criteria are grade point averages, both overall and in the pre-professional program, progress in completing the pre-professional curriculum, and an evaluation of work submitted. Successful applicants will have demonstrated, among other qualities, promise and professional aptitude through the quality of their course work and their overall performance in the pre-professional program, and will have demonstrated an interest in pursuing a career in journalism. Students with deficiencies in these requirements may on occasion be admitted provisionally. Once deficiencies are removed the student will be given full admission status.

Applications for admission to the professional programs may be obtained from the Office of the Dean, School of Journalism, or online at the School's website. A \$15 nonrefundable application fee and transcripts of all academic work must accompany the application. Admission for one academic year cannot be deferred to another academic year without the written consent of the academic chair of the student's department.

Students transferring from other ACEJMC-accredited programs in journalism or radio-television may be admitted on a space available basis. Transfer credit for pre-professional and professional courses taken at other institutions is accepted only for those courses that are deemed equivalent and in which a letter grade of C or

better is obtained.

Academic Progression

The general University academic standing requirements are listed separately in this catalog. See index.

Students enrolled in the professional journalism program must maintain satisfactory academic progress. Admission to the professional program requires a cumulative grade average of 2.5 and a pre-journalism or pre-R-TV course average of 2.5. Any student who has been admitted and whose grade average subsequently falls below a 2.5 must meet with his or her advisor to discuss the student's progress before classes resume the following semester. A student in the professional program who has a cumulative or professional grade point average less than 2.0 will be suspended from the program.

A student dismissed from the program for substandard performance will not be readmitted, except in cases where substantiation is made to the faculty, by written petition, that the substandard performance was the result of circumstances that no longer exist, or that the student has demonstrated the capability and desire to perform satisfactory work since dismissal from the program.

A student leaving the journalism or R-TV professional programs for any reason, whether in good standing or on academic suspension, must reapply for admission.

Name	Minor	Certificate	Associate	Bachelor
Journalism	Requirements			Requirements
Radio-Television				Requirements

Journalism B.A.

Bachelor of Arts - Journalism

School of Journalism

Catalog Year: 2014-2015

Degree Specific Credits: 37

Required Cumulative GPA: 2.5

Note: Degree Specific Requirements: must complete at least 37 and no more than 48 JRNL credits. Students must complete at least 72 total credits outside of Journalism.

Pre-Journalism Courses

Rule: 2.5 overall GPA and 2.5 GPA in pre-journalism core.

Note: The lower division core must be completed prior to admission to the School of Journalism professional program. The department strongly recommends students complete 2 semesters of the same foreign language before applying to the professional program.

Minimum Required Grade: C-

38 Total Credits Required

Core Requirements

Rule: Complete with at least a 2.5 in this core.

Note: Must complete these courses in order to apply to the professional programs.

—	Course	Credits
	JRNL 100H - Media History and Literacy	3 Credits
	JRNL 170 - Elements of News Writing	3 Credits
	JRNL 257 - Beginning Visual Journalism	3 Credits
	JRNL 270 - Reporting	3 Credits
	Minimum Required Grade: C-	12 Total Credits Required

Math

Rule: Must complete 1 of the following math courses that fulfills the General Education math requirement.

Note: Other courses considered by department as long as meets the General Education Requirement.

—	Course	Credits
	M 104 - Numbers as News	3 Credits
	M 105 - Contemporary Mathematics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 122 - College Trigonometry	3 Credits
	M 135 - Mathematics for K-8 Teachers I	5 Credits
	M 151 - Precalculus	4 Credits
	Minimum Required Grade: C-	3 Total Credits Required

American History

Rule: Complete 1 of the following:

—	Course	Credits
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HSTA 101H - American History I	4 Credits
HSTA 102H - American History II	4 Credits
HSTA 103H - Honors American History I	4 Credits
HSTA 104H - Honors American History II	4 Credits
Minimum Required Grade: C-	4 Total Credits Required

Indigenous and Global General Education Course

Rule: Complete 1 of the following:

Course	Credits
ANTY 101H - Anthro & the Human Experience	3 Credits
ANTY 141H - The Silk Road	3 Credits
GPHY 243X - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
HSTR 146H - The Silk Road	3 Credits
HSTR 231H - Modern Latin America	3 Credits
JRNL 105X - Global Current Events	3 Credits
MCLG 100H - Intro Latin American Studies	3 Credits
NASX 105H - Intro Native Amer Studies	3 Credits
NASX 231X - Indig World View Perspectives	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
SOCI 212H - Southeast Asian Cult & Civ	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Political Science Course

Rule: Complete 1 of the following

Note: If PSCI 230 is taken to fulfill the Indigenous and Global General Education Course, PSCI 210 or 220 is required to fulfill this requirement.

—	Course	Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Economics or Business Course

Rule: Complete 1 of the following:

—	Course	Credits
	BGEN 105S - Introduction to Business	3 Credits
	ECNS 101S - Economic Way of Thinking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Modern or Classical Language

Rule: Students must complete the first year sequence of any modern or classical language.

Journalism Professional Program

Rule: Complete all courses.

Note: Must also complete 1 capstone course as designated by the faculty.

—	Course	Credits
	JRNL 300 - First Amendmnt and Jrnalism La	3 Credits
	JRNL 400 - Ethics & Trends in News Media	3 Credits
	JRNL 498 - Supervised Internship	1 To 2 Credits
Minimum Required Grade: C-		7 Total Credits Required

Journalism Upper Division Electives

Rule: Complete 5 of the following:courses

Note: JRNL 472: Opinion Writing and JRNL 473: International Reporting offered spring, alternating years.

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Course	Credits
JRNL 328 - Int Photojournalism	3 Credits
JRNL 330 - News Editing	3 Credits
JRNL 331 - Intermediate Web Reporting	3 Credits
JRNL 340 - Intermediate Audio	3 Credits
JRNL 350 - Intermediate Video Photography	3 Credits
JRNL 351 - Intermediate Video Directing	3 Credits
JRNL 352 - Int Video Reporting and Produc	3 Credits
JRNL 362 - Feature Writing	3 Credits
JRNL 370 - Public Affairs Reporting	3 Credits
JRNL 410 - Native News Honors Project	1 To 3 Credits
JRNL 411 - Reporting Native News	1 To 6 Credits
JRNL 412 - Montana Journalism Review	1 To 6 Credits
JRNL 414 - Investigations	3 Credits
JRNL 427 - Adv Photo & Multimed Storytell	3 Credits
JRNL 428 - Freelance Photography	3 Credits
JRNL 429 - Documentary Photojournalism	3 Credits
JRNL 430 - Print & Web Editing & Design	3 Credits
JRNL 431 - Online Journalism	3 Credits
JRNL 440 - Advanced Audio	3 Credits
JRNL 470 - Covering Elections	3 Credits
JRNL 471 - Covering the Legislature	3 Credits
JRNL 472 - Opinion Writing	3 Credits
JRNL 473 - International Reporting	3 Credits
JRNL 474 - Magazine Freelance Writing	3 Credits

	JRNL 480 - Advanced Video Reporting	3 Credits
	JRNL 481 - Adv Video Photo and Directing	3 Credits
	JRNL 482 - Advanced Video Storytelling	3 Credits
	JRNL 485 - Griz TV	3 Credits
	JRNL 488 - Student Documentary Unit	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Journalism Minor

Minor - Journalism (Minor)

School of Journalism

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Core Courses

Rule: Must complete all of the following courses

	Course	Credits
	JRNL 100H - Media History and Literacy	3 Credits
	JRNL 170 - Elements of News Writing	3 Credits
	JRNL 257 - Beginning Visual Journalism	3 Credits
	JRNL 270 - Reporting	3 Credits
	JRNL 300 - First Amendmnt and Jrnalism La	3 Credits
	JRNL 400 - Ethics & Trends in News Media	3 Credits
Minimum Required Grade: C-		18 Total Credits Required

Additional courses

Note: Must complete 1 additional upper-division elective

Note: Must complete 1 additional upper-division elective

Print Journalism

Department Faculty

Professors

Denise Dowling, Associate Professor
Ray Ekness, Professor & Director of Student Success
Peggy Kuhr, Vice President for Integrated Communications
Dennis Swibold, Professor & Director of Faculty Affairs

Associate Professors

Lee Banville, Associate Professor
Ray Fanning, Associate Professor
Keith Graham, Associate Professor
Henriette Lowisch, Associate Professor
Jeremy Lurgio, Associate Professor
Nadia White, Associate Professor

Assistant Professors

Larry Abramson, Dean
Jule Banville, Assistant Professor
Jason Begay, Assistant Professor
Joe Eaton, Assistant Professor
Kevin Van Valkenburg, Pollner Professor

Adjunct Faculty

Ryan Corwin, Adjunct Instructor
Courtney Cowgill, Adjunct Instructor
Matthew Frank, Adjunct Instructor
Breanna Roy, Adjunct Instructor
John Twiggs, Adjunct Instructor
Kathy Weber-Bates, Adjunct Instructor

Course Descriptions

Journalism

- JRNL 100H - Media History and Literacy

Credits: 3. Offered autumn. A survey of the history, development and role of the media in society, including newspapers, magazines, radio, television, books, movies, recordings and the World Wide Web. The course examines ethical, political, financial and other issues related to mass media. Also included is an introduction to media literacy and critical thinking about the media and their messages. **Course Attributes:** Historical & Cultural Course American and European

- **JRNL 102Y - News Literacy**

Credits: 3. Offered spring. The course will teach students to become discriminating news consumers, helping them recognize the difference between news and propaganda, news and opinion, bias and fairness, assertion and verification, and evidence and inference in news reports. It will cover the foundation of news dissemination from its earliest manifestations through the accelerating news revolution of the present. **Course Attributes:** American and European

- **JRNL 105X - Global Current Events**

Credits: 3. Offered autumn and spring. Survey of global news intended to make students familiar with the context and vocabulary necessary to understand the news, what makes it, and the implications that stem from it. **Course Attributes:** Indigenous and Global

- **JRNL 140A - Intro Radio/Audio Storytelling**

Credits: 3. Offered intermittently. Introduction to the fundamentals of audio storytelling. Students will learn creative skills through experimentation with the use of sounds, interviews and voice description. **Course Attributes:** Expressive Arts Course

- **JRNL 170 - Elements of News Writing**

Credits: 3. Offered Fall and Spring. Prereq. or Co-req., grade of C- or better in WRIT 101. Foundational course in the elements of news writing, with a focus on the style and conventions of writing for print, online and broadcast media.

- **JRNL 201 - Diversity in Media**

Credits: 3. Offered autumn. Examination of how the news media portray different ethnic groups and other diverse populations and how the media's portrayals of diverse groups affect journalists' personal views and professional practices. Students will learn how to portray more accurately and fairly individuals, groups and points of view outside society's mainstream.

- **JRNL 257 - Beginning Visual Journalism**

Credits: 3. Offered autumn and spring. This course provides an introduction to photo and video journalism using digital cameras. Students will learn the basics of editing still images with Photoshop and video with Final Cut Pro. Students will learn how to take compelling, content-driven photographs using light, composition and depth of field. Students will also learn about capturing quality video, audio and natural sound used to build video sequences. The overall emphasis is on visual storytelling. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 260 - Sports Journalism**

Credits: 3. Offered intermittently. Prereq., JRNL 270. Study and practice of sports journalism in print and broadcast, including its history and its finest examples.

- **JRNL 270 - Reporting**

Credits: 3. Offered autumn and spring. Prereq., JRNL 170. Fundamentals of interviewing, reporting, writing and audio editing of news stories for print, online and broadcast media. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40 Writing Course-Approved Writing Course-Intermediate

- **JRNL 295 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40

- **JRNL 300 - First Amendment and Journalism Law**

Credits: 3. Offered spring. Prereq., JRNL 270 and admission to professional program, or consent of instr. Overview of issues related to journalism and the law. Exploration of libel, privacy, prior restraints, access and other First Amendment questions along with ethical problems peculiar to media news gathering. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 328 - Intermediate Photojournalism**

Credits: 3. Offered autumn and spring. Prereq., Must be admitted to Journalism Professional Program. Students create single photo assignments for newspapers, magazines and online publications. Students also create narrative picture stories and photo essays, one of which is produced in Final Cut Pro, and learn the basics of portable flash units. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 330 - News Editing**

Credits: 3. Offered autumn and spring. Prereq., Must be admitted to Journalism Professional Program. Fundamentals of editing and headline writing for print and online media. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 331 - Intermediate Web Reporting**

Credits: 3. Offered autumn and spring. Prereq., Must be admitted to Journalism Professional Program. Students learn to produce reporting for different websites and digital news sources, with a special emphasis on using digital technologies to broaden sources for stories. Course will also explore the societal, business and ethical effects these emerging technologies are having.

- **JRNL 340 - Intermediate Audio**

Credits: 3. Offered autumn. Prereq., admission to Professional Program. Use of audio in news, interview and feature programs. Students will write, gather audio and produce segments and programs using digital audio equipment. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40 Writing Course-Upper-Division Writing Course-Advanced

- **JRNL 350 - Intermediate Video Photography**

Credits: 3. Offered autumn. Prereq., admission to Professional Program. Digital video photography, storytelling and non-linear editing. Students will be introduced to high-definition video cameras and advanced editing techniques and build on photojournalism skills introduced in JRNL 257. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40

- **JRNL 351 - Intermediate Video Directing**

Credits: 3. Offered spring. Prereq., JRNL 350. Students will learn the fundamentals of production and directing of studio-based programming. Students will work with those enrolled in Intermediate Video Reporting & Producing to create content. Newscasts produced in these courses are not intended for air. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40

- **JRNL 352 - Intermediate Video Reporting and Production**

Credits: 3. Offered spring. Prereq., JRNL 350. Creation of video news stories and programs including story idea generation, research and interviewing techniques, sound selection, script writing, television anchoring and producing, video photography and editing. Works with Intermediate Video Directing class to create news programs. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40 Writing Course-Upper-Division Writing Course-Advanced

- **JRNL 362 - Feature Writing**

Credits: 3. Offered autumn and spring. Prereq., Must be admitted to Journalism Professional Program. Classroom instruction and practical experience in applying feature-writing techniques to the coverage of news, entertainment and sports for print and electronic media. **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40 Writing Course-Upper-Division Writing Course-Advanced

- **JRNL 370 - Public Affairs Reporting**

Credits: 3. Offered autumn and spring. Prereq., Must be admitted to Journalism Professional Program. Study and practice of reporting public issues with emphases on news sources,

interpretive writing and the coverage of local, state and federal governments. **Course Attributes:**
Internships/Practicums Journ/R-TV graduation limit 40 Writing Course-Upper-Division
Writing Course-Advanced

- **JRNL 396 - Adv Journ Problems**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Independent study. **Course Attributes:** Service Learning/Volunteer Journ/R-TV graduation limit 40

- **JRNL 400 - Ethics & Trends in News Media**

Credits: 3. Offered autumn and spring. Prereq., senior standing in journalism or radio-television. Practical ethics case studies from print, online and broadcast media, as well as an examination of the trends that are shaping the evolving news media. **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40

- **JRNL 410 - Native News Honors Project**

Credits: 1 TO 3. (R-6) Offered spring. Prereq., consent of instr. Researching, photographing and designing stories about Montana's Native American community. Photojournalism students travel with reporters to Montana's seven Indian reservations to document in-depth stories on a single topic. **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40

- **JRNL 411 - Reporting Native News**

Credits: 1 TO 6. (R-6) Offered spring. Prereq., consent of instr. Researching, reporting and editing stories about Montana's Native American community. Reporters travel to Montana's seven Indian reservations to investigate in depth a single story topic. Editors coach reporters and edit their stories. The stories appear in a publication distributed throughout the state and nation. **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40

- **JRNL 412 - Montana Journalism Review**

Credits: 1 TO 6. (R-6) Offered spring. Prereq., consent of instr. Students assist writing, editing, design and overall production and distribution of the Montana Journalism Review, a publication of the School of Journalism. **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40

- **JRNL 414 - Investigations**

Credits: 3. Offered autumn. Prereq., JRNL 370 for print students, JRNL 352 for broadcast students. Introduction to methods and ethics of investigative reporting, emphasizing computer-assisted research and analysis of public records and databases. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 427 - Advanced Photo & Multimedia Storytelling**

Credits: 3. Offered spring. Prereq., JRNL 328 and admission into Professional Program. Students discuss, research, photograph, design, write and produce several documentary-style stories and essays using still photography, video, audio, text and graphics. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 428 - Freelance Photography**

Credits: 3. Offered autumn and spring. Prereq., JRNL 328 and admission into Professional Program. A workshop-style class that centers on the technical aspects of digital still and video camera lighting for freelance photography. Includes instruction in basic business practices for freelance work. Students produce weekly assignments including editorial and adventure portraiture, food illustrations, magazine fashion projects and travel stories. Business and marketing practices will include copyright, branding, usage, pricing, licensing and negotiation. Students must provide a professional still digital SLR with lenses and a portable strobe. **Course Attributes:** Internships/Practicums

- **JRNL 429 - Documentary Photojournalism**

Credits: 3. Offered autumn. Prereq., JRNL 417 or consent of instr. Production of an in-depth documentary project involving a social issue with intent to educate, inform and implement change.

Students write, shoot and design final project in book form or produce a multimedia project using stills, video, audio and text. **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 430 - Print & Web Editing & Design**

Credits: 3. Offered spring. Prereq., JRNL 380 or consent of instr. Introduction to basic design principles, typography, color theory and usage, headline and caption writing. Discussion of the newest research on how readers use print and online publications. Students will design newsletter, brochure, newspaper, magazine and websites, plus other publications.

- **JRNL 431 - Online Journalism**

Credits: 3. Offered autumn and spring. Prereq., admission to the professional program or consent of instr. Course introduces students to the basics of website design and organization, explores how the Internet can be used to generate sources for stories and directs students in using multimedia reporting techniques for a web-based news site. **Course Attributes:** Internships/Practicums
Journ/R-TV graduation limit 40

- **JRNL 433 - Marketing Your Work**

Credits: 2. Offered spring. Prereq., admission to the professional program. This course aims to help upper-division students find buyers for their journalistic work in today's rapidly changing information marketplace. Students will study how to identify news markets, how to establish and maintain relationships with editors, producers and publishers; and how to maintain control of their work while maximizing its value.

- **JRNL 440 - Advanced Audio**

Credits: 3. Offered spring. Prereq., JRNL 340 or consent of instr. Students will create long-form, in-depth audio programs such as radio documentaries and radio deliberation programming on a variety of topics. Students will report, interview, host, and write the programs for a variety of outlets such as radio stations, webcasting and online. **Course Attributes:**
Internships/Practicums

- **JRNL 470 - Covering Elections**

Credits: 3. Offered autumn of even-numbered years. Prereq., JRNL 370 or consent of instr. Students will produce coverage of Montana elections for newspapers, broadcast stations and the web. **Course Attributes:** Internships/Practicums

- **JRNL 471 - Covering the Legislature**

Credits: 3. Offered spring of odd-numbered years. Prereq., JRNL 370 or consent of instr. Students will produce coverage of Montana's biennial legislative sessions for newspapers, broadcast stations and the web. **Course Attributes:** Montana Field Experience

- **JRNL 472 - Opinion Writing**

Credits: 3. Offered intermittently. Prereq., JRNL 370 or consent of instr. Practice in writing editorials, columns, op-eds, and opinion blogs. Examines the evolving role of journalism in moderating and stimulating public discourse. **Course Attributes:** Internships/Practicums
Journ/R-TV graduation limit 40 Writing Course-Upper-Division

- **JRNL 473 - International Reporting**

Credits: 3. Offered intermittently. Prereq., admission to the professional program or consent of instr. Prepares students to report internationally and to develop global sources for local stories. History and practice of foreign correspondence. **Course Attributes:**
Journ/R-TV graduation limit 40

- **JRNL 480 - Advanced Video Reporting**

Credits: 3. Offered autumn. Prereq., JRNL 352. Teams will create three to five minute television weekly news updates available online and broadcast on commercial stations in Montana. Students will fill all positions needed to produce the updates including reporters, producers and anchors, in tandem with students in JRNL 450, 650. **Course Attributes:** Internships/Practicums
Journ/R-TV graduation limit 40

- **JRNL 481 - Adv Video Photo and Directing**
 Credits: 3. Offered autumn. Prereq., JRNL 351 or consent of instr. Teams will create three to five minute weekly news updates to be broadcast online and on commercial stations in Montana. Students will fill all positions needed to produce the updates including photographers, editors and directors. **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 482 - Advanced Video Storytelling**
 Credits: 3. Offered autumn. Prereq., JRNL 350 or consent of instr. Teams will generate story ideas about Montana issues, businesses and people. Students will research, write, photograph, interview, edit and create long-form video programs. The programs generated in this course are intended for air on Montana PBS **Course Attributes:** Research & Creative Schlrshp
- **JRNL 485 - Griz TV**
 Credits: 3. Offered spring. Prereq., JRNL 480 or 481. Techniques and strategies for directing, reporting, and producing a 30 minute live newscast. Students will also produce a weekly online newscast. **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 488 - Student Documentary Unit**
 Credits: 3. Offered spring. Prereq., JRNL 351 or 352 or consent of instructor. In-depth examination of a topic of importance in Montana. Students will produce a one-hour television documentary to air on MontanaPBS and other outlets. Students will research, report, write, photograph, edit and promote the film. Co-convenes with JRNL 688. **Course Attributes:**
 Research & Creative Schlrshp Co-Convened Course Journ/R-TV graduation limit 40
- **JRNL 491 - Special Topics**
 Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
 Journ/R-TV graduation limit 40
- **JRNL 494 - Pollner Seminar**
 Credits: 3 TO 6. (R-6) Offered autumn and spring. Prereq., consent of instructor or print and photo department chair. Seminar on a topic selected by the T. Anthony Pollner Distinguished Professor. Topics will range from journalism history, ethics, practices and performance to current issues in the news media. **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 505 - Journ and Society Sem**
 Credits: 3. Offered autumn. Prereq., graduate standing. Discussion and research about current journalism issues related to environmental science and natural resource journalism. Study of relevant traditional and online research methodology. Level: Graduate **Course Attributes:**
 Journ/R-TV graduation limit 40
- **JRNL 551 - Graduate Newscast Prod**
 Credits: 3. Offered spring. Prereq., JRNL 482 or consent of instructor. Intensive instruction and practice in reporting, writing, producing, directing and delivering television newscasts. Work on a special program for Montana PBS. Level: Graduate **Course Attributes:**
 Journ/R-TV graduation limit 40
- **JRNL 567 - Pres/Broadcast Law**
 Credits: 3. Offered spring. Prereq., graduate standing. Examination and discussion of state and federal court cases affecting the mass media, with emphasis on First Amendment issues. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 570 - Reporting**
 Credits: 3. Offered autumn. Prereq., graduate standing. Principles of news gathering through records, documents, meetings, observation of events, and interviewing with a focus on coverage of environmental science and natural resources. Producing news and feature accounts for broadcast, print and digital media. Perspectives on reporting standards and practices especially related to natural resource news. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40

- **JRNL 575 - Story Lab**
 Credits: 3. Offered spring. Prereq., graduate standing. Journalism students are paired with UM researchers for a practicum on telling the stories of scientific research for a general news audience. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 580 - News Editing**
 Credits: 3. Offered autumn. Prereq., JRNL 570 or consent of instr. Fundamentals of copy editing and story editing for the print news media. In addition, students perform deadline editing on actual news stories for publication. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 590 - Meth Journ Research**
 Credits: 3. Prereq., consent of the graduate program director. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40
- **JRNL 591 - Special Topics**
 Credits: 1 TO 8. (R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 594 - Seminar**
 Credits: 1 TO 9. (R-9) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 599 - Professional Project**
 Credits: 1 TO 6. (R-6) Offered every term. Planning, research and execution of a major project in print, photographic or broadcast journalism. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 620 - Covering NA Issues**
 Credits: 3. Offered spring. Prereq., consent of instr. Researching, writing, photographing and/or editing in-depth special reports on issues that affect the Indians who reside within Montana's borders. Co-convening course JOUR 420/421. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40
- **JRNL 640 - Montana Journalism Review**
 Credits: 1 TO 3. (R-6). Offered spring. Prereq., consent of instr. Intensive laboratory experience in all phases of magazine publication, including writing, editing, layout, design, production and distribution of Montana Journalism Review, an annual publication of the School of Journalism. Co-convenes with U 440. Level: Graduate **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40
- **JRNL 650 - Gr Bcst Newsroom-Editorial**
 Credits: 3. (R-6) Prereq., R-TV 550, JRNL 551 or consent of instr. Students direct, photograph and edit a daily Newsbrief report for Montana PBS, and a weekly UMNews program for commercial stations, in tandem with students in R-TV 450, 460 and 650. Co-convenes with JRNL 460. Level: Graduate **Course Attributes:** Internships/Practicums Journ/R-TV graduation limit 40
 Co-Convened Course
- **JRNL 690 - Research in Journalism**
 Credits: 1 TO 9. (R-9) Offered every term. Prereq., consent of the graduate program director. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate **Course Attributes:** Research & Creative Schlrshp Journ/R-TV graduation limit 40
- **JRNL 698 - Externship**

Credits: 1 TO 3. (R-3) Offered every term. Prereq., JRNL 570. Practical experience working for news media and other approved businesses, agencies or organizations focused on natural resource issues, industries or scientific research. Level: Graduate **Course Attributes:**

Internships/Practicums Journ/R-TV graduation limit 40

- **JRNL 699 - Thesis**

Credits: 1 TO 6. (R-6) Offered every term. Research and writing of master's thesis. Level: Graduate **Course Attributes:** Journ/R-TV graduation limit 40

Broadcast Journalism

Department Faculty

Professor

Denise Dowling, Associate Professor
Ray Ekness, Professor & Director of Student Success
Peggy Kuhr, Vice President for Integrated Communications
Dennis Swibold, Professor & Director of Faculty Affairs

Associate Professor

Lee Banville, Associate Professor
Ray Fanning, Associate Professor
Keith Graham, Associate Professor
Henriette Lowisch, Associate Professor
Jeremy Lurgio, Associate Professor
Nadia White, Associate Professor

Assistant Professor

Larry Abramson, Dean
Jule Banville, Assistant Professor
Jason Begay, Assistant Professor
Joe Eaton, Assistant Professor
Kevin Van Valkenburg, Pollner Professor

Adjunct

Ryan Corwin, Adjunct Instructor
Courtney Cowgill, Adjunct Instructor
Matthew Frank, Adjunct Instructor
Breanna Roy, Adjunct Instructor
John Twiggs, Adjunct Instructor
Kathy Weber-Bates, Adjunct Instructor

Radio-Television Production B.A.

School of Journalism

Catalog Year: 2014-2015

Degree Specific Credits: 37

Required Cumulative GPA: 2.5

Note: Degree Specific Requirements: must complete at least 37 and no more than 48 JRNL credits. Students must complete at least 72 total credits outside of Journalism.

Pre-Journalism Courses

Rule: 2.5 overall GPA and 2.5 GPA in pre-journalism core.

Note: The lower division core must be completed prior to admission to the School of Journalism professional program. The department strongly recommends students complete 2 semesters of the same foreign language before applying to the professional program.

38 Total Credits Required

Core Requirements

Rule: Complete with at least a 2.5 in this core.

Note: Must complete these courses in order to apply to the professional programs.

—	Course	Credits
	JRNL 100H - Media History and Literacy	3 Credits
	JRNL 170 - Elements of News Writing	3 Credits
	JRNL 257 - Beginning Visual Journalism	3 Credits
	JRNL 270 - Reporting	3 Credits
	Minimum Required Grade: C-	12 Total Credits Required

Math

Rule: Must complete 1 of the following math course that fulfills the General Education math requirement.

Note: Other courses considered by department as long as meets the General Education Requirement.

—	Course	Credits
	M 104 - Numbers as News	3 Credits

M 105 - Contemporary Mathematics	3 Credits
M 115 - Probability and Linear Math	3 Credits
M 121 - College Algebra	3 Credits
M 122 - College Trigonometry	3 Credits
M 135 - Mathematics for K-8 Teachers I	5 Credits
M 151 - Precalculus	4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Indigenous and Global General Education Course

Rule: Complete 1 of the following:

Course	Credits
ANTY 101H - Anthro & the Human Experience	3 Credits
ANTY 141H - The Silk Road	3 Credits
GPHY 243X - Africa	3 Credits
GPHY 245X - The Middle East	3 Credits
HSTR 146H - The Silk Road	3 Credits
HSTR 231H - Modern Latin America	3 Credits
JRNL 105X - Global Current Events	3 Credits
MCLG 100H - Intro Latin American Studies	3 Credits
NASX 105H - Intro Native Amer Studies	3 Credits
NASX 231X - Indig World View Perspectives	3 Credits
PSCI 230X - Intro to International Rel	3 Credits
SOCI 212S - Social Issues Southeast Asia	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Political Science Course

Rule: Complete 1 of the following:

Note: If PSCI 230X is taken to fulfill the Indigenous and Global General Education Course, PSCI 210S or 220S is required.

—	Course	Credits
	PSCI 210S - Intro to American Government	3 Credits
	PSCI 220S - Intro to Comparative Govt	3 Credits
	PSCI 230X - Intro to International Rel	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Economics or Business Course

Rule: Complete 1 of the following:

—	Course	Credits
	BGEN 105S - Introduction to Business	3 Credits
	ECNS 101S - Economic Way of Thinking	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

American History

Rule: Complete 1 of the following:

—	Course	Credits
	HSTA 101H - American History I	4 Credits
	HSTA 102H - American History II	4 Credits
	HSTA 103H - Honors American History I	4 Credits
	HSTA 104H - Honors American History II	4 Credits
Minimum Required Grade: C-		4 Total Credits Required

Modern or Classical Language

Rule: Students must complete the first year sequence of any modern or classical language.

Journalism Professional Program

Rule: Complete all of the following courses.

Note: Must also complete 1 capstone course as designated by the faculty.

Course	Credits
JRNL 300 - First Amendmnt and Jrnalism La	3 Credits
JRNL 400 - Ethics & Trends in News Media	3 Credits
JRNL 498 - Supervised Internship	1 To 2 Credits
Minimum Required Grade: C-	7 Total Credits Required

Journalism Upper Division Electives

Rule: Complete at least 5 of the following:

Course	Credits
JRNL 331 - Intermediate Web Reporting	3 Credits
JRNL 340 - Intermediate Audio	3 Credits
JRNL 350 - Intermediate Video Photography	3 Credits
JRNL 351 - Intermediate Video Directing	3 Credits
JRNL 440 - Advanced Audio	3 Credits
JRNL 481 - Adv Video Photo and Directing	3 Credits
JRNL 482 - Advanced Video Storytelling	3 Credits
JRNL 485 - Griz TV	3 Credits
JRNL 488 - Student Documentary Unit	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Journalism Minor

Minor - Journalism (Minor)

School of Journalism

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Core Courses

Rule: Must complete all of the following courses

Course	Credits
JRNL 100H - Media History and Literacy	3 Credits
JRNL 170 - Elements of News Writing	3 Credits
JRNL 257 - Beginning Visual Journalism	3 Credits
JRNL 270 - Reporting	3 Credits
JRNL 300 - First Amendmnt and Jrnalism La	3 Credits
JRNL 400 - Ethics & Trends in News Media	3 Credits
Minimum Required Grade: C-	18 Total Credits Required

Additional courses

Note: Must complete 1 additional upper-division elective

Note: Must complete 1 additional upper-division elective

School of Law

Irma S. Russell, Dean

Andrew King-Ries, Associate Dean

The Law School is accredited by the American Bar Association and the Association of American Law Schools, and offers the degree of Juris Doctor (J.D.). Prerequisites for admission to the Law School are a baccalaureate degree and Law School Admission Test.

For detailed information concerning the Law School's admission criteria, application procedures, facilities, and official course descriptions, consult the Law School Catalog, which may be obtained by calling (406)243-6169 or visiting the Law School [website](#).

The Law School's administrative regulations are contained in the Law School Student Handbook, which is on the website. The Law School conforms in most instances to the calendar established for the entire University. There are some differences, however, because the Law School operates on a different (and longer) semester system than the rest of the University.

»Academic Year Calendar

Access the Law School Academic Calendar on the [Law School calendar web page](#).

»Required Curriculum

First Year	Credits
500 Civil Procedure I	3
501 Civil Procedure II	2
502 Contracts I	3
503 Contracts II	2
504 Pretrial Advocacy I	2
505 Pretrial Advocacy II	1
506 Legal Research	2
508 Legal Analysis	1
509 Legal Writing I	3
510 Criminal Law & Proc I	2
511 Criminal Law & Proc II	3
512 Torts I	2
513 Torts II	3
Second Year	Credits
550 Property I	2
551 Property II	3
552 Federal Tax(may be taken third year)	3

554 Business Organizations	3
555 Professional Responsibility	3
556 Business Transactions	2
557 Trial Practice	2
558 Constitutional Law	4
560 Evidence	3
Electives (see below)	
Third Year	Credits
(minimum of 4 credits required)	
599 Clinical Training II	1-8
600 Clinical Training III	1-6
601 Clinical Training IV	1-6
Electives (see below)	

Elective Courses

(Elective offerings vary from year to year)

- Advanced Criminal Procedure (Law 690, 2 credits)
- Advanced Environmental Law (Law 649, 3 credits)
- Advanced Legal Research (Law 615, 2 credits)
- Advanced Legal Issues in Education (Law 686, 3 credits)
- Advanced Legislation (Law 652, 2 credits)
- Advanced Federal Indian Law (Law 617, 2 credits)
- Advanced Public Land and Resources Law (Law 619, 2 credits)
- Advanced Trial Advocacy (Law 685, 1 credit)
- Agricultural Law (Law 656, 2 credits)
- Alternative Dispute Resolution (Law 614, 3 credits)
- American Indian Natural Resources (Law 619, 2 credits)
- Appellate Advocacy (Law 616, 3 credits)
- Bankruptcy (Law 621, 2 credits)
- Child Advocacy (Law 670, 2 credits)
- Client Counseling Team (Law 638, 2 credits)
- Conflict of Laws (Law 653, 2 credits)
- Consumer Transactions (Law 645, 3 credits)
- Copyright Law (Law 682, 3 credits)
- Cyber Law (Law 676, 2 credits)
- Disability Law (Law 668, 2 credits)
- Elder Law (Law 620, 3 credits)
- Employment Law (Law 622, 3 credits)
- Environmental Law (Law 650, 3 credits)
- Estate Planning (Law 659, 3 credits)

- Family Law (Law 669, 3 credits)
- Family Law Mediation (Law 672, 2 credits)
- Federal Courts (Law 671, 2 credits)
- Federal Indian Law (Law 648, 3 credits)
- First Amendment Seminar (Law 675, 2 credits)
- Foundations of Natural Resources Conflict Resolution (Law 613, 3 credits)
- Gender and the Law (Law 625, 3 credits)
- Health Care Law (Law 637, 3 credits)
- Independent Study (Law 660/1, 1-2 credits)
- Insurance Law (Law 624, 3 credits)
- International Business & Trade (Law 629, 2 credits)
- Introduction to Environmental Law (Law 650, 3 credits)
- Land Use Planning (Law 687, 3 credits)
- Law & Literature (Law 607, 1 credit)
- Law & Technology (Law 693, 2 credits)
- Law Practice (Law 631, 1 credit)
- Law Reviews I, II, III, IV (Law 564/5, Law 602/3, 1-2 credits)
- Lawyers' Values (Law 630, 2 credits)
- Legal History (Law 626, 2 credits)
- Local Government (Law 646, 3 credits)
- Moot Courts (Law 666, 2 credits)
- Montana Constitutional Law (Law 618, 2 credits)
- Natural Resource Development (Law 633, 3 credits)
- Negotiations (Law 641, 2 credits)
- Negotiation Team (Law 642, 2 credits)
- Non-profit Organizations (Law 674, 2 credits)
- Patent Law (Law 627, 2 credits)
- Philosophy of Law (Law 664, 3 credits)
- Practicum in Natural Resources Conflict Resolution
- Product Liability (Law 657, 2 credits)
- Public Interest Lawyering (Law 673, 3 credits)
- Public International Law (Law 634, 3 credits)
- Public Land and Resources Law (Law 654, 3 credits)
- Public Regulation of Business (Law 632, 3 credits)
- Real Estate Transactions (Law 658, 2 credits)
- Remedies (Law 628, 3 credits)
- Sales & Leases (Law 692, 3 credits)
- Secured Transactions (Law 636, 2 credits)
- Special Topics in Criminal Law (Law 667, 2 credits)
- Taxation of Business Organizations (Law 639, 4 credits)
- Taxation of Estates & Gifts (Law 655, 3 credits)
- Taxation of Property Transactions (Law 640, 2 credits)
- Trademark Law (Law 693, 2 credits)
- Tribal Courts/Tribal Law (Law 688, 3 credits)
- Tribal/State Relations (Law 694, 2 credits)
- UCC Articles 203 (Law 609, 3 credits)
- Water Law (Law 663, 2 credits)
- White Collar Crime (Law 644, 2 credits)
- Workers' Compensation (Law 662, 3 credits)

Professors

Bari Burke, Professor
 Eduardo R.C. Capulong, Professor of Law
 Cynthia Ford, Professor
 Elaine Gagliardi, Associate Dean of Students & Professor
 Larry Howell, Professor
 Andrew King-Ries, Associate Dean & Professor
 Paul Kirgis, Dean and Professor of Law

Monte Mills, Assistant Professor & Co-Director, Margery Hunter Brown Indian Law Clinic
Jeff Renz, Clinical Professor

Associate Professors

Michelle Bryan, Professor of Law / Co-Director, Land Use & Natural Resources Clinic
Philip Cousineau, Assoc. Prof. of Law Librarianship
Stacey Gordon, Associate Professor
Jordan Gross, Associate Professor
Anthony Johnstone, Associate Professor
Maylinn Smith, Associate Professor
Hillary Wandler, Associate Professor

Assistant Professors

Pippa Browde, Assistant Professor
Jonathon Byington, Associate Professor
Samuel Panarella, Associate Professor
Cathay Smith, Assistant Professor of Law
Martha Williams, Assistant Professor

Adjunct Faculty

Eldena Bear Don't Walk, Adjunct Professor
Daniel Belcourt, Adjunct Professor
Randall Bishop, Adjunct Professor
Daniel Browder, Adjunct Professor
Stephen Brown, Adjunct Professor
J. Martin Burke, Professor (Retired)
Anna Conley, Adjunct Professor
Sally Cummins, Adjunct Professor
Heidi Fanslow, Adjunct Professor
Gary Graham, Adjunct Professor
Barbara Halligan, Adjunct Professor
Marianne Hartigan, Adjunct Professor
Matthew Hayhurst, Adjunct Professor
Richard Hegger, Adjunct Professor
Joel Henry, Professor
Marcia Holland, Adjunct Professor
Thomas Huff, Adjunct Professor / Professor of Philosophy, Emeritus
James Hunt, Adjunct Professor
Cort Jensen, Adjunct Professor
Malin Johnson, Adjunct Professor
Kristen Juras, Adjunct Professor
Martin King, Adjunct Professor
Ralph Kirscher, Adjunct Professor
Robert Lukes
Alan McCormick, Adjunct Professor
Matthew Mckinney, Adjunct Professor
Gregory Munro, Adjunct Professor
Jerome Patterson, Adjunct Professor
Robert Phillips, Adjunct Professor
David Rice, Adjunct Professor
Julie Sirrs, Adjunct Professor
Klaus Sitte, Adjunct Professor
Margaret Tonon, Adjunct Professor
Christian Tweeten, Adjunct Professor
Joshua Van de Wetering, Adjunct Professor

Mike and Maureen Mansfield Center

Abraham Kim, Director

The Maureen and Mike Mansfield Center was established in 1986 to pay tribute to Maureen and Mike Mansfield and to recognize their important contributions to U.S. Asian relations and public policy. The Center is an academic unit within the University of Montana and receives core funding from an endowment managed by the Maureen and Mike Mansfield Foundation. Mansfield Center faculty offer classroom instruction, conduct research, provide training for Asian and U.S. government personnel, and organize various types of conferences, all with a focus on East Asia. The Center faculty collaborate with the University's Asian Studies Program and several other campus units.

The Mansfield Center's Ethics and Public Affairs Program (formerly known as the Center for Ethics) focuses upon the relationship of values to public institutions and affairs. Its courses, seminars, lectures, conferences, and internships examine the role that ethical values can and should play in public life, moral quandaries faced by those who govern philosophical and practical dimensions of political ethics, and issues of leadership and character in public service.

No Degrees Found

Course Descriptions

[View Offered Courses](#)

East Asian Studies

Department Faculty

Affiliates

Matthew Olson, Fellow (Communications), Faculty Affiliate

East Asian Studies B.A.

Bachelor of Arts - East Asian Studies

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Lower Division Core Courses

Rule: Complete the following subcategories

6 Total Credits Required

Fundamentals

Rule: Must complete the following course

Note: On occasion the Modern and Classical Languages department offers an alternative Introduction to East Asian Studies course which could fulfill this requirement. Check with the advisor.

—	Course	Credits
	HSTR 240 - East Asian Civilizations	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Culture and Civilization

Rule: Must complete 1 of the following courses

—	Course	Credits
	CHIN 211H - Chinese Culture and Civiliz	3 Credits
	JPNS 150H - Japanese Cult & Civiliz	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Core Courses

Rule: Must complete the following subcategories

18 Total Credits Required

Chinese Studies

Rule: Must complete 2 courses of Chinese Studies

Japanese Studies

Rule: Must complete 2 courses of Japanese Studies

East Asian Studies

Rule: Must complete 2 courses of Japanese, Chinese, Viet Nam, pan-East Asia, or Buddhism

Note: Student may select from courses as they are available.

Language

Rule: Must complete one of the following subcategories

20 Total Credits Required

Chinese Language

Rule: May select the following language sequence

—	Course	Credits
	CHIN 101 - Elementary Chinese I	5 Credits
	CHIN 102 - Elementary Chinese II	5 Credits
	CHIN 201 - Intermediate Chinese I	5 Credits
	CHIN 202 - Intermediate Chinese II	5 Credits
	Minimum Required Grade: C-	20 Total Credits Required

Japanese Language

Rule: May select the following language sequence

—	Course	Credits
	JPNS 101 - Elementary Japanese I	5 Credits
	JPNS 102 - Elementary Japanese II	5 Credits
	JPNS 201 - Intermediate Japanese I	5 Credits
	JPNS 202 - Intermediate Japanese II	5 Credits
	Minimum Required Grade: C-	20 Total Credits Required

Mansfield Center Course Listing

Course Descriptions

Mansfield Center

- **MANS 101 - Elementary Pashto I**

Credits: 5. Offered intermittently. Prereq., students must be grant eligible. This course is an intensive six-week course teaching Pashto.

- **MANS 102 - Elementary Pashto II**

Credits: 5. Offered intermittently. Prereq., MANS 101. Students must be also grant eligible. This course is an intensive six-week course teaching Pashto.

- **MANS 107 - Elementary Korean I**

Credits: 5. The Defense Critical Language and Culture Program (DCLCP) (of The University of Montana's Maureen and Mike Mansfield Center) provides intensive language and culture training for members of the National Guard, Reserve, and Active Duty utilizing a congressionally funded Language Training Center (LTC) contract through the Department of Defense Language and National Security Education Office (DLNSEO)—Grant title: Subaward 2013-LTC-Montana (H98210-13-2-0001). This DCLCP course is designed to meet DoD (Department of Defense) total force Korean language training needs, especially members of the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to enable the DoD workforce to be better prepared and equipped with the target language, cultural and regional expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll into other UMT language course. Nonetheless, we encourage the students to pursue a degree in programs like Eastern Asian Studies, Asian Studies, or political science offered by the University of Montana.

- **MANS 108 - Elementary Chinese I**

Credits: 5. The Defense Critical Language and Culture Program's Elementary I is an intensive 120-hour, 30 hours per week course (with 5 hours dedicated to culture and regional studies in English), equivalent to 6 months of college language courses. The course is for Special Forces military students who have previous language training in Chinese language, yet whose skills may have eroded somewhat due to insufficient practice. Students are admitted into the elementary Chinese-Mandarin class if they currently perform at either 0 or 0+ on the Interagency Language Roundtable (ILR) scale. In class, the target language is used exclusively when teaching the language, with no English permitted (unless in a case of an emergency when the Chinese word is unknown). Standard Chinese or Modern Standard Chinese (MSC), also known as Mandarin, Putonghua and Guoyu is the official language of the People's Republic of China, the Republic of China (Taiwan) and one of the four official languages of Singapore. Due to the complexities of this language, the Defense Language Institute categorized MSC as Category IV language, one of the toughest languages to learn for non-native speakers. The majority of the class will be conducted via Video Tele Conferencing (VTC); the remaining portion of the class will be in residence. In order to create communicative and task-based and skill-integration activities in improving students' overall language proficiency level, additional tutoring, counseling and coaching will also be conducted.

- **MANS 201 - Intermediate Pashto I**

Credits: 4. Offered intermittently. Prereq., MANS 101 and MANS 102. Students must also be grant eligible. This course is an intensive five-week course teaching Pashto.

- **MANS 202 - Intermediate Pashto II**

Credits: 4. Offered intermittently. Prereq., MANS 101, MANS 102 and MANS 201. Students must also be grant eligible. This course is an intensive five-week course teaching Pashto.

- **MANS 207 - Intermediate Korean I**

Credits: 5. The Defense Critical Language and Culture Program (DCLCP) (of The University of Montana's Maureen and Mike Mansfield Center) provides intensive language and culture training for members of the National Guard, Reserve, and Active Duty utilizing a congressionally funded Language Training Center (LTC) contract through the Department of Defense Language and National Security Education Office (DLNSEO)—Grant title: Subaward 2013-LTC-Montana (H98210-13-2-0001). This DCLCP course is designed to meet DoD (Department of Defense) total force Korean language training needs, especially members of the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to enable the DoD workforce to be better prepared and equipped with the target language, cultural and regional expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll into other UMT language course. Nonetheless, we encourage the students to pursue a degree in programs like Eastern Asian Studies, Asian Studies, or political science offered by the University of Montana.

- **MANS 208 - Intermediate Chinese I**

Credits: 5. The Defense Critical Language and Culture Program's Intermediate I is an intensive 120-hour, 30 hours per week course (with 5 hours dedicated to culture and regional studies), equivalent to 6 months of college language courses. The course is for Special Forces military students who have previous language training in Chinese language, yet whose skills may have eroded somewhat due to insufficient practice. Students are admitted into the elementary Chinese-Mandarin class if they currently perform at either 1 or 1+ on the Interagency Language Roundtable (ILR) scale. In class, the target language is used exclusively, with no English permitted (unless in a case of an emergency when the Chinese word is unknown). Standard Chinese or Modern Standard Chinese (MSC), also known as Mandarin, Putonghua and Guoyu is the official language of the People's Republic of China, the Republic of China (Taiwan) and one of the four official languages of Singapore. Due to the complexities of this language, the Defense Language Institute categorized MSC as Category IV language, one of the toughest languages to learn for non-native speakers. The majority of the class will be conducted via Video Tele Conferencing (VTC); the remaining portion of the class will be in residence. In order to create communicative and task-based and skill-integration activities in improving students' overall language proficiency level, additional tutoring, counseling and coaching will also be conducted

- **MANS 240 - History of Afghanistan/Pak.**

Credits: 5. Offered intermittently. Prereq., students must be grant eligible. This course is an intensive twenty-two week course teaching the history and cultures of Afghanistan and Pakistan.

- **MANS 295 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Experimental offerings of new courses or one-time offerings of current topics.

- **MANS 296 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently.

- **MANS 307 - Advanced Korean I**

Credits: 5. The Defense Critical Language and Culture Program (DCLCP) (of The University of Montana's Maureen and Mike Mansfield Center) provides intensive language and culture training for members of the National Guard, Reserve, and Active Duty utilizing a congressionally funded Language Training Center (LTC) contract through the Department of Defense Language and National Security Education Office (DLNSEO)—Grant title: Subaward 2013-LTC-Montana (H98210-13-2-0001). This DCLCP course is designed to meet DoD (Department of Defense) total force Korean language training needs, especially members of the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to enable the DoD workforce to be better prepared and equipped with the target language, cultural and regional expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll into other UMT language course. Nonetheless, we encourage the students to pursue a degree in programs like Eastern Asian Studies, Asian Studies, or Political Science offered by the University of Montana.

- **MANS 308 - Advanced Chinese I**

Credits: 5. The Defense Critical Language and Culture Program's Advanced I is an intensive 120-hour, 30 hours per week (with 5 hours dedicated to culture and regional studies in the target language), equivalent to 6 months of college language courses. The course is for Special Forces military students who have previous language training in Chinese language, yet whose skills may have eroded somewhat due to insufficient practice. Students are admitted into the advanced Chinese-Mandarin class if they currently perform at either 2 or 2+ on the Interagency Language Roundtable (ILR) scale. In class, the target language is used exclusively, with no English permitted (unless in a case of an emergency when the Chinese word is unknown). Standard Chinese or Modern Standard Chinese (MSC), also known as Mandarin, Putonghua and Guoyu is the official language of the People's Republic of China, the Republic of China (Taiwan) and one of the four official languages of Singapore. Due to the complexities of this language, the Defense Language Institute categorized MSC as Category IV language, one of the toughest languages to learn for non-native speakers. The majority of the class will be conducted via Video Tele Conferencing (VTC); the remaining portion of the class will be in residence. In order to create communicative and task-based and skill-integration activities in improving students' overall language proficiency level, additional tutoring, counseling and coaching will also be conducted.

- **MANS 395 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MANS 396 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently.

- **MANS 494 - Mansfield Center Seminar**

Credits: 1 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

- **MANS 495 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MANS 496 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **MANS 595 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

Maureen and Mike Mansfield Library

Shali Zhang, Dean of Libraries

The Maureen and Mike Mansfield Library at the University of Montana provides an array of information resources and services in support of the curricular and research programs of the University. These resources include traditional library collections and electronic access to networked research databases, e-journal packages, electronic journal subscriptions, media materials, and a web-based integrated library catalog. Library services include in-depth research and reference assistance, an extensive instruction program integrated into the university curriculum, and full-service computing and copying facilities. Extensive services for distance education students and faculty are available to provide an equitable educational experience.

The Maureen and Mike Mansfield Library comprises the heart of UM's library system. Collections exceed 1.75 million bound volumes, more than 218,000 electronic books, access to over 67,000 print and electronic journals, an expanding array of electronic databases, over 73,000 media, a federal government depository collection and an Archives and Special Collections. These collections are supplemented by an active interlibrary loan service through which the resources of other libraries are made available to students and faculty. The Mansfield Library is open seven days a week for 111 hours per week during the academic semester.

Over 130 computers available for student use and wireless access throughout the building provides fast and stable internet connectivity in support of access to electronic resources and access to other networked information. Three state-of-the-art classrooms underscore the goal of the Library as a learning library in which students learn how to access and evaluate information in support of their advancing academic careers. Study carrels, group study rooms, study tables, and soft seating on all floors of the library provide a variety of study environments.

The Mansfield Library at Missoula College UM (located on the East Campus) supports its curricular programs. Students and faculty at both campuses have access to all library resources and services. Students at Bitterroot College UM, in Hamilton, also have full access to the Mansfield Library resources and services. The library collections at the affiliated UM campuses are located in Butte at Montana Tech, and Highlands College of Montana Tech; in Dillon at The Carson Library of the University of Montana-Western; and in Helena at Helena College the University of Montana.

Department Faculty

Professors

Barry Brown
Kim Granath
Samantha Hines, Head, Mansfield Library at Missoula College
Donna McCrea
Sue Samson

Associate Professors

Julie Edwards
Teresa Keenan
Tammy Ravas
Megan Stark
Kate Zoellner

Assistant Professors

Adrienne Alger, Assistant Professor
Susanne Caro
Wendy Walker

Adjunct Assistant Professors

Natalie Bond
Jill Howard
Kimberly Swanson

Notice: Trying to get property of non-object in
/usr/local/www/apache24/data/dev1/sites/_common/includes/classes/course-catalog/course-
catalog.class.php on line 662 Notice: Trying to get property of non-object in
/usr/local/www/apache24/data/dev1/sites/_common/includes/classes/course-catalog/course-
catalog.class.php on line 662

Missoula College

Jane Baker, Interim Dean

Penny Jakes, Interim Associate Dean

Missoula College University of Montana is the new name of the college formerly known as the University of Montana College of Technology. The renaming is a part of a Montana Board of Regents initiative for Montana's two-year colleges.

Our mission, as the two-year college of the University of Montana, is to provide open access to higher education that expands opportunities for Montana residents. We are a gateway to comprehensive education, delivering high quality, student-centered, professional, technical, transfer, and workforce programs and courses.

The Missoula College offers programs and services on four campuses: the East Campus at 909 South Avenue West, the West Campus at 3639 South Avenue West, Mountain Campus at 32 Campus Drive, and the Bitterroot College in Hamilton. The student support offices including Enrollment Services, Disability Services for Students, Financial Aid, Registrar, Career Services, Educational Opportunity (EOC), Outreach Programming Office, Academic Advising, and administrative offices are located at the East Campus. All business technology programs, applied computing and electronics programs, culinary arts programs, health professions programs, as well as a branch of the Mansfield Library, The Bookstore at the Missoula College, and a dining room are located on the East Campus. All industrial technology programs are located on the West Campus.

Students may attend courses at four campus sites and online. Courses are scheduled at a variety of times between 7 a.m. and 10 p.m., Monday through Saturday. The Missoula College Dean's Office, department chairs and/or program directors may be contacted for specific program and scheduling information.

Bachelor of Applied Science Degree Program

A Bachelor of Applied Science degree is offered by the University of Montana in Missoula through the Applied Computing & Electronics in collaboration with the Missoula College. The initial contact for information and degree planning for the B.A.S. degree is the Missoula College. This degree program is available for students who have completed Associate of Applied Science degrees from accredited institutions and who wish to continue toward completing a baccalaureate degree. For more information, see the Applied Computing & Electronics section of this catalog.

Associate of Applied Science and Certificate of Applied Science Programs

The Associate of Applied Science degree and Certificate of Applied Science programs are designed to prepare an individual for employment in a specific career or career pathway. In some instances, particularly in Health Professions, the degree or certificate is a prerequisite for taking a licensing examination. The Associate of Applied Science degree is not typically considered a transfer degree, although opportunities do exist at the University of Montana and some other baccalaureate degree-granting institutions for continuing in programs such as the University's Bachelor of Applied Science degree program.

The College's Surgical Technology and Respiratory Care programs are reviewed by their respective Joint Review Committees and accredited by the Commission on Accreditation of Allied Health Education Programs. The Food Service Management program is accredited by the American Culinary Federation Educational Institute Accrediting Commission, the Paralegal Studies program is approved by the American Bar Association, and the Nursing programs are approved by the Montana Board of Nursing and the National League for Nursing Accrediting Commission.

Associate of Arts Degree Program

The Associate of Arts Degree is a general education transfer degree and does not officially include a major or minor course of study but does indicate areas of emphasis and areas of concentration. To receive an Associate of Arts (AA) degree, students must successfully complete all the general education requirements as described by Montana Board of Regents policy 301.10 Appendix 1. The minimum grade point average for the 60 credits required for the AA is 2.0.

Credit Applicable Toward an Associate of Arts and Baccalaureate Degrees

The following Missoula College courses have been approved to count as elective credit, and/or General Education credit for the Associate of Arts and baccalaureate degrees. With departmental approval, some may count toward major or cognate requirements. With departmental approval, up to 10 additional credits from courses not on this list may be counted. Refer to the sections on Technical Courses and Credit Maximums in this catalog (see index).

- AASC 100, 101
- BIOB 101N
- BIOH 108
- BIOH 201N
- BIOH 202N
- BIOH 211N
- BIOH 212N
- BGEN 105S
- COMX 102, 115S, 111A, 140, 212, 217A, 242, 219S
- CAPP 120, 134
- CSCI 110, 215E, 172, 221, 113
- ETEC 232, 260
- ENST 230H
- CULA 270, 299
- M 105, 115, 121, 122, 151, 162
- NRSG all courses, except 291
- NUTR 221N
- PSYX 100S, 161S, 230S 238, 240
- SCN 100N, 105N, 175N, 260N
- WRIT 101, 121, 221
- LIT 110L, 120L
- CRWR 240A, CRWR 210A, CRWR 211A

Academic Support Services

Services designed to increase the success of students enrolled at Missoula College are available at the College. Such services include Academic Advising Center, tutoring in the Academic Support Center and computer-based academic learning tools, study skills workshops, basic skills developmental courses, access to Disability Services for Students, academic and financial aid reinstatement and follow-up assistance, individual student retention services, and other learning support activities.

Name	Minor	Certificate	Associate	Bachelor
<u>Accounting Technology</u>			<u>Requirements</u>	
<u>Administrative Management</u>			<u>Requirements</u>	
<u>Carpentry</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Computer Aided Design</u>		<u>Requirements</u>		
<u>Computer Support Specialist</u>		<u>Requirements</u>		
<u>Culinary Arts</u>		<u>Requirements</u>		
<u>Customer Relations</u>		<u>Requirements</u>		
<u>Diesel Technology</u>			<u>Requirements</u>	

<u>Electronics Technology</u>			<u>Requirements</u>	
<u>Energy Technology</u>		<u>Requirements</u>	<u>Requirements</u>	
<u>Food Service Management</u>			<u>Requirements</u>	
<u>General AA</u>			<u>Requirements</u>	
<u>Health Information Technology</u>		<u>Requirements</u>		
<u>Heavy Equipment Operation</u>		<u>Requirements</u>		
<u>Information Technology</u>			<u>Requirements</u>	
<u>Management</u>			<u>Requirements</u>	
<u>Medical Information Technology</u>			<u>Requirements</u>	
<u>Medical Reception</u>		<u>Requirements</u>		
<u>Network & Info Security Prof</u>		<u>Requirements</u>		
<u>Paralegal Studies</u>			<u>Requirements</u>	
<u>Pharmacy Technology</u>		<u>Requirements</u>		
<u>Practical Nursing</u>			<u>Requirements</u>	
<u>Radiologic Technology</u>			<u>Requirements</u>	
<u>Recreational Power Equipment</u>		<u>Requirements</u>		
<u>Registered Nursing</u>			<u>Requirements</u>	
<u>Respiratory Care</u>			<u>Requirements</u>	
<u>Sales and Marketing</u>		<u>Requirements</u>		
<u>Surgical Technology</u>			<u>Requirements</u>	
<u>Welding Technology</u>		<u>Requirements</u>	<u>Requirements</u>	

Applied Arts and Sciences Department

Cathy Corr, Chair

The Department of Applied Arts and Sciences provides instruction in five disciplines: communication, mathematics, behavioral science and psychology, science, and writing. Many courses from these disciplines count towards the general education requirements for the Associate of Arts (AA) degree and frequently are programmatic requirements for Associate of Applied Science (AAS) degrees.

Course Descriptions

Applied Arts and Sciences

- **AASC 100 - Intro to University Experience**
Credits: 3. This course is designed to help new students make a successful transition to college and acquire the skills needed to become competent and successful in higher education. Topics include an introduction to campus resources and academic policies; motivation and time management; study skills and learning strategies; critical thinking and problem solving; ethics, diversity and collaboration; information literacy and research. The course culminates with a semester capstone project. Elective credit only. Credit not allowed for both AASC 100 and AASC 101.
- **AASC 101 - Study & Learning Strategy**
Credits: 2. This course facilitates the development of skills needed to become competent and successful in higher education. Topics include management of classroom performance, time, and money; memory, listening and note-taking; reading and test-taking strategies; critical thinking and problem-solving; information literacy and research; ethics and diversity; stress management and healthy choices. Elective credit only. Credit not allowed for both AASC 100 and AASC 101. **Course Attributes:** Study Skills Course
- **AASC 195T - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course
- **AASC 196T - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course
- **AASC 295T - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

Art

- **ARTZ 195 - Student Teaching**
Credits: 1 TO 6. (R-6) Offered intermittently. Organized student teaching.

Biology-General

- **BIOB 295 - Student Teaching**
Credits: 1 TO 6. (R-6) Offered intermittently. Organized student teaching.

Biology-Human

- **BIOH 108 - Basic Anatomy**
Credits: 3. Offered Intermittently. Structures of the human body and their basic functions.

- BIOH 201N - Human Anat Phys I (equiv 301)**
 Credits: 4. Offered autumn and spring. Prereq., introductory science course or college-prep high school biology course recommended. Comprehensive knowledge of human form and function necessary for students preparing for health-related professions. Emphasis on structure, function and homeostatic regulation of body systems with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers tissues through nervous system. Required, integrated laboratory includes some dissection. **Course Attributes:**
 Natural Science Lab Course Natural Science Course Practical Nursing Prog Rqrmnt
 Registered Nursing Prog Rqrmnt
- BIOH 202N - Human Anat and Phys I Lab**
 Credits: 4. Offered autumn and spring. Coreq., BIOH 201. Basic knowledge necessary for students in health-related programs. Emphasis on normal anatomy and physiology with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers tissues through nervous system. A cadaver lab is included. **Course Attributes:**
 Natural Science Lab Course Natural Science Course Practical Nursing Prog Rqrmnt
 Registered Nursing Prog Rqrmnt
- BIOH 211N - Human Anat Phys II (equiv 311)**
 Credits: 4. Offered autumn and spring. Prereq., and continuation of BIOH 201N. Comprehensive knowledge of human form and function necessary for students in health-related programs. Emphasis on structure function and homeostatic regulation of body systems with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers endocrine through reproductive systems. Required integrated laboratory includes frequent dissection. **Course Attributes:**
 Natural Science Lab Course Natural Science Course
 Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt
- BIOH 212N - Human Anat Phys II Lab**
 Credits: 4. Offered autumn and spring. Prereq., BIOH 201N. Coreq., BIOH 211. Continuation of 201N. Basic knowledge necessary for students in health-related programs. Emphasis on normal anatomy and physiology with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers endocrine through reproductive systems. A cadaver lab is included. **Course Attributes:**
 Natural Science Lab Course
 Natural Science Course Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt
- BIOH 213N - The Biology of Behavior**
 Credits: 3. Offered autumn and spring. Prereq., SCN 100N. An introduction to the biological basis of human behavior, including neuron function and the roles of hormones, heredity, and environmental influences. Behavioral topics include sensation, learning, emotion, and issues such as obesity, addiction, and stress. Intended for students to satisfy the science with a lab general education requirement. **Course Attributes:**
 Natural Science Lab Course
- BIOH 220 - Human Physiology**
 Credits: 4. Offered intermittently. Prereq., BIOH 201N, 202N, 211N, and 212N. In-depth exploration of principles and clinical consequences of the physiology of selected human organ systems. Building upon basic concepts covered in BIOH 201N, 202N, 211N, and 212N, students study membrane functions, neural physiology, endocrine and peripheral nervous system function and coordination, circulatory, respiratory, renal, and digestive physiology.
- BIOH 261 - Human Physiology lab**
 Credits: 4. Offered autumn. Prereq., BIOH 201N, 202N, 211N, and 212N. In-depth exploration of principles and clinical consequences of the physiology of selected human organ systems. Building upon basic concepts covered in BIOH 201N, 202N, 211N, and 212N, students study membrane functions, neural physiology, nervous system integration, endocrine and peripheral nervous system function and coordination, circulatory, respiratory, renal, digestive, and reproductive physiology.
- BIOH 295 - Student Teaching**

Chemical Addiction Studies

- **CAS 140X - Addictions and Diversity**

Credits: 3. Offered autumn and spring; summers intermittently. This course required for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. Introduction to multicultural competencies where students will be exposed to the fundamentals of working with substance abusing and dependent individuals from the cultural impact of race, nationality, gender, age, sexual orientation, religion, and socio-economic status on the development and progression of alcohol/drug problems. Appropriate for students of Social Work, Psychology, community health, Business and Counseling students, Education, and those with an interest in diversity and addictions. **Course Attributes:** Indigenous and Global

- **CAS 185 - Prevention Practices**

Credits: 3. Offered autumn and spring and summers intermittently. This course required for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. The course introduces strategies for environmental prevention that focus on altering and improving the environment by changing social norms or attitudes, controlling the availability of illicit drugs or alcohol, or strengthening enforcement of laws and regulations. Risk and Protective Theory will be outlined, as well as the five categories of environmental strategies. This course is appropriate for everyone who has or will have a role in prevention, education, community health, and/or community change. Required for Chemical Addiction Studies students. May also be appropriate for students of social work, psychology, sociology, community health or those with an interest in learning about alcohol and drug prevention in society.

- **CAS 191 - Special Topics**

Credits: 3. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CAS 195 - Field Work/Clinical/Practicum**

Credits: 1 TO 3. (R-3) Offered every autumn and spring. This field work placement focuses on PREVENTION and is created to provide Chemical Addiction Studies students with direct experience working in community organizations where they will create and implement alcohol and drug prevention activities. May also be appropriate for students of Social Work, Psychology, Sociology, Community Health or those with an interest in learning about prevention practices with direct experience in community organizations. Prerequisite: CAS 185 Prevention Practices and CAS 243, Fundamentals of Substance Abuse C/I. **Course Attributes:** Internships/Practicums

- **CAS 210 - Individual Counseling**

Credits: 3. Offered intermittently. Prereq., CAS 201; CAS 242; PSYX 240. This course is intended for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. Major theories and practice of individual counseling for the client with substance abusing or chemically dependent individual is presented.

- **CAS 225 - Group Counseling**

Credits: 3. Offered Intermittently. Prereq., CAS 201, CAS 242, PSYX 240. This course is intended for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. Major theories and practice of counseling for the client with substance abusing or chemically dependent individual in group settings. Includes comprehensive group approaches, family therapy and other appropriate group strategies. Includes group dynamics and strategies to managing group sessions.

- **CAS 231 - Pharmacology/Addictions**

Credits: 3. Offered intermittently. This course is offered for students seeking to obtain their AA

degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. May also be appropriate for Students of Social Work, Psychology, Sociology, Community Health or those with an interest in learning about pharmacology and addictions. This course discusses the classes of drugs, their effects on behavior and the effects on society in general. Primary emphasis is on the effects of the chemicals on the brain function of the individual.

- **CAS 242 - Fund Subst Abuse and Addiction**

Credits: 3. This course is offered for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. May also be appropriate for Students of Social Work, Psychology, Sociology, or Community Health.

- **CAS 243 - Substance Abuse Counseling I**

Credits: 3. Offered autumn and spring and summers intermittently. Prereq., CAS 242, CoReq. CAS 201, PSYX 240, or Abnormal Psychology, and consent of instr. This course is required for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. This course is created to provide students specific knowledge regarding the theories, research, and evidenced-based literature in the provision of addiction counseling services. Students will be introduced to the overall scope of the problems of addictions, professional characteristics and principles of addiction counselors, ethical and legal responsibilities of professional behavior, addiction counseling skills and competencies required to be addiction counselors.

- **CAS 248 - Substance Abuse Counseling II**

Credits: 3. Offered autumn and spring and summers intermittently. Prereq., PSYX 240, CAS 201, CAS 242, consent of instr., corereq., CAS 243. This course is required for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. Meets specific State of Montana educational requirements associated with individual and group counseling for addiction, as well as ethics for addiction counselors. The course requires the student to draw upon the resources provided by experts. The course work significant amount of experiential application and counseling practice techniques.

- **CAS 260 - Addiction Assess/Documentation**

Credits: 3. Offered autumn and spring and summers intermittently. Prereq./CoReq., CAS 243, CAS 248, and consent of instr. This course is required for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. Intended to provide a comprehensive education to meet State of Montana education requirements for Licensure in Addiction Counseling. Students will be trained in clinical assessment diagnosis, treatment planning and patient record documentation with the client who has substance use disorders. Students will complete experiential application of the materials.

- **CAS 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CAS 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CAS 295 - Field Work/Clinical/Practicum**

Credits: 1 TO 4. (R-4) This course is offered for students seeking to obtain their AA degree in Chemical and Addiction Studies and who wish to become Licensed Addiction Counselors in the State of Montana. This Field Work Placement focuses on addiction treatment and counseling activities. The student will work in the community under the supervision of an addiction treatment professional and be given the opportunity to witness and participate in alcohol and drug treatment counseling activities. Prerequisites: Consent of Instructor and successful completion of all other CAS courses. **Course Attributes:** Internships/Practicums

Chemistry

- **CHMY 195 - Student Teaching**

Credits: 1 TO 6. (R-6) Offered intermittently. Organized student teaching.

Communication

- **COMX 102 - Interprsnl Skills in Workplace**

Credits: 1. This course will introduce students to interpersonal communication theory which can be applied to a workplace environment. Students will learn effective communication strategies that promote success in professional and personal relationships.

- **COMX 140L - Intro to Visual Rhetoric**

Credits: 3. Offered autumn and spring. An introduction to the persuasive nature of visual symbols as texts. Readings will include historical to contemporary rhetorical criticisms on advertising, billboards, bodies, cartoons, memorials, and photography. **Course Attributes:**
Literary & Artistic Stds Crse

- **COMX 191 - Special Topics**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **COMX 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **COMX 198 - Internship**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prerequisite, consent of instructor. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (398, 498) may count toward graduation.

- **COMX 212X - Intro to Intercultural Com**

Credits: 3. Offered autumn and spring. This course provides students with an introduction to communicating across cultures. Local and global case studies and theories will be explored. Students will explore the influence of immediate communication and social media on large scale social issues. **Course Attributes:** Indigenous and Global

- **COMX 217A - Oral Interpretation of Lit**

Credits: 3. Offered intermittently. Introduction to orally presenting literature to an audience. Focus is on analyzing and performing prose, drama, poetry, and children's literature to express point of view. **Course Attributes:** Expressive Arts Course

- **COMX 219S - Survey of Children's Comm**

Credits: 3. Offered autumn. Focus on communication processes and contemporary communication environments of children and adolescents. Topics include language development and the brain, nonverbal communication development, media, contracting, bullying, and gender. **Course Attributes:** Social Sciences Course

- **COMX 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **COMX 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

Creative Writing

- **CRWR 210A - Intro Fiction Workshop**

Credits: 3. Offered intermittently. This beginning writing workshop emphasizes the reading, discussion, and revision of students' short fiction. Students will be introduced to the technical elements of writing fiction. No prior experience in writing short fiction required. **Course Attributes:** Expressive Arts Course

- **CRWR 211A - Intro Poetry Workshop**

Credits: 3. Offered intermittently. This beginning writing workshop focuses on the reading, discussion, and revision of students' poems. Students will study and use models of poetic techniques. No prior experience in writing poetry required. **Course Attributes:** Expressive Arts Course

- **CRWR 240A - Intro Creative Writing Wrkshp**

Credits: 3. Offered every term. Beginning writing workshop designed for students to explore genres of creative writing with opportunities for students to write, and revise using genre-specific writing techniques. **Course Attributes:** Expressive Arts Course

Environmental Studies

- **ENST 231H - Nature and Society**

Credits: 3. Offered intermittently, autumn and spring. Prereq., WRIT 101. Explores the relationship between ideas about nature and the development of political and social ideas, institutions, and practices in primarily western (Euro-American) society. Course is an elective for students in the 2-year AA and AAS degree programs. **Course Attributes:** Historical & Cultural Course
Writing Course-Approved Writing Course-Intermediate

Mathematics

- **M 065 - Prealgebra**

Credits: 3. Offered every term. Prereq., ALEKS placement ≥ 1 . Arithmetic and basic algebra skills needed for Introductory Algebra. Topics include integers and rational numbers, decimals and percentages with applications, ratios and proportions with applications, single variable linear equations with applications, introduction to graphing, exponents, factoring, and an introduction to polynomials. Credit does not count toward a certificate or degree. Credit does not count toward Associate of Arts, Associate of Applied Science, or Baccalaureate degrees. **MC Course Attributes:** Technical Course

- **M 090 - Introductory Algebra**

Credits: 3. Offered every term. Prereq., M 065 or ALEKS placement ≥ 2 . Review of arithmetic principles of integers and rational numbers, linear equations in one or two unknowns, systems of linear equations and operations with polynomials and rational expressions. Credit does not count toward an Associate of Arts, Associate of Applied Science, or Baccalaureate degree. MC

- **M 095 - Intermediate Algebra**

Credits: 3. Offered autumn and spring. Prereq., M 090 or ALEKS placement ≥ 3 . Topics include linear equations, inequalities, applications and graphing; polynomials; radicals, rational exponents and complex numbers; quadratic equations. Graphing calculator required. Credit does not count toward Associate of Arts or Baccalaureate degrees. MC

- **M 111 - Technical Mathematics**

Credits: 3. Offered autumn and spring. Prereq., ALEKS placement ≥ 2 . Designed to provide the mathematical background necessary for success in the industrial areas. Topics covered include percent, ratio proportion, formula evaluation, basic algebra and geometry concepts, trigonometry, measurement, statistics, and graphing. Markdowns, inventory turnover, and other basic

formulas. Credit does not count toward Associate of Arts or Baccalaureate degrees. MC Course
Attributes: Technical Course

Psychology

- **PSYX 161S - Fund of Organizational Psych**
Credits: 3. Offered intermittently. Foundation in the psychological processes that influence behavior of people in organizational settings. **Course Attributes:** Social Sciences Course
- **PSYX 230 - Developmental Psychology**
Credits: 3. Offered autumn, Spring, Summer. Prereq., PSYX 100S. The study of human physical, cognitive and psychosocial development throughout the life span. Content covers major theories, the influence of genetics, and the environment from a chronological aspect. Appropriate for Social work, Nursing, Addiction Studies, Education, and Psychology.
- **PSYX 238 - Adolescent Psychology**
Credits: 3. Offered every term. PreReq., PSYX 100S or PSYX 230S. This course is designed to provide an introduction to the physical, social, emotional, and cognitive developmental changes that occur during adolescence, as well as their relationships and cultural influences. Appropriate for students in Addiction Studies, Psychology, Social Work, Education, and other disciplines where a study of the adolescent is desired.
- **PSYX 240 - Fund of Abnormal Psychology**
Credits: 3. Offered every term. Prereq., PSYX 100. This course provides a broad introduction to abnormal psychology, which includes defining abnormality, examining the history of abnormal psychology, identifying how abnormal psychology relates to other disciplines in psychology, exploring major research methods used in abnormal psychology, discussing various mental illnesses and their potential causes and possible treatments, and applying major abnormal psychological findings to practical problems.

Science (COT)

- **SCN 095T - Special Topics**
Credits: 1 TO 6. Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **SCN 100N - Issues in Biology**
Credits: 3. Offered autumn and spring. An introductory course for students with little science background. This course explores several issues relating to human biology such as cancer, drug abuse, population growth, and genetic engineering. Also includes discussions of fundamental biological concepts such as evolution, biodiversity, and basic cell and molecular biology. **Course Attributes:** Natural Science Course
- **SCN 105N - Montana Ecosystems**
Credits: 3. Offered autumn and spring. An introduction to the landscapes and ecosystem diversity of Montana, with an emphasis on exploring the dominant habitats of western Montana. Required, integrated laboratory includes field trip investigations, classroom lab exercises, and presentations. **Course Attributes:** Natural Science Lab Course Natural Science Course
- **SCN 120T - Technical Physics I**
Credits: 4. Offered intermittently. Prereq., M 095. Introduction to models, measurements, vectors, motion in a straight line, motion in a plane, Newton's laws of motion, application of Newton's laws, and circular motion and gravitation. **Course Attributes:** Technical Course
- **SCN 175N - Integrated Physical Science I**
Credits: 3. Offered every term. An introduction to the basic principles of physics, chemistry, and nuclear reactions with emphasis on the scientific method and process. A knowledge of basic

algebraic functions, decimals, and scientific notation is recommended. Suitable for students with little science background. **Course Attributes:** Natural Science Course

- **SCN 176N - Integrated Phys. Science II**

Credits: 3. Offered spring term. An introduction to the fundamental principles of environmental and earth sciences. Course emphasizes the scientific method and process of science. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **SCN 195T - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

- **SCN 196T - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

- **SCN 260N - The Biology of Behavior**

Credits: 3. Offered autumn and spring. Prereq., SCN 100N. An introduction to the biological basis of human behavior, including neuron function and the roles of hormones, heredity, and environmental influences. Behavioral topics include sensation, learning, emotion, and issues such as obesity, addiction, and stress. Intended for students to satisfy the science with a lab general education requirement. **Course Attributes:** Natural Science Lab Course Natural Science Course

- **SCN 291 - Student Teaching**

Credits: 1 TO 6. (R-6) Offered intermittently. Organized student teaching.

- **SCN 295T - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

Writing

- **WRIT 090T - Critical Writing Skills**

Credits: 3. Offered intermittently. Prereq., placement or referral by WRIT 101 instructor. Designed for students who need instruction and practice integrating critical thinking, reading, and writing before entering the required first-year writing course. Emphasis on drafting and revising. Grading by traditional letter system or NCR (no credit). Traditional letter grade only. Credit does not count toward a certificate or degree. **Course Attributes:** Technical Course

- **WRIT 095 - Developmental Writing**

Credits: 3. Offered every term. Prereq., placement or referral by WRIT 101 instructor. Designed for students who need instruction and practice integrating critical thinking, reading and writing before entering the required first-year writing course. Emphasis on invention, drafting, and revision. Grading A-F or NC (no credit). Credit does not count toward Associate of Arts or Baccalaureate degrees.

- **WRIT 121 - Intro to Technical Writing**

Credits: 3. Offered every term. Introduction to technical writing situations that integrate text, design, and graphics. Emphasis is on evidence-based, informative writing that uses design and graphics to visually represent logic and organization. Course focuses on writing as a process and includes student self-assessment. Major assignments include a pure technical document, exploration of credibility, and public science writing. Students are expected to write without major faults in grammar or usage and to have basic computer literacy. **Course Attributes:** Writing Course-Approved Writing Course-Intermediate

- **WRIT 191T - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course
- **WRIT 192 - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently.
- **WRIT 221 - Intermediate Tech Writing**
Credits: 3. Offered intermittently. Prereq., WRIT 121, WRIT 101, or consent of instr. Continuation of technical writing with emphasis on technical text including editing for technical content, graphic placement, and document design as seen through the eye of the audience. Current critical issues in technical writing are discussed. **Course Attributes:** Writing Course-Approved
Writing Course-Intermediate
- **WRIT 291T - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course
- **WRIT 292T - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

Applied Arts and Sciences A.A.

The Department of Applied Arts and Sciences offers the Associate of Arts degree. The Associate of Arts degree is considered a general education transfer degree and does not include a major or minor course of study. To receive an Associate of Arts degree, students must:

- successfully complete all lower-division general education requirements with a letter grade of C- or better;
- earn a minimum of 60 credits, at least 30 of which must be from UM;
- and maintain an institutional cumulative GPA of 2.00 for all UM courses taken for a traditional letter grade (A-F).

Matriculating students may begin coursework in the autumn, spring or summer. Courses numbered below 100 do not count toward the 60 credit requirement or general education course requirements, but do fulfill financial aid credit load requirements. Up to 15 technical credits (courses with a "T" suffix) may be counted toward the total 60 required for the AA degree. For students who have earned an AAS degree, however, up to 20 credits of courses with a "T" suffix may apply toward the requirements for an AA degree.

Students planning on completing a baccalaureate degree are encouraged to select specific general education courses and electives that meet the requirements for that future major. Students work with their advisor to develop an AA degree plan to best prepare them to transition to a four-year degree.

Pathways within the Associate of Arts Degree

Although the AA does not include a major or minor course of study, students may elect to choose classes in a specific area of interest. Recognized pathways within the Associate of Arts degree include:

- Chemical and Addiction Studies
- Business
- Communication Studies
- Health IT
- Professional Communication
- Sociology

- For individuals attending the Montana Law Enforcement Academy, a specialized Associate of Arts degree is offered through a collaboration among Missoula College UM, the University of Montana Department Of Sociology, and the Montana Law Enforcement Academy in Helena, MT.

Courses

U = for undergraduate credit only. An "R" after the course title indicates students may earn credit for each successful completion to the maximum number indicated after the "R." Credits earned beyond this maximum will not count towards the total required for the AA degree.

Associate of Arts - General AA

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Note: The AA degree has three requirements: completion of UM's lower-division General Education Requirements (GERs), a minimum of 60 total earned credits, and a minimum cumulative GPA of 2.0. At least 30 of the total 60 degree credits must be earned from Missoula College or UM-Missoula. Missoula College students are limited to enrolling in lower-division coursework (course level 100 or 200).

Up to 15 technical credits may be counted towards the total 60 required for the AA. If the student has previously earned an AAS degree, the student may use up to 20 technical credits.

Mathematics

Rule: Any Mathematics course level 104 or higher (excluding M 111 Technical Mathematics).

Note: Appropriate placement into mathematics courses required. Prerequisites may apply. If a student successfully places into and completes a mathematics (either "M" or "STAT") course that is also considered a Symbolic System, that course may be used to count towards both the Mathematics and Symbolic Systems General Education Requirements.

Minimum Required Grade: C-

3-4 Total Credits Required

Symbolic System/Foreign Language

Rule: Students must complete either a Symbolic System OR a Foreign Language.

Minimum Required Grade: C-

3-10 Total Credits Required

Symbolic Systems

Rule: Successful completion of 1 course from the list below.

Note: Prerequisites apply for all courses listed above; some courses from this list are major-restricted. Other baccalaureate major-specific Symbolic Systems may be used in lieu of course list above; speak with your advisor for more information.

	Course	Credits
—		

M 136 - Math for K-8 Teachers II	4 Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
PSYX 222 - Psychological Statistics	3 Credits
SOCI 202 - Social Statistics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Foreign Language

Rule: Successful completion of first-year sequence of a Modern and Classical Language (MCLL).

Note: A first-year sequence consists of 101 & 102 courses (5 credits each) for all MCLL majors except Irish; 101, 102, & 103 courses of Irish (3 credits each) must be completed. Students may take placement test to demonstrate proficiency to receive non-credit exemption from this requirement. Speak with your advisor for more information.

Writing Skills

Rule: Both WRIT 101 AND an Approved Writing Course are required.

Note: NOTE: Students who place into and successfully complete WRIT 201 are considered to have satisfied both the WRIT 101 and the Lower-Division Approved Writing Course General Education Requirements.

Minimum Required Grade: C-

6 Total Credits Required

WRIT 101

Rule: Take 1 of the courses below.

Note: Appropriate placement into WRIT 101/201 required. Prerequisites may apply.

Course	Credits
WRIT 101 - College Writing I	3 Credits
WRIT 201 - College Writing II	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

Perspectives

Rule: A minimum of 3 credits towards each Perspective Category is required.

Note: Some courses satisfy multiple Perspectives or GER Categories; visit with your advisor for more information. Students who take the maximum number of Perspective "double-dippers" possible will be able to complete the Perspectives with a total of 21 credits.

Minimum Required Grade: C-

21-27 Total Credits Required

Expressive Arts (A)

Rule: A minimum of three credits is required.

Literary & Artistic Studies (L)

Rule: A minimum of three credits is required.

Historical & Cultural Studies (H)

Rule: A minimum of three credits is required.

Social Sciences (S)

Rule: A minimum of three credits is required.

Ethical & Human Values (E)

Rule: A minimum of three credits is required.

American & European Perspectives (Y)

Rule: A minimum of three credits is required.

Indigenous & Global Perspectives (X)

Rule: A minimum of three credits is required.

Natural Sciences (N)

Rule: A minimum of six credits is required. At least one course must have a laboratory component.

AA Degree Electives

Rule: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree.

Note: Transfer students may count up to 30 transfer credits towards the total 60 necessary for degree. A maximum of 15 technical credits may be counted towards the total 60. (A student may use 20 technical credits towards the 60 if s/he has earned an AAS degree.)

Healthcare Informatics A.A.

Associate of Arts - General AA; Track: Healthcare Informatics

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 66

Required Cumulative GPA: 2.0

Note: Upon completion of the required course work, students will have earned a General AA degree that meets the requirements for a Certificate of Applied Science (CAS) in Computer Support, the MUS core for maximum transferability of General Education requirements, and courses specifically required by the 2+2 articulation agreement with Montana Tech for a BS in Health Care Informatics.

Montana University System (MUS) Core General Education Requirements

Rule: All courses are required

Note: In addition to the categories above, students must ensure that at least one course they take during their college career has "significant content related to the cultural heritage of Native Americans." This requirement may be fulfilled through the Social Science/History elective, the Humanities/Fine Arts elective, or by taking an additional course. Please consult with an advisor about which courses fulfill both sets of requirements.

Minimum Required Grade: C-

32 Total Credits Required

Natural Science Perspective

Rule: All courses are required

Course	Credits
BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits
BIOH 202N - Human Anat and Phys I Lab	4 Credits
BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
BIOH 212N - Human Anat Phys II Lab	4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Social Sciences/History Perspective

Rule: Take a minimum of 6 credits

Note: Must take one additional elective that fulfills the MUS Social Sciences/History perspective. Please note that the MUS Core general education requirements differ from the University of Montana general education requirements. Consult with your advisor to ensure that all requirements are met.

—	Course	Credits
	BGEN 105S - Introduction to Business	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Mathematics Perspective

Rule: All courses are required

—	Course	Credits
	M 121 - College Algebra	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Communications Perspective

Rule: All courses are required

—	Course	Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Humanities/Fine Arts Perspective

Rule: Take a minimum of 6 credits

Note: Must take one additional elective that fulfills the MUS Humanities/Fine Art perspective. Please note that the MUS Core general education requirements differ from the University of Montana general education requirements. Consult with your advisor to ensure that all requirements are met.

—	Course	Credits
	CSCI 215E - Social & Ethical Issues in CS	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Cultural Diversity Perspective

Rule: Take a minimum of 3 credits

Note: Must take one elective that fulfills the MUS Cultural Diversity perspective. Please note that the MUS Core general education requirements differ from the University of Montana general education requirements. Consult with your advisor to ensure that all requirements are met.

Health Care Informatics Track Requirements

Rule: All courses are required

Course	Credits
AHMS 144 - Medical Terminology	3 Credits
CSCI 105 - Computer Fluency	3 Credits
CSCI 110 - Programming - VB I	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
CSCI 240 - Databases and SQL	3 Credits
HIT 101 - Intro to Healthcare Informatic	3 Credits
HIT 265 - Electronic Health Records	3 Credits
ITS 150 - CCNA 1: Exploration	3 Credits
ITS 165 - OS Commands and Scripts	3 Credits
ITS 210 - Network OS - Desktop	3 Credits
ITS 280 - Computer Repair & Maint.	3 Credits
ITS 289 - Professional Certification	1 Credits
Minimum Required Grade: C-	34 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Applied Science B.A.

Lynn Stocking, Advisor

The Bachelor of Applied Science (BAS) degree is a baccalaureate degree designed for students who have earned an Associate of Applied Science (AAS) degree from a regionally accredited institution for higher education. The Missoula College section of the University of Montana-Missoula catalog identifies Associate of Applied Science degree programs offered at The University of Montana.

Interdisciplinary in nature, the BAS affords students the opportunity to identify an area or areas of concentration from which they will take upper-division courses. Students are encouraged to consider subject area(s) that will assist them with their academic and/or professional goals.

Specific requirements for the degree are: 1.) Completion of an AAS degree with a 2.50 GPA; 2.) Completion of a BAS degree plan identifying academic coursework which is approved by an identified degree plan advisor group; 3.) Completion of a minimum of 127 credits of coursework with 39 upper-division credits and a minimum 2.0 cumulative GPA; 4.) Completion of all UM General Education Requirements. Up to 50 credits earned from the AAS degree may count towards the 127 required for the BAS.

It is important to understand that the BAS degree does not identify a specific discipline major or minor, but rather areas of concentration.

Students interested in pursuing this degree should contact the BAS Advisor at 406-243-7801 for more information.

Bachelor of Applied Science - Applied Science

College Humanities & Sciences

Catalog Year: 2014-2015

Degree Specific Credits: 127

Required Cumulative GPA: 2.0

Symbolic System/Foreign Language

Rule: Students must complete either a Symbolic System OR a Foreign Language.

Minimum Required Grade: C-

3-10 Total Credits Required

Symbolic Systems

Rule: Successful completion of 1 course from the list below.

Note: Prerequisites apply for all courses listed above; some courses from this list are major-restricted. Other baccalaureate major-specific Symbolic Systems may be used in lieu of course list above; speak with your advisor for more information.

Course	Credits
M 136 - Math for K-8 Teachers II	4 Credits
M 162 - Applied Calculus	4 Credits
M 171 - Calculus I	4 Credits
PSYX 222 - Psychological Statistics	3 Credits

SOCI 202 - Social Statistics	3 Credits
STAT 216 - Introduction to Statistics	4 Credits
Minimum Required Grade: C-	3-4 Total Credits Required

Foreign Language

Rule: Successful completion of first-year sequence of a Modern and Classical Language (MCLL).

Note: A first-year sequence consists of 101 & 102 courses (5 credits each) for all MCLL majors except Irish; 101, 102, & 103 courses of Irish (3 credits each) must be completed. Students may take placement test to demonstrate proficiency to receive non-credit exemption from this requirement. Speak with your advisor for more information.

Writing Skills

Rule: Both WRIT 101 AND an Approved Writing Course are required.

Note: NOTE: Students who place into and successfully complete WRIT 201 are considered to have satisfied both the WRIT 101 and the Lower-Division Approved Writing Course General Education Requirements.

Minimum Required Grade: C-

6 Total Credits Required

WRIT 101

Rule: Take 1 of the courses below.

Note: Appropriate placement into WRIT 101/201 required. Prerequisites may apply.

Course	Credits
WRIT 101 - College Writing I	3 Credits
WRIT 201 - College Writing II	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

Perspectives

Rule: A minimum of 3 credits towards each Perspective Category is required.

Note: Some courses satisfy multiple Perspectives or GER Categories. Some courses in the area(s) of concentration may overlap with Perspective or other GER categories; visit with your advisor for more information.

Minimum Required Grade: C-

27 Total Credits Required

Expressive Arts (A)

Rule: A minimum of three credits is required.

Literary & Artistic Studies (L)

Rule: A minimum of three credits is required.

Historical & Cultural Studies (H)

Rule: A minimum of three credits is required.

Social Sciences (S)

Rule: A minimum of three credits is required.

Ethical & Human Values (E)

Rule: A minimum of three credits is required.

American & European Perspectives (Y)

Rule: A minimum of three credits is required.

Indigenous & Global Perspectives (X)

Rule: A minimum of three credits is required.

Natural Sciences (N)

Rule: A minimum of six credits is required. At least one course must have a laboratory component.

Mathematics

Rule: Any Mathematics course level 104 or higher (excluding M 111 Technical Mathematics).

Note: Appropriate placement into mathematics courses required. Prerequisites may apply. If a student successfully places into and completes a mathematics (either "M" or "STAT") course that is also considered a Symbolic System, that course may be used to count towards both the Mathematics and Symbolic Systems General Education Requirements.

Minimum Required Grade: C-

3-4 Total Credits Required

Upper-Division Credit Requirement

Rule: 39 upper-division courses required for UM GERs. At least 30 of the 39 upper-division credits must be from the degree area(s) of concentration.

Note: null

39 Total Credits Required

Upper-Division Writing

Rule: At least one upper-division writing course is required for UM GERs.

Note: This course may overlap with area(s) of concentration selected or total Upper-Division Credits.

3 Total Credits Required

AAS Degree Credits

Rule: Up to 50 credits earned from AAS may be counted towards the 127 required for the BAS.

Minimum Required Grade: C-

38-50 Total Credits Required

Business Technology Department

Cheryl Galipeau, Chair

The Business Technology Department of Missoula College collaborates with business and industry to prepare graduates to compete in and contribute to a dynamic global society. The department attracts and retains skilled faculty with the professional experience and theoretical background to utilize diverse instruction which reflects current and emerging business practices. Faculty actively engage student in the learning process by integrating experiential technical education and empowering students to adapt to an ever-changing world.

Students may choose from six Associate of Applied Science degree programs and four Certificate of Applied Science programs. Degree programs include Accounting Technology with an option in Computer Support; Administrative Management with an option in Social Media Management; Food Service Management; Medical Information Technology with options in Health Information Coding Specialty, and Medical Administrative Assisting; Paralegal Studies; and Management with options in Entrepreneurship and Sales and Marketing. Certificate of Applied Science programs include Culinary Arts, Customer Relations, Medical Reception, and Sales and Marketing.

Students may attend classes on Missoula College's East Campus and UM's Mountain campus. Programs may contain day, evening and weekend classes.

Course Descriptions

Accounting

- **ACTG 100 - Essentials of Accounting**

Credits: 4. Offered autumn and spring. Introduction to basic double-entry accounting. Emphasis on analyzing, journalizing, and posting transactions; trial balance, worksheet, financial statements, and adjusting/closing procedures, cash control and completing the accounting cycle.

- **ACTG 101 - Accounting Procedures I**

Credits: 4. Offered autumn and spring. Basic double-entry accounting. Emphasis on analyzing, journalizing, and posting transactions; trial balance, worksheet, financial statements, and adjusting/closing procedures, accounting systems, and cash control.

- **ACTG 102 - Accounting Procedures II**

Credits: 4. Offered autumn and spring. Prereq., ACTG 101 with competency test score of 75% or

better. Expansion of ACTG 101 including receivables, inventories, plant and intangible assets, and expanded liabilities. Includes partnerships, corporations, long-term liabilities, investments in debt and equity securities, and the statement of cash flow.

- **ACTG 180 - Payroll Accounting**

Credits: 3. Offered autumn and spring. Prereq., ACTG 101 with competency test score of 75% or greater. Comprehensive payroll course including computation/preparation of paychecks, completing deposits and payroll tax returns, informational returns and issues relating to identification and compensation of independent contractors. Includes state and federal payroll law. Introduction to Montana's Department of Labor and Industry, Unemployment Insurance Division, an State Compensation Insurance Fund.

- **ACTG 192 - Independent Study**

Credits: 1 TO 9. Course material appropriate to the needs and objectives of the individual student.

- **ACTG 211 - Income Tax Fundamentals**

Credits: 4. Offered autumn. Prereq., ACTG 180 with a "C" grade or better. This class is a comprehensive overview of individual income taxation. It includes an introduction to taxation terminology, taxation principles and an overview of retirement plans/tax ramifications for small businesses/individuals. Individual taxation is taught through preparation of a series of tax returns. Course emphasis is on individuals and sole proprietorships.

- **ACTG 215 - Fnd of Govt & Not Profit Acct**

Credits: 3. Offered spring. Prereq., ACTG 101-102 or consent of instr. Principles of accounting for governmental units, health care organizations, colleges and universities, and other nonprofit organizations.

- **ACTG 250 - Accounting Capstone**

Credits: 4. Offered spring. Prereq., ACTG 202, 211, or equivalent. and consent of instr. Capstone class integrates accounting software, income tax preparation, financial statement preparation, ratio analysis, financial report writing: includes presentation and critical thinking skill development as well.

- **ACTG 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Allied Health Medical Assist

- **AHMA 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHMA 201 - Med Asst Clinical Prcdrs I**

Credits: 4. Offered autumn. Prereq., MAT 005, SCN 201N-202N. Skill development necessary to assist health care practitioners in all aspects of patient care in the medical office clinical setting. Includes achieving competency in prepping patients for a physical examination, charting, medication administration, basic medical laboratory skills. **Course Attributes:**
Technical Course

- **AHMA 260 - Med Assist Lab 1**

Credits: 2. Co-req., AHMA 201. This course introduces the student to basic skills of medical assisting. Included in this course are standard procedures, aseptic and sterilization procedures, vital signs, assisting with general exams, urinalysis, and drug administration.

- **AHMA 262 - Med Assist Laboratory Procedures 2**

Credits: 2. Prereq., AHMA 201 and 260. Corereq., AHMA 203. This course builds on skills learned in AHMA260 and moves into areas of greater specialization. Included in this course are CLIA-waived

and hematological testing, ECG, venipuncture, assisting with surgical procedures, wound care, and specialty exams.

- **AHMA 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHMA 298 - Medical Assisting Externship**

Credits: 5. Offered autumn. Prereq., consent of instructor. Placement in a medical office for a guided experience providing the student with a practical application of learned medical office administrative skills. Direct supervision will be the responsibility of a designated person at the site. The students will spend six hours per week to total 90 hours in assigned clinical rotations. **Course Attributes:** Internships/Practicums Technical Course

Allied Health Medical Support

- **AHMS 175 - Medical Law & Ethics**

Credits: 2. This course will introduce students to the common laws, regulations, and agencies affecting ambulatory medical facilities. Current issues of ethics and bioethics will also be discussed. This is a blended class.

Administrative Management

- **AMGT 145 - Records Management**

Credits: 2. Offered every term. Introduction to alphabetic filing techniques and electronic database records management. Current technical developments utilizing automated records systems, biometric access control devices, electronic file organization, ergonomics, the Internet, image technology, and integrated security systems.

- **AMGT 192 - Independent Study**

Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **AMGT 240 - Admin Support for the Office**

Credits: 3. Offered autumn. Prereq., CAPP 134. Overview of the procedures and scope of the administrative assistant's role in today's automated office, including traditional and electronic communications, operation of multi-media equipment, and managing office technology.

Business: General

- **BGEN 160S - Issues in Sustainability**

Credits: 3. Offered autumn and spring. Same as CCN 160S. This literature-intensive course is intended to expose the student to a variety of essays addressing the balance of economic development with the principles of sustainability and social equity. The student is offered an introduction to sustainability concepts, natural systems/cycles and environmental economics. Natural capitalism and triple bottom line maximization is explored, along with the role of corporations and small businesses in sustainable development. A survey of issues surrounding corporate social responsibility and sustainability-driven innovation will be conducted.

- **BGEN 235 - Business Law**

Credits: 3. Offered autumn and spring. This course provides an overview of law as it applies to business transactions. Topics include the nature and source of law; courts and procedure; contracts, sales, and employment; commercial paper; bailment's; property; business organizations; insurance; wills and estate planning; consumer and creditor protection; torts; criminal law; and agency law. Credit not allowed for both BGEN 235 and BADM 257.

Business: Management

- **BMGT 216 - Psych of Mgmt & Supervision**

Credits: 4. Offered autumn. Management theory, research, and the practice of management. Topics covered include leadership styles and techniques, effective communication approaches, time management, decision making, delegation, and the basic functions of supervisory skills.

- **BMGT 242 - Front Line Supervision**

Credits: 3. Offered spring. Introduces basic employee development with emphasis on the responsibilities of a newly-appointed supervisor. Emphasizes organizational structure, motivation, delegation of authority, the hiring process, employee development, employee performance, evaluations, and dealing with employee conflict.

- **BMGT 245 - Customer Service Management**

Credits: 4. Offered spring. Designed to prepare employees and managers to meet customers' expectations. Review of customer service philosophy and techniques. Services marketing, quality issues, service design and delivery, customer interaction systems, complaint handling and service recovery, customer relationships, loyalty management, and operations are addressed.

- **BMGT 299 - Capstone:Entrepreneurship**

Credits: 3. Offered spring. Prereq., CAPP 120. An overview of the skill areas and business principles needed to start and operate a small business. Includes developing a business plan, identifying sources of capital formation, managing growth, and marketing issues related to new ventures.

Business: Marketing

- **BMKT 109 - Visual Merchandising & Display**

Credits: 3. Offered spring. Introduction to various techniques used by retailers in the merchandising and displaying of goods. Analysis of different approaches and methods for effectiveness in actual retail settings. Includes display principles of balance, color, and focal point statements.

- **BMKT 112 - Applied Sales**

Credits: 2. Offered autumn. Course provides students with basic sales skills through the use of experiential training, role-playing and evaluating presentations. Includes the steps in prospecting, opening, presenting, demonstrating, handling objections, and closing the sale. Students will gain experience through role-playing activities, observations, and written presentations.

- **BMKT 112T - Applied Sales**

Credits: 2. Offered autumn. Course provides students with basic sales skills through the use of experiential training, role-playing and evaluating presentations. Includes the steps in prospecting, opening, presenting, demonstrating, handling objections, and closing the sale. Students will gain experience through role-playing activities, observations, and written presentations. **Course Attributes:** Technical Course

- **BMKT 114 - Psychology of Selling**

Credits: 3. Offered spring. Development of selling techniques which are used by many of the world's best companies and explanation of why they work. Includes the psychological reasons that prevent a prospect from purchasing a product or service and the techniques to motivate a prospect to buy.

- **BMKT 225 - Marketing**

Credits: 3. Offered autumn. An overview of marketing activities including the consumer buying decision process, distribution channels, the planning process, and new marketing trends. Students learn how to introduce a new product into the market place, target markets, and promote products through advertising and package design.

- **BMKT 225T - Marketing**

Credits: 3. Offered autumn. An overview of marketing activities including the consumer buying decision process, distribution channels, the planning process, and new marketing trends. Students learn how to introduce a new product into the marketplace, target markets, and promote products through advertising and package design. **Course Attributes:** Technical Course

- **BMKT 240 - Advertising**

Credits: 3. Offered spring. Exposure to the history and fundamentals of advertising; in-depth exploration of advertising media, budget plans, ad campaign designs, and in-house promotion designs; and the production of actual radio, television, and print advertising.

- **BMKT 265 - Social Media Strat & Mgmt**

Credits: 3. Offered spring. Prereq., CAPP 120 or CSCI 105. Students will analyze and select appropriate communication channels and technologies according to relevant publics, evaluate suitability of media content and use best communication practices to promote a positive organizational image, and apply business relationship marketing techniques to enhance social communities. Students will monitor issues and analyze trends across various social media platforms and manage media through professional, accessible, and ethical practices expected in our global society.

Business

- **BUS 195T - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

- **BUS 198T - Business Technology Internship**

Credits: 3. Prereq. Consent of instr. Extended classroom experience which provides practical application of classroom learning during placements in supervised business-related environments. The experience increases students' business skills, and occupational awareness and professionalism. Variable internship credit will be determined by Department Faculty Supervisor. BUS 198T credits and work experience do not apply toward or substitute for Business Technology Department x298 internship credits and work experience.

- **BUS 210 - Critical Analysis for Business**

Credits: 3. Offered autumn and spring. Prereq., WRIT 101 or equivalent, or instructor approval. This is an analysis, critical thinking, and writing course. Students will be introduced to traditional Western philosophy through study and discussion of Socrates, Plato, and Aristotle. Students analyze theories of knowledge and morality in relationship to current events within American Democracy and Law. **Course Attributes:** Writing Course-Approved
Writing Course-Intermediate

- **BUS 238T - Financial Planning**

Credits: 3. Offered autumn. This course deals with personal financial planning and investments. The course will focus on a variety of personal finance topics including, the time value of money, liquid asset management, federal income and estate taxes, credit cards, consumer loans, automobile purchases, and insurance. The course then looks at long-term investing. Special topics covered include stocks, bonds, mutual funds, and tax-deferred retirement plans. There are two overall goals of the course. The first goal is to provide students with knowledge that will help you avoid commonly occurring errors in the management of personal finances. The second goal is to introduce you to some of the key concepts underlying the discipline of finance.

- **BUS 291T - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **BUS 295T - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors,

experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Technical Course

- **BUS 296T - Independent Study**
Credits: 1 TO 9. (R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

Computer Applications

- **CAPP 091 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Credit does not count toward an Associate of Arts, Associate of Applied Science, or Baccalaureate degree.
- **CAPP 120 - Introduction to Computers**
Credits: 3. Offered autumn and spring. Introduction to computer terminology, hardware, and software, including wire/wireless communications and multimedia devices. Students utilize word processing, spread sheet, database, and presentation applications to create projects common to business and industry in a networked computing environment. Internet research, email usage, and keyboarding proficiency are integrated.
- **CAPP 154 - MS Word**
Credits: 3. Offered autumn and spring. Prereq., CAPP 120 or basic computer experience and consent of instr. Preparation of business forms, correspondence, mail merges, columnar projects, and reports using up-to-date software. Business related application projects, graphics, and printer operation are included.
- **CAPP 156 - MS Excel**
Credits: 3. Offered autumn and spring. Prereq., CAPP 120; and M 090 or M 095. Emphasis on the use of workbooks and sheets to solve business problems. Includes projects relating to data and graphs/charts.
- **CAPP 254 - Advanced MS Word**
Credits: 3. Offered autumn and spring. Prereq., CAPP 154. Analysis of the concepts of advanced work processing document production underlying mastery of the software. Business-related application projects utilizing critical thinking included. Speed and timing component to increase skills essential for employment.

Communication

- **COMX 250 - Intro to Public Relations**
Credits: 3. Offered autumn and spring. Introduction to the origin, scope, and nature of public relations activities. Investigation of policies, strategies, and procedures available to an organization in establishing and controlling its communications. Course will explore the impact of public relations and media through case studies and writing exercises.

Culinary Arts

- **CULA 101 - Introduction to Food Service**
Credits: 5. Offered every term. Introduction to fundamentals in food handling practice, history, cooking methods, tool and equipment skills, safety and sanitation, recipe and menu development. **Course Attributes:** Technical Course
- **CULA 105 - Food Service Sanitation**
Credits: 2. Offered autumn and summer. Introduction to fundamentals in safe and sanitary food handling practices. Emphasis on development of a well-designed food safety program centered on

- **CULA 156 - Dining Room Procedures**

Credits: 3. Offered every term. Prereq., CULA 101 and CULA 105 with a "C" or better. Introduction to foundations of dining room service: such as American, French, English and Russian style services. With buffet and tableside presentation along with beverage service and protocol for customer service, sanitation and menu design. Techniques include espresso service, fine dining service and tableside presentation. Personal hygiene, applied math, basic culinary terminology, beverage management, and tableside cooking methods are practiced.

- **CULA 157 - Pantry & Garden-Manager**

Credits: 3. Offered autumn and spring. Prereq., CULA 101 and CULA 105 with a "C" or better. Identification of fresh greens, vegetables, and fruits reviewed. General and specific knife skills and garnish techniques practiced. Standards of quality, preparation, and presentation discussed and practiced. Practice preparation of entrée salads, cold sauces, appetizers, finger sandwiches, pâtés, gelatins, mousses, ice carvings, as well as banquet and buffet presentation. **Course Attributes:** Technical Course

- **CULA 158 - Short Order Cookery**

Credits: 4. Offered every term. Prereq., CULA 101 and CULA 105 with a "C" or better. Hands-on experience in all facets of short order cookery. Emphasis on coordination, speed, presentation, and basic food preparation as well as cooking methods. **Course Attributes:** Technical Course

- **CULA 160 - Soups, Stocks, & Sauces**

Credits: 3. Offered every term. Prereq., CULA 101 and CULA 105 with a "C" or better. Hands-on preparation of basic soups, stocks, sauces, glazes, thickening agents, and garnishes. **Course Attributes:** Technical Course

- **CULA 161 - Meats & Vegetables**

Credits: 3. Offered every term. Prereq., CULA 101 and CULA 105 with a "C" or better. Hands-on experience with the fundamental cooking methods for meats, vegetables, grains, legumes, and pastas. **Course Attributes:** Technical Course

- **CULA 165 - Baking & Pastry**

Credits: 3. Offered every term. Prereq., CULA 101, CULA 105, M 095 with a "C" or better or consent of instr. Introduction to various ingredients and how they affect the finished product. Covers six basic functions of ingredients and the techniques of scaling, pan preparation, sifting, chocolate, and pastry bag work. **Course Attributes:** Technical Course

- **CULA 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

- **CULA 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

- **CULA 210 - Nutritional Cooking**

Credits: 3. Offered spring. Prereq., CULA 101 and CULA 105, M 105 or consent of instr. Principles of healthy and nutritious culinary procedures. Adjustment of classic methods to suit preparations designed to extend variety on "lighter" menus. **Course Attributes:** Technical Course

- **CULA 270 - Purchasing and Cost Controls**

Credits: 5. Offered autumn. Prereq., CULA 101 and CULA 105, M 095; or consent of instr. Principles of purchasing foods and materials based on needs, specifications, availability, and seasonality. Costs of doing business including products, labor, facilities, and preparing financial statements.

- **CULA 275 - Patisserie**

Credits: 2. Offered spring. Prereq., CULA 165, M 095 or consent of instr. Advanced principles and techniques in preparing custard sauces, pastry cream, puddings, custards, mousses, Bavarians, soufflés, ices, crepes, fruits, and dessert sauces. Emphasis on presentation of plated desserts.

Course Attributes: Technical Course

- **CULA 291 - Special Topics**

Credits: 1 TO 6. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

- **CULA 298 - Food Service Internship**

Credits: 4. Offered spring & fall. Prereq., Students must be enrolled in final semester of program and maintain a minimum "C" in all CULA (CUL & FSM) courses, or recommendation of Culinary Program Director. On-the-job training in position delegated by the Culinary Arts Internship Director. This experience increases students' skills, prepares them for initial employment, and increases occupational awareness and professionalism. Students work a minimum of 300 hours at approved event sites and attend scheduled on campus meetings. **Course Attributes:**

Internships/Practicums Technical Course

- **CULA 299 - Culinary Arts Capstone**

Credits: 4. Offered spring. Prereq., CULA 270, coreq., CRT 205T. Students must be enrolled in final semester of program and maintain a minimum "C" in all CULA courses, or recommendation of Culinary Program Director. Coordinates with computer applications course to create virtual food establishments. Includes capstone experience integrating menu planning and design, facilities, publicity, labor, purchasing, and kitchen preparation culminating in a formal, multi-course dinner.

Human Resources

- **HMR 290T - Adm Mgmt Internship**

Credits: 2. Offered autumn and spring. Prereq., last semester in program, minimum of "C" in program courses, and approval of program director. On the job training in positions related to each student's career goal in the administrative field. This experience increases students' skills, prepares them for initial employment and increases occupational awareness and professionalism. Students work a minimum of six hours each week at an approved site and attend weekly scheduled one-hour seminars. **Course Attributes:** Technical Course

- **HMR 295T - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

Hospitality, Tourism, & Rec.

- **HTR 107 - Intro Hospitality Management**

Credits: 3. This course introduces students with an overview of the businesses in the hospitality industry, including hotel/lodging, restaurant, and travel/tourism. The course provides the history, present factors, and future trends that will affect the hospitality industry, as well as introductory practices in marketing, operations, economics, technology, and customer service.

- **HTR 201 - Hotel Mngmt/Ops**

Credits: 3. This course introduces students to the different management responsibilities within hotel and lodging operations. Students receive instruction on the responsibilities and requirements of management in the areas of front desk management, security/maintenance, housekeeping, administration, and food/beverage.

Legal Studies

- **LEG 183 - Contracts**

Credits: 2. Offered spring. Sources of law affecting the formation, enforceability, and interpretation of contracts. Includes the necessary elements of a contract, the basic doctrines of contract law, and practical approaches to drafting a contract.

- **LEG 184 - Legal Ethics**

Credits: 2. Offered autumn. Introduction to ethics for the paralegal, including confidentiality, paralegal-attorney relationship, fee arrangements, Code of Professional Conduct, attorney-client privilege, fiduciary responsibilities, and public service.

- **LEG 185 - Introduction Paralegal Studies**

Credits: 3. Offered autumn. Consent of instr. Students will develop an ability to analyze basic legal principles in real property law and practical experience increasing, organizing, and completing real estate transactions. Students in the course will develop fundamental skills; real estate, landlord-tenant, and land use law. Further, students will continue development of drafting skills, legal research, and case analysis.

- **LEG 186 - Introduction to Legal Research**

Credits: 2. Offered autumn. Prereq., acceptance into program or consent of instr. Introduction to legal research focusing on how to find, use, understand, and correctly cite law library resources.

- **LEG 187 - Leg Res & Wrtg I**

Credits: 2. Offered spring. Prereq., LEG 186. Advanced legal research focusing on how to find, use, understand, and correctly cite legal resources. Electronic research methods are presented. Application of legal research to writing is introduced.

- **LEG 188 - Prin of Real Estate**

Credits: 2. Offered spring. Consent of instr. Students will develop an ability to analyze basic legal principles in real property law and practical experience increasing, organizing, and completing real estate transactions. Students in the course will develop fundamental skills; real estate, landlord-tenant, and land use law. Further, students will continue development of drafting skills, legal research, and case analysis.

- **LEG 189 - Criminal Procedures**

Credits: 3. Offered spring. Consent of instr. Criminal prosecution and defense representation with an overview of criminal law principles. Training in criminal procedure involving felonies and misdemeanors in federal, Montana, and municipal courts.

- **LEG 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **LEG 196 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **LEG 270 - Civil Litigation**

Credits: 3. Offered autumn. Prereq., LEG 185T, LEG 187T or consent of instr. Introduction to rules governing civil litigation involving the general nature of how lawsuits arise including client interviews and data gathering, pleading and practice from the filing of suit to file preparation for trial, and core considerations of ethics and professionalism.

- **LEG 282 - Contemporary Legal Issues**

Credits: 3. Offered spring. Prereq., LEG 270, or consent of instr. Capstone experience designed to investigate topical legal issues of immediate importance. Although the course has delineated structure, the nature of the course will allow both relevant concentrated focus as well as traditional disciplined examination of numerous areas of law practice and theory. The various pedagogical modules will offer students the opportunity to explore statutory structure, analyze case law, and

draft legal forms.

- **LEG 283 - Trial Preparation**

Credits: 3. Offered spring. Prereq., LEG 270, or consent of instr. Capstone experience designed to investigate topical legal issues of immediate importance. Although the course has delineated structure, the nature of the course will allow both relevant concentrated focus as well as traditional disciplined examination of numerous areas of law practice and theory. The various pedagogical modules will offer students the opportunity to explore statutory structure, analyze case law, and draft legal forms.

- **LEG 285 - Family Law**

Credits: 3. Offered spring. Prereq., LEG 185, LEG 286 or consent of instr. Study of Montana law relating to marriage, husband and wife, parent and child, termination of marriage, adoption, joint and sole custody arrangements and modifications, child support guidelines, and juvenile issues. Includes preparation of standard family law documents.

- **LEG 286 - Legal Res & Writing II**

Credits: 2. Offered autumn. Prereq., LEG 186T/187T. Advanced legal research and writing with emphasis on drafting and composing legal memoranda; legal research skills and development of legal writing ability.

- **LEG 287 - Legal Res. & Writing III**

Credits: 2. Offered spring. Prereq., LEG 286. Continued development of legal research and writing skills including advanced legal theory/case law synthesis, drafting correspondence, pleadings, discovery documents, persuasive writing. Upon completion of this course, the student will be able to: research, analyze, synthesize, and prioritize law cases, treatises, doctrines, theory of the law, legal rules, and other information and draft appropriate correspondence, pleadings, motions, briefs, discovery documents or memoranda relating to that information as would be anticipated in a law office.

- **LEG 288 - Estate Administration**

Credits: 2. Offered spring. Prereq., LEG 185, LEG 286 or consent of instr. This course provides an overview of the law as it applies to wills, trusts, and other estate matters. Topics include the nature and sources of the law relating to wills, trusts, and estates, estate planning, intestate succession, family protection, probate, and estate taxes.

- **LEG 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **LEG 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **LEG 298 - Paralegal Studies Internship**

Credits: 2. Offered autumn and spring. Prereq., last semester in program, minimum of "C" in LEG courses, and approval of program director. On-the-job experience as a paralegal trainee under the supervision of an employer, attorney, or court official. This experience increases students' skills, prepares them for initial employment and advancement on the job, and increases occupational awareness and professionalism. Students work a minimum of 90 hours at an approved site and attend a weekly one-hour seminar. **Course Attributes:** Internships/Practicums

Media Arts

- **MART 214 - Digital Publishing & Design**

Credits: 3. Offered autumn and spring. Prereq., CAPP 120, CSCI 105, or consent of instr. A comprehensive foundation of layout and design principles to integrate digital media essential for effective print-based and web-based business publications.

- **MART 232 - Interactive Web II**

Credits: 3. Offered autumn and spring. Prereq., CAPP 120, CSCI 105, or consent of instr. Provides a background and foundation skills required for designing and implementing Web sites for public and private organizations. Marketing and design techniques are applied using state-of-the-art software.

Technical Administrative Skill

- **TASK 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Accounting Technology A.A.S.

Lisa Swallow, Director

Almost all organizations need either in-house financial staff or outside bookkeeping/accounting services to aid with financial data compilation and reporting. Bookkeepers and accountants maintain financial records and often participate in strategic planning and other fiscal decisions. Graduates work in small businesses as full charge bookkeepers or large businesses as members of an accounting staff. They are required to communicate extensively with vendors, clients, and employees and are often key players in business projections, cash forecasting, and budgeting. This program provides students the marketable skills for employability in a variety of organizations including service, retail, non-profit, governmental, and accounting firms. Program graduates use technology to gather, compile and analyze data. They communicate budgetary and accounting information to non-financial colleagues and managers. Students considering this program should be analytical, detail-oriented, and enjoy using current technology.

Associate of Applied Science - Accounting Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

AAS Accounting Technology

Rule: All courses required.

Course	Credits
ACTG 101 - Accounting Procedures I	4 Credits
ACTG 102 - Accounting Procedures II	4 Credits

	ACTG 180 - Payroll Accounting	3 Credits
	ACTG 202 - Principles of Mang Acct	3 Credits
	ACTG 211 - Income Tax Fundamentals	4 Credits
	ACTG 215 - Fnd of Govt & Not Profit Acct	3 Credits
	ACTG 250 - Accounting Capstone	4 Credits
	ACTG 298 - Internship	1 To 3 Credits
	BGEN 105S - Introduction to Business	3 Credits
	BGEN 160S - Issues in Sustainability	3 Credits
	BGEN 235 - Business Law	3 Credits
	BUS 210 - Critical Analysis for Business	3 Credits
	BUS 238T - Financial Planning	3 Credits
	CAPP 120 - Introduction to Computers	3 Credits
	CAPP 156 - MS Excel	3 Credits
	COMX 111A - Intro to Public Speaking	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
	ECNS 201S - Principles of Microeconomics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-		63 Total Credits Required

Writing Requirement

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

	Course	Credits
	WRIT 101 - College Writing I	3 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Accounting Technology Computer Support A.A.S.

In addition to accounting technician training, students selecting this option will be prepared to manage and maintain LAN and/or WAN system, install, maintain and troubleshoot software, and train and support system users. They also will be trained to configure and diagnose workstation hardware, administer system security and upgrade, update and expand network systems.

Associate of Applied Science - Accounting Technology; Computer Support Option

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 64

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

AAS Accounting Technology

Rule: All courses required.

Note: ACTG 298 Accounting Internship is a 2crt course

Course	Credits
ACTG 101 - Accounting Procedures I	4 Credits
ACTG 102 - Accounting Procedures II	4 Credits
ACTG 180 - Payroll Accounting	3 Credits
ACTG 202 - Principles of Mang Acct	3 Credits
ACTG 211 - Income Tax Fundamentals	4 Credits
ACTG 250 - Accounting Capstone	4 Credits
ACTG 298 - Internship	1 To 3 Credits
BGEN 105S - Introduction to Business	3 Credits
CAPP 156 - MS Excel	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits

	CSCI 105 - Computer Fluency	3 Credits
	CSCI 110 - Programming - VB I	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
	CSCI 215E - Social & Ethical Issues in CS	3 Credits
	ITS 150 - CCNA 1: Exploration	3 Credits
	ITS 165 - OS Commands and Scripts	3 Credits
	ITS 210 - Network OS - Desktop	3 Credits
	ITS 280 - Computer Repair & Maint.	3 Credits
	ITS 289 - Professional Certification	1 Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-		64 Total Credits Required

Writing Requirement

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

	Course	Credits
	WRIT 101 - College Writing I	3 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Administrative Management A.A.S.

Cheryl Galipeau, Director

The Administrative Management Program allows students to advance the career proficiencies acquired in the Customer Relations certificate program by earning an Associate of Applied Science Degree. The Administrative Management program prepares graduates to meet the administrative and information needs of business and industry. Students gain proficiency in computer, management, and information technologies. They complete an academic component to gain an understanding of professional responsibilities in our global society. Graduates of this program become vital members of executive teams with the ability to assume supervisory, organizational, and communication roles in the coordination of administrative services. Students are encouraged to earn

Microsoft Office Specialist (MOS) certification on Microsoft Office programs. Earning a Microsoft Office Specialist certification increases job opportunities by demonstrating technical proficiency in advanced skills to potential and current employers. Interested students should discuss this opportunity with the Administrative Management Program Director. An Associate of Applied Science Degree in Administrative Management opens opportunities for graduates in a variety of business settings.

Associate of Applied Science - Administrative Management

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 64

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

AAS, Administrative Management, Course Requirements

Rule: All courses required

Note: Completion of the requirements for a Certificate of Applied Science in Customer Relations, 33 credits, is embedded within the completion of the Administrative Management courses. See Program Director for CAS advising.

See Program Director for advising regarding course prerequisites, and math and writing placement assessments.

Course	Credits
BGEN 105S - Introduction to Business	3 Credits
BGEN 235 - Business Law	3 Credits
BMGT 216 - Psych of Mgmt & Supervision	4 Credits
BMGT 245 - Customer Service Management	4 Credits
BUS 210 - Critical Analysis for Business	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
CAPP 154 - MS Word	3 Credits
CAPP 254 - Advanced MS Word	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
COMX 250 - Intro to Public Relations	3 Credits

	CSCI 172 - Intro to Computer Modeling	3 Credits
	HMR 290T - Adm Mgmt Internship	2 Credits
	ITS 221 - Project Management	3 Credits
	MART 214 - Digital Publishing & Design	3 Credits
	MART 232 - Interactive Web II	3 Credits
	TASK 145 - Records Management	2 Credits
	TASK 240 - Admin Support for the Office	3 Credits
Minimum Required Grade: C-		54 Total Credits Required

Writing Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Math Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

—	Course	Credits
	M 105 - Contemporary Mathematics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Accounting Requirements

Rule: Pick 1 of the 2 courses below

—	Course	Credits
	ACTG 100 - Essentials of Accounting	4 Credits

ACTG 101 - Accounting Procedures I	4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Food Service Management A.A.S.

Tom Campbell, Director

The Food Service Management program culminates in an Associate of Applied Science Degree. This program combines theory, practical training, and industry experience to prepare students for entry-level and management positions in the diverse and dynamic hospitality industry. The degree program is designed to continue principles taught in the Culinary Arts certificate program. The spectrum of learning is expanded to include more in-depth professional studies thereby enhancing employment options. Accreditation by the American Culinary Federation ensures graduates' eligibility for certification as an ACF "Certified Culinarian".

Technical subject areas include introduction to the industry, basic baking, patisserie, cost control, dining room service, Garde manger, nutritional cooking, fundamental cooking principles, short order cookery, a la carte stations, menu planning, supervised internship, and the recognized sanitation certificate awarded by the National Restaurant Association Educational Foundation.

Associate of Applied Science - Food Service Management

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 65

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

AAS Food Service Management

Rule: All courses required.

Course	Credits
BMGT 216 - Psych of Mgmt & Supervision	4 Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
CRT 205T - Food Serv Mgmt Comp App	2 Credits
CULA 101 - Introduction to Food Service	5 Credits

CULA 105 - Food Service Sanitation	2 Credits
CULA 156 - Dining Room Procedures	3 Credits
CULA 157 - Pantry & Garden-Manager	3 Credits
CULA 158 - Short Order Cookery	4 Credits
CULA 160 - Soups, Stocks, & Sauces	3 Credits
CULA 161 - Meats & Vegetables	3 Credits
CULA 165 - Baking & Pastry	3 Credits
CULA 210 - Nutritional Cooking	3 Credits
CULA 270 - Purchasing and Cost Controls	5 Credits
CULA 275 - Patisserie	2 Credits
CULA 298 - Food Service Internship	4 Credits
CULA 299 - Culinary Arts Capstone	4 Credits
M 105 - Contemporary Mathematics	3 Credits
PSYX 161S - Fund of Organizational Psych	3 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-	65 Total Credits Required

Entrepreneurship A.A.S.

Students selecting the Entrepreneurship option will focus on venture initiation, constructing business plans, generating financing, and beginning operations. Areas of study focus on the critical factors involved in accounting, sales strategy, advertising and marketing issues complemented with supervisory skills. Students gain knowledge of basic disciplines of business through both classroom and hands-on training. Computer technology and web development are added components to assist students to compete in today's changing business climate. Successful graduates will depart with a comprehensive business plan and presentation skills required to approach financiers.

Associate of Applied Science - Management; Entrepreneurship Option

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

AAS Business Management, Entrepreneurship

Rule: All courses required

Note: BMGT 298 Management Internship is a 2 crt course.

Course	Credits
ACTG 101 - Accounting Procedures I	4 Credits
ACTG 102 - Accounting Procedures II	4 Credits
ACTG 180 - Payroll Accounting	3 Credits
BGEN 235 - Business Law	3 Credits
BMGT 216 - Psych of Mgmt & Supervision	4 Credits
BMGT 298 - Management Internship	1 To 3 Credits
BMGT 299 - Capstone:Entrepreneurship	3 Credits
BMKT 112 - Applied Sales	2 Credits
BMKT 114 - Psychology of Selling	3 Credits
BMKT 225 - Marketing	3 Credits
BMKT 240 - Advertising	3 Credits
BUS 210 - Critical Analysis for Business	3 Credits
BUS 238T - Financial Planning	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
M 115 - Probability and Linear Math	3 Credits

	MART 214 - Digital Publishing & Design	3 Credits
	MART 232 - Interactive Web II	3 Credits
	PSYX 161S - Fund of Organizational Psych	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		67 Total Credits Required

Management Sales and Marketing A.A.S.

This option combines technical sales and promotional related courses as a foundation for students seeking middle to advanced positions in the sales and marketing field. Students will be required to complete sales presentations using appropriate techniques to apply consultative and negotiation selling skills. Students will study and demonstrate effective sales techniques, plan and implement effective visual displays and presentations, and develop strong record keeping skills and management of accounts. Additional emphases in computer skills, accounting, and technical writing provide students with the needed edge for this competitive career.

Associate of Applied Science - Management; Sales and Marketing Option

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

AAS Business Management, Sales & Marketing

Rule: All courses required

Note: BMGT 298 Management Internship is a 2 crt course.

Course	Credits
ACTG 101 - Accounting Procedures I	4 Credits
ACTG 102 - Accounting Procedures II	4 Credits
ACTG 180 - Payroll Accounting	3 Credits
BGEN 235 - Business Law	3 Credits

BMGT 216 - Psych of Mgmt & Supervision	4 Credits
BMGT 298 - Management Internship	1 To 3 Credits
BMKT 109 - Visual Merchandising & Display	3 Credits
BMKT 112 - Applied Sales	2 Credits
BMKT 114 - Psychology of Selling	3 Credits
BMKT 225T - Marketing	3 Credits
BMKT 240 - Advertising	3 Credits
BUS 210 - Critical Analysis for Business	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
COMX 250 - Intro to Public Relations	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
ECNS 201S - Principles of Microeconomics	3 Credits
M 115 - Probability and Linear Math	3 Credits
MART 214 - Digital Publishing & Design	3 Credits
MART 232 - Interactive Web II	3 Credits
PSYX 161S - Fund of Organizational Psych	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	67 Total Credits Required

Health Information Coding Specialty A.A.S.

Students are trained to analyze health records and to accurately abstract and code procedures and diagnoses utilizing legal and regulatory standards. An understanding of anatomy, medical terminology and disease processes will provide students with the necessary tools to determine correct codes and sequences.

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

Degree Core Courses

Rule: All Courses Required

Note: AHMS 291 Special Topics: Simulated Lab Medical Support is a 3 crt course.

"Coding courses held on-line Great Falls College"
See program director for coding course information.

Course	Credits
AHMS 108 - Health Data Content & Struct	2 Credits
AHMS 144 - Medical Terminology	3 Credits
AHMS 156 - Medical Billing Fundamentals	3 Credits
AHMS 160 - Beginning Procedural Coding	3 Credits
AHMS 212 - CPT Coding	3 Credits
AHMS 216 - Pharmaceutical Products	3 Credits
AHMS 220 - Medical Office Procedures	4 Credits
AHMS 291 - Special Topics	1 To 6 Credits
AHMS 298 - Medical Info Internship	3 Credits
BIOH 108 - Basic Anatomy	3 Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
CAPP 154 - MS Word	3 Credits

	COMX 115S - Intro to Interpersonal Communc	3 Credits
	MED 155T - Medical Software Applic	2 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		60 Total Credits Required

Math Requirements

Rule: Pick 1 of the 2 courses below

—	Course	Credits
	M 105 - Contemporary Mathematics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Medical Administrative Assisting A.A.S.

Medical administrative assistants are trained to effectively greet patients, supervise office personnel, schedule appointments, post charges and payments, submit insurance claims using current coding procedures, maintain patient records, calculate payroll, create and update the office procedures manual, assist in improving work flow and office efficiencies, and transcribe letters and patient chart notes.

Students successfully completing the program are awarded the Associate of Applied Science degree. Students may enter either autumn or spring semester.

Students entering autumn semester may complete the program in four semesters as outlined below. Students entering spring should meet with advisor prior to selecting courses.

Associate of Applied Science - Medical Information Technology; Medical Administrative Assist Option

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 61

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Degree Core Courses

Rule: All Courses Required

Course	Credits
ACTG 100 - Essentials of Accounting	4 Credits
ACTG 180 - Payroll Accounting	3 Credits
AHMS 108 - Health Data Content & Struct	2 Credits
AHMS 144 - Medical Terminology	3 Credits
AHMS 156 - Medical Billing Fundamentals	3 Credits
AHMS 220 - Medical Office Procedures	4 Credits
AHMS 298 - Medical Info Internship	3 Credits
BIOH 108 - Basic Anatomy	3 Credits
BMGT 216 - Psych of Mgmt & Supervision	4 Credits
BMGT 245 - Customer Service Management	4 Credits
CAPP 120 - Introduction to Computers	3 Credits
CAPP 154 - MS Word	3 Credits
CAPP 156 - MS Excel	3 Credits
CAPP 254 - Advanced MS Word	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
MED 155T - Medical Software Applic	2 Credits
TASK 145 - Records Management	2 Credits
TASK 240 - Admin Support for the Office	3 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-	58 Total Credits Required

Math Requirements

Rule: Pick 1 of the 2 courses below

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Course	Credits
M 105 - Contemporary Mathematics	3 Credits
M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Paralegal Studies A.A.S.

Tom Stanton, Director

This program is approved by the American Bar Association. The Paralegal Studies program prepares students for challenging and diverse careers in private law practices and in the law-related areas of business, industry, and government. The goals of the Paralegal Studies program are to enable students, through theoretical and practical legal education, to understand the function of law, to work as paralegals in the effective delivery of legal services, and to enhance the legal profession. This program is designed to equip students with skills to analyze legal issues and to perform a variety of activities including drafting legal documents, interviewing clients, conducting legal research, and preparing cases for trial. Students utilize current technology through Internet research and legal and general office software applications. Paralegal studies students receive the necessary legal training to take advantage of new career opportunities in all sectors of the economy. Students are exposed to the principles of legal ethics and are cautioned regarding restrictions against the unauthorized practice of law by laypersons. Paralegals may not provide legal services directly to the public, except as permitted by law.

Associate of Applied Science - Paralegal Studies

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 70

Required Cumulative GPA: 2.0

Note: Two year/four semester in-step degree. If classes are taken out of sequence, or Spring enrollment, additional semesters are required for graduation. Also note, LEG prefix (legal specialty) are only offered in the semester indicated.

See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

Associate in Applied Sciences in Paralegal Studies Course Requirements

Rule: All Courses Required

Course	Credits
ACTG 100 - Essentials of Accounting	4 Credits

BUS 210 - Critical Analysis for Business	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
CAPP 154 - MS Word	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
CRT 188T - Computers and Law	3 Credits
LEG 183T - Contracts	2 Credits
LEG 184T - Legal Ethics	2 Credits
LEG 185T - Intro Paralegal Studies	3 Credits
LEG 186T - Intro to Legal Research	2 Credits
LEG 187T - Leg Res & Wrtg I	2 Credits
LEG 188T - Prin of Real Estate	2 Credits
LEG 189T - Criminal Procedures	3 Credits
LEG 270T - Civil Litigation	3 Credits
LEG 282T - Contemporary Legal Issues	3 Credits
LEG 283T - Trial Preparation	3 Credits
LEG 285T - Family Law	3 Credits
LEG 286T - Legal Res & Writing II	2 Credits
LEG 287T - Legal Res & Writing III	2 Credits
LEG 288T - Estate Administration	2 Credits
LEG 290T - Legal Assist Internship	2 Credits
M 105 - Contemporary Mathematics	3 Credits
PSCI 210S - Intro to American Government	3 Credits
PSYX 161S - Fund of Organizational Psych	3 Credits
SOCI 101S - Introduction to Sociology	3 Credits
WRIT 101 - College Writing I	3 Credits

Minimum Required Grade: C-

70 Total Credits Required

Culinary Arts Certificate

Tom Campbell, Director

The Bureau of Labor Statistics indicates that the hospitality field is America's number one retail employer and predicts its growth will increase 30 percent over the next two years. Students entering the Culinary Arts Certificate program or Food Service Management degree program prepare for careers in the hospitality industry. Students develop the skills needed to then seek employment in hotels, restaurants, resorts, casinos, clubs, catering, and corporate dining. Culinary careers encompass hospitality management, sales, product development, and entrepreneurship.

To meet the growing demand of the hospitality industry, two program options are available. Students may earn a Culinary Arts Certificate of Applied Science or a Food Service Management Associate of Applied Science degree.

The Culinary Arts certificate program is three semesters and provides an introduction to the field of culinary arts. Students prepare for an entry-level position in the expanding and challenging food service industry. This program incorporates comprehensive hands-on learning experiences complemented by supportive courses designed to prepare students for a wide range of career opportunities. This program also allows for a seamless transition into the Food Service Management degree.

Certificate of Applied Science - Culinary Arts

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

CAS Culinary Arts Certificate

Rule: All courses required.

Course	Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
CULA 101 - Introduction to Food Service	5 Credits
CULA 105 - Food Service Sanitation	2 Credits

	CULA 156 - Dining Room Procedures	3 Credits
	CULA 157 - Pantry & Garden-Manager	3 Credits
	CULA 158 - Short Order Cookery	4 Credits
	CULA 160 - Soups, Stocks, & Sauces	3 Credits
	CULA 161 - Meats & Vegetables	3 Credits
	CULA 165 - Baking & Pastry	3 Credits
	CULA 210 - Nutritional Cooking	3 Credits
	M 105 - Contemporary Mathematics	3 Credits
	PSYX 161S - Fund of Organizational Psych	3 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		44 Total Credits Required

Customer Relations Certificate

Cheryl Galipeau, Director

The Customer Relations program provides students with the skills to promote excellent customer relations in business settings. Coursework includes service-level decision making, formulation of service policies, customer service management, and the development of staff. Students gain knowledge of customer care, effective communication, and the importance of public relations to promote a positive company image. Students develop an understanding of challenges and conflicts while servicing both internal and external customers. Emphases in business, computers, and communications provide a solid background for customer relations positions in the current business environment.

Certificate of Applied Science - Customer Relations

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Note: The Certificate of Applied Science in Customer Relations is available online. See Program Director for scope and sequence advising.

CAS Customer Relations Course Requirements

Rule: All courses required

—	Course	Credits
	BGEN 105S - Introduction to Business	3 Credits
	BGEN 235 - Business Law	3 Credits
	BMGT 245 - Customer Service Management	4 Credits
	CAPP 120 - Introduction to Computers	3 Credits
	CAPP 154 - MS Word	3 Credits
	COMX 115S - Intro to Interpersonal Communc	3 Credits
	COMX 250 - Intro to Public Relations	3 Credits
	TASK 145 - Records Management	2 Credits
Minimum Required Grade: C-		24 Total Credits Required

Math Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

—	Course	Credits
	M 105 - Contemporary Mathematics	3 Credits
	M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Writing Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Computer Science Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

—	Course	Credits
	CAPP 156 - MS Excel	3 Credits
	CSCI 172 - Intro to Computer Modeling	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Medical Reception Certificate

Michelle Boller, Interim Director

The Medical Reception curriculum provides students with the skills needed to provide exceptional service to patients in a medical setting. In this role, essential duties include scheduling appointments, screening telephone calls, obtaining and entering patient registration information, releasing appropriate medical information, maintaining medical records and managing patient flow. Medical Reception students are instructed in the financial transactions of a practice and will have a clear understanding of all the activities in the billing and collection cycle. Students are provided a broad overview of medical law and the principles of medical ethics as well as the guidelines established by HIPAA. This training also prepares students for the position of a hospital ward secretary.

Certificate of Applied Science - Medical Reception

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 34

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

CAS Medical Reception

Rule: All courses required.

—	Course	Credits
	ACTG 100 - Essentials of Accounting	4 Credits
	AHMS 144 - Medical Terminology	3 Credits

	AHMS 156 - Medical Billing Fundamentals	3 Credits
	AHMS 220 - Medical Office Procedures	4 Credits
	BMGT 216 - Psych of Mgmt & Supervision	4 Credits
	CAPP 120 - Introduction to Computers	3 Credits
	CAPP 154 - MS Word	3 Credits
	MED 155T - Medical Software Applic	2 Credits
	TASK 145 - Records Management	2 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		34 Total Credits Required

Math Requirements

Rule: Pick 1 of the 2 courses below

Note: Appropriate placement into mathematics courses required. Prerequisites may apply.

Course	Credits
M 105 - Contemporary Mathematics	3 Credits
M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Sales and Marketing Certificate

Brian Larson, Director

Students in the Sales and Marketing program are trained in sales and supportive tasks relating to retail or wholesale organizations. They study the application of the latest counselor selling techniques to assist clients in meeting needs. The curriculum also involves marketing activities, bookkeeping functions, and merchandising skills.

Certificate of Applied Science - Sales and Marketing

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 34

Required Cumulative GPA: 2.0

CAS Sales and Marketing

Rule: All courses required

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

Course	Credits
ACTG 101 - Accounting Procedures I	4 Credits
ACTG 102 - Accounting Procedures II	4 Credits
BMKT 109 - Visual Merchandising & Display	3 Credits
BMKT 112 - Applied Sales	2 Credits
BMKT 114 - Psychology of Selling	3 Credits
BMKT 225 - Marketing	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 250 - Intro to Public Relations	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
M 115 - Probability and Linear Math	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	34 Total Credits Required

Social Media Management

Associate of Applied Science - Administrative Management; Social Media Management
Option

Catalog Year: 2014-2015

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Note: See Program Director for scope and sequence advising.
Please refer to online schedule for online course availability.

AAS, Administrative Management, Social Media Management Option Course Requirements

Rule: All courses required

Note: See Program Director for advising regarding BMKT 291, Special Topics: Social Media Strategies and Management, 3 cr, offered spring

Course	Credits
BGEN 105S - Introduction to Business	3 Credits
BGEN 235 - Business Law	3 Credits
BMGT 245 - Customer Service Management	4 Credits
BMKT 114 - Psychology of Selling	3 Credits
BMKT 225 - Marketing	3 Credits
BMKT 240 - Advertising	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 111A - Intro to Public Speaking	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
COMX 140L - Intro to Visual Rhetoric	3 Credits
COMX 250 - Intro to Public Relations	3 Credits
CSCI 172 - Intro to Computer Modeling	3 Credits
HMR 290T - Adm Mgmt Internship	2 Credits
JRNL 100H - Media History and Literacy	3 Credits
JRNL 257 - Beginning Visual Journalism	3 Credits
M 115 - Probability and Linear Math	3 Credits
MART 214 - Digital Publishing & Design	3 Credits

	MART 232 - Interactive Web II	3 Credits
	TASK 240 - Admin Support for the Office	3 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		60 Total Credits Required

Health Professions Department

Mary Nielson, Chair

The Health Professions Department of Missoula College-University of Montana seeks to prepare students to be health practitioners who are technically competent and who are safe and in a variety of clinical, agency and community settings. The Health Professions Department offers four Associate of Applied Science (A.A.S.) Degrees, one Associate of Science (A.S.) Degree, and one Certificate of Applied Science (CAS) program with courses and learning experiences that contribute to understanding the health needs of individuals and society. Clinical affiliations and on-site experiences are essential elements of all programs; local and regional communities, their agencies, and organizations are a valuable resource and provide cooperative learning experiences in health delivery systems.

Course Descriptions

Allied Health Medical Support

- **AHMS 108 - Health Data Content & Struct**
 Credits: 2. Offered spring. In-depth study of origin, use, content and structure of health records; storage and retrieval systems; numbering and filing systems; documentation requirements; use and structure of health care data sets; and how these components relate to primary and secondary record systems. Additional topics include gathering, compilation and computing of healthcare related statistics, use of research and statistical methods for developing healthcare data into information for various requesters. **Course Attributes:** Technical Course
- **AHMS 144 - Medical Terminology**
 Credits: 3. Offered every term. Introduction to a medical word building system using Greek and Latin word roots, combining forms, suffixes, and prefixes. **Course Attributes:** Technical Course
- **AHMS 156 - Medical Billing Fundamentals**
 Credits: 3. Offered every term. Prereq. or coreq., AHMS 220 or consent of instr. An introduction to insurance claim processing for the major medical insurance programs. Students will be provided with a basic knowledge of CPT and ICD-9 procedural and diagnostic coding. Emphasis on completing universal insurance forms to maximize reimbursement as well as trouble shoot denied or underpaid claims. **Course Attributes:** Technical Course
- **AHMS 160 - Beginning Procedural Coding**
 Credits: 3. Offered autumn. Prereq., AHMS 156, AHMS 108 or consent of instr. Foundation for utilizing the CPT coding system to increase compatibility and comparability of medical data among users and providers.
- **AHMS 162 - Beginning Diagnosis Coding**

Credits: 3. Offered autumn. Prereq., AHMS 156, AHMS 108 or consent of instr. Introductory foundation for utilizing the International Classification of Diseases coding for classification of morbidity and mortality information for statistical purposes and for indexing medical records by disease and operation.

- **AHMS 164 - AHMS 164 Beginning Diagnosis Coding: ICD-10**

Credits: 3. This course covers basic and intermediate levels of theory and application of ICD-CM principles and guidelines for coding and sequencing diagnoses and procedures. Students perform basic and intermediate coding using real health records, case studies, and scenarios. Application will focus on the use of the electronic ICD-10-CM with an overview of encoder software. This coding class involves hands-on coding, and knowledge of basic use of applicable coding books or the electronic ICD-10-CM. Currently the students take this course through Great Falls

- **AHMS 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHMS 192 - Independent Study**

Credits: 1 TO 9. Course material appropriate to the needs and objectives of the individual student.

- **AHMS 212 - CPT Coding**

Credits: 3. Offered spring. Prereq., AHMS 210 or consent of instr. Comprehensive application of the CPT coding system to assign codes for services, supplies and equipment for comparative analysis, research and reimbursement.

- **AHMS 213 - ICD-10 CODING**

Credits: 3. Prereq., AHMS 164. Basic understanding of diagnostic and procedural coding principles should already be established. The course requires interpreting ICD-10-CM coding and reporting guidelines to sequence and assign appropriate diagnostic codes for both inpatient and various outpatient settings. Compliance issues associated with various IPPS reimbursement systems such as MS-DRGs, as well as APCs are covered. Encoder software will complement the ICD-10-CM manual in the application of coding processes. Clinical information will be interpreted from brief case studies and progress to the coding of health record excerpts.

- **AHMS 216 - Pharmaceutical Products**

Credits: 3. Offered autumn. Fundamental principles of pharmacology and the implications of medication use. Includes the law as it pertains to drug use, dosage forms, routes of administration as well as the pharmacologic actions and uses of drugs.

- **AHMS 220 - Medical Office Procedures**

Credits: 4. Offered autumn. An introduction to the necessary skills and qualities required to function successfully in the medical arena. Emphasis on medico-legal and ethical responsibilities, records management and financial management of the medical practice, and interpersonal communications to include patient reception, telephone techniques and appointment scheduling.
Course Attributes: Technical Course

- **AHMS 245 - Simulated Lab**

Credits: 3. Prereq., consent of instr. This course will use computer applications and software in maintaining health information in medical records through practice utilizing HIT applications through the AHIMA Virtual Lab, to include the following applications: Master Patient Index, Electronic Health Record, Encoder, Abstracting, Chart Tracking, Release of Information.

- **AHMS 252 - Computerized Medical Billing**

Credits: 2. Offered spring, Prereq., AHMS 156; prereq. or coreq. AHMS 220; or consent of instr. A medical package is used to enter and update patient data, enter charges, payments and adjustments, and generate management reports, insurance forms, and patient statements.

- **AHMS 255 - Medical Transcription I**

Credits: 3. Offered every term. Prereq., CAPP 154; prereq. Or coreq., AHMS 144. An introduction to the transcription of authentic physician-dictated medical reports in a variety of medical specialties. Emphasis on the development of accuracy and speed in interpreting, transcribing and editing medical dictation for content and clarity.

- **AHMS 256 - Medical Transcription II**

Credits: 3. Offered every term. Prereq., CAPP 154 and AHMS 255. Advanced medical transcription of realistic physician-dictated medical reports in a variety of medical specialties. Emphasis on production and increased speed in interpreting, transcribing and editing medical dictation for content and clarity. **Course Attributes:** Technical Course

- **AHMS 270E - Medical Ethics**

Credits: 3. Offered every term. Ethical decision-making tools for addressing common ethical issues in the health professions. **Course Attributes:** Ethical & Human Values Course

- **AHMS 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHMS 292 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **AHMS 298 - Medical Info Internship**

Credits: 3. Offered every term. Prereq., last semester in program, minimum of "C" in AHMS/AHMA (MED) courses, and approval of program director. On-the-job training in positions related to each student's career goal in the medical information field. This experience increases students' skills, prepares them for initial employment and advancement on the job, and increases occupational awareness and professionalism. Students work a minimum of 180 hours at an approved site and attend a scheduled one-hour seminar. **Course Attributes:** Internships/Practicums
Technical Course

Allied Health Respiratory Care

- **AHRC 101 - Communication Management**

Credits: 1. Offered autumn. Prereq., Acceptance into Respiratory Care Program. Study of respiratory care departmental organization and administration procedures, effective communication strategies, and legal and ethical issues for the Respiratory care professional.

- **AHRC 115 - Blood Gas Analysis**

Credits: 2. Offered autumn. Prereq., acceptance into the Respiratory Care program. Study of the indications, rational, methods, instrumentation, and analysis of Blood Gases. Emphasis will be placed on the physiology and clinical implications of acid-base abnormalities.

- **AHRC 129 - Patient Care & Assessment**

Credits: 4. Offered autumn. Prereq., BIOH 201N-202N. Introduction to nursing- related knowledge and skills with emphasis on application of microbiology to aseptic technique. Assessment of the respiratory system with cardiopulmonary diagnostic and laboratory tests interpretation. Observation and interpretation of overall patient condition is integrated throughout the course. **Course Attributes:** Technical Course

- **AHRC 130 - Respiratory Care Lab IB**

Credits: 1. Offered autumn. Prereq., acceptance into the Respiratory Care program. Basic clinical competencies taught in RES 129 are studied in a laboratory setting. Peer and instructor review of competencies included. Students focus on patient assessment skills and techniques/equipment.

- **AHRC 131 - Resp Care Fundamentals**

Credits: 5. Offered autumn. Prereq., acceptance into the Respiratory Care program. Orientation to basic respiratory care science including the application of principles of physics and chemistry. Emphasis on theory, operation and troubleshooting of equipment used at the entry level of practice. Microbiology in relation to equipment processing, pulmonary rehabilitation and home care included. **Course Attributes:** Technical Course

- **AHRC 133 - Resp Care Pharmacology**

Credits: 3. Offered winter. Prereq., acceptance into the Respiratory Care Program or consent of instr. Principles of basic chemistry introduced with an application to pharmacology as related to the pulmonary system. Cardiovascular and related pharmacology studied in preparation for ACLS and ventilator management. **Course Attributes:** Technical Course

- **AHRC 150 - Respiratory Care Lab I**

Credits: 1. Offered autumn. Prereq., acceptance into the Respiratory Care program. Basic clinical competencies taught in RES 131 are studied in a laboratory setting. Peer and instructor review of competencies included. Students earn their BLS certification. **Course Attributes:** Technical Course

- **AHRC 231 - Resp Crit Care**

Credits: 4. Offered spring. Prereq., RES 120, 129, 131, 133, 150. Continuation of RES 131. Physiology, indication, contraindications, and application of mechanical ventilation. Emphasis on patient assessment, monitoring, stabilization and weaning during assisted pressure breathing. Analysis of the various modes of ventilation, including optimizing the patient-ventilator interface in the adult through various advanced airway techniques. **Course Attributes:** Technical Course

- **AHRC 232 - Resp Path & Disease**

Credits: 3. Offered spring. Prereq., RES 120, 129, 131, 133, 150. Special lectures in medicine and disease as related to the cardiopulmonary system. Emphasis on recognition of signs and symptoms of disease and implications for treatment through the study of selected case studies. **Course Attributes:** Technical Course

- **AHRC 235 - Cardiopulm Anat & Phys**

Credits: 3. Offered spring. Prereq., RES 120, 129, 131, 133, 150 or consent of instr. Principles of physiologic chemistry are introduced and applied to the macro and micro anatomy of the cardiopulmonary system with a focus on structure and function. Application made to pathology and assessment of patients receiving mechanical ventilation. **Course Attributes:** Technical Course

- **AHRC 242 - Respiratory Management**

Credits: 1. Offered autumn. Prereq., RES 260T, 265T. Study of respiratory care departmental organization and administration procedures. **Course Attributes:** Technical Course

- **AHRC 243 - Perinat & Pediat Res Care**

Credits: 3. Offered autumn. Prereq., RES 260, 265. Study of perinatal and pediatric respiratory care with emphasis on assessment, resuscitation and mechanical ventilation of the neonate and pediatric patient. The theory of Neonatal Resuscitations (NRP) will be presented. Neonatal and pediatric diseases will be studied. **Course Attributes:** Technical Course

- **AHRC 250 - Respiratory Care Lab II**

Credits: 2. Offered spring. Prereq., RES 120, 129, 131, 133, 150. A continuation of RES 150 with emphasis on adult critical care. Clinical competencies taught in RES 231 and RES 235 are studied in a laboratory setting. Peer and instructor review of competencies included. **Course Attributes:** Technical Course

- **AHRC 252 - Respiratory Care Review**

Credits: 2. Offered autumn. Prereq., RES 260, 265. A review of respiratory care in preparation for credentialing exams. Students must take an Entry Level Self-Assessment Exam, a Written Registry Self-Assessment Exam, and a Clinical Simulation Self-Assessment Exam. **Course Attributes:**

Technical Course

- **AHRC 255 - Clinical Experience I**
Credits: 5. Offered spring. Prereq., RES 120, 129, 131, 133, 150. Emphasis on the student directly performing basic clinical skills in a patient care setting to include hospitals, home care, and pulmonary function laboratories. Students also participate in physician rounds. **Course Attributes:** Technical Course
- **AHRC 260 - Resp Care Lab III**
Credits: 1. Offered summer. Prereq., RES 231, 232, 235, 250, 255. Students study principles and theory of advanced life support. Peer and instructor review are included. Students will be Advanced Cardiac Life Support (ACLS) and Pediatric Advance Life Support (PALS) certified at the end of this class. **Course Attributes:** Technical Course
- **AHRC 265 - Clinical Experience II**
Credits: 5. Offered summer. Prereq., RES 231, 232, 235, 250, 255. Continuation of clinical skills learned in RES 255. Introduction to adult critical care along with sleep and cardiac diagnostics. Students also participate in physician rounds. **Course Attributes:** Technical Course
- **AHRC 270 - Resp Care Lab IV**
Credits: 1. Offered autumn. Prereq., RES 260, 265. Emphasis on neonatal and pediatric critical care. Clinical competencies introduced in RES 241 are studied. Peer and instructor review of competencies are included. **Course Attributes:** Technical Course
- **AHRC 275 - Clinical Exp III**
Credits: 6. Offered autumn. Prereq., RES 260, 265, 270. Continuation of RES 265 with critical care of the adult. Neonatal and pediatric critical care experiences are emphasized. Students also participate in physician rounds. **Course Attributes:** Technical Course
- **AHRC 291 - Special Topics**
Credits: 1 TO 8. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course
- **AHRC 292 - Independent Study**
Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.

Surgical Technology

- **AHST 101 - Introduction to Surgical Techn**
Credits: 3. Offered spring. Prereq., admission to the program. Provides an orientation to the scrub and circulatory roles of the surgical technologist in the preoperative, intraoperative and postoperative periods. Entry level skills and theories are emphasized. **Course Attributes:** Technical Course
- **AHST 115 - Surgical Lab I**
Credits: 2. Offered spring. Prereq., admission to the program. Demonstration of sterile technique in the campus lab, various skills and their application in the operating room. **Course Attributes:** Technical Course
- **AHST 154 - Surgical Pharmacology**
Credits: 3. Offered spring. Prereq., admission to the program, M 090. Basic overview of the medications that are commonly used before, during and after a surgical procedure. **Course Attributes:** Technical Course
- **AHST 191 - Special Topics**
Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors,

experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Ethical & Human Values Course Technical Course

- **AHST 200 - Operating Room Techniques**

Credits: 5. Offered autumn. Prereq., completion of all second semester courses. Focus on the scrub and circulator roles of the surgical technologist in the preoperative, intraoperative, and postoperative periods. More complex skills and theories; impact of new technologies in the 21st century operating room. **Course Attributes:** Technical Course

- **AHST 201 - Surgical Procedures I**

Credits: 4. Offered autumn. Prereq., completion of all second semester courses. A study of surgical procedures following the patient through the preoperative, intraoperative, and post-operative stages of specific surgical specialties. **Course Attributes:** Technical Course

- **AHST 202 - Surgical Procedures II**

Credits: 5. A study of surgical procedures following the patient through the preoperative, intraoperative, and postoperative stage of CV/thoracic, orthopedic, neurological, and ophthalmic specialties. **Course Attributes:** Technical Course

- **AHST 215 - Surgical Lab II**

Credits: 2. Offered spring. Demonstration of more complex skills in the campus lab, including assistant circulating, and their application in the operating room. **Course Attributes:**
Technical Course

- **AHST 250 - Surgical Clinical I**

Credits: 4. Offered autumn. Prereq., completion of all second semester courses and successful completion of AHST 215. Perioperative experience in the minor surgical procedure role through a supervised clinical hospital rotation. **Course Attributes:** Technical Course

- **AHST 251 - Surgical Clinical II**

Credits: 5. Offered spring. Prereq., completion of all third semester courses. Perioperative experience in the major surgical procedure role through a supervised clinical hospital rotation. **Course Attributes:** Technical Course

- **AHST 298 - Surgical Internship**

Credits: 5. Offered spring. Prereq., successful completion of AHST 202, 251T. Capstone experience in the perioperative role in preparation for initial employment, increasing occupational awareness and professionalism. Students take call for emergency surgeries alongside experienced hospital staff. **Course Attributes:** Internships/Practicums Technical Course

Radiologic Technology

- **AHXR 100 - Intro to Diagnostic Imaging**

Credits: 3. Offered fall. Introduction to the field of radiology and its mix of technical equipment, lab work, hospital environment, patient care and team work. **Course Attributes:**
Technical Course

- **AHXR 121 - Radiographic Imaging I**

Credits: 4. Offered spring. Introduction to fundamental physics principles underlying radiology and diagnostic x-ray production. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Factors of image quality and exposure methods: density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts. **Course Attributes:** Technical Course

- **AHXR 140 - Radiographic Methods**

Credits: 2. Offered fall. Preparation in the procedures associated with radiology in standard radiographic environments. **Course Attributes:** Technical Course

- **AHXR 141 - Radiology Lab**

Credits: 1. Co-Requisite AHXR 140 Radiological Methods. Students will practice all patient positioning skills necessary for competency as Radiologic Technologists.

- **AHXR 192 - Independent Study**

Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.

Course Attributes: Technical Course

- **AHXR 195 - Radiographic Clinical: I**

Credits: 1 TO 12. (R-20) Offered over two semesters throughout the Radiology Technology program, beginning Spring semester. Students will begin with an introduction to patient management and basic radiographic procedures. The final semester offers opportunities in advanced patient management skills and experience with highly skilled radiographic procedures. Each semester builds on the previous semester, always emphasizing the principles of ALARA. **Course Attributes:**

Internships/Practicums Technical Course

- **AHXR 221 - Radiographic Imaging II**

Credits: 3. Offered autumn. Offers students more technical and detailed information on the use of image receptor systems, processing principles, advanced digital imaging systems and imaging modalities used in radiology.

- **AHXR 225 - Radiobiology/Radiation Protctn**

Credits: 2. Offered autumn. Principles of radiation protection and radio biology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. **Course Attributes:**

Technical Course

- **AHXR 240 - Radiological Methods II**

Credits: 3. Offered spring. Knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis on radiographic specialty procedures, pathology, and advanced imaging.

- **AHXR 270 - Radiographic Registry Review**

Credits: 2. Offered spring. An overview of imaging concepts as a review for the national certification test. Topics include a systematic approach for image evaluation, patient care, radiation protection and the physics of radiographic imaging. **Course Attributes:**

Technical Course

- **AHXR 291 - Special Topics**

Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **AHXR 295 - Radiographic Clinical: I**

Credits: 1 TO 9. (R-20) Offered over two semesters throughout the Radiology Technology program, beginning Spring semester. Students will begin with an introduction to patient management and basic radiographic procedures. The final semester offers opportunities in advanced patient management skills and experience with highly skilled radiographic procedures. Each semester builds on the previous semester, always emphasizing the principles of ALARA. **Course Attributes:**

Internships/Practicums

- **AHXR 298 - Internship**

Credits: 1. Extended classroom experience which provides practical application of classroom learning during placements off campus. **Course Attributes:**

Internships/Practicums

Nursing

- **NRSG 100 - Introduction to Nursing**

Credits: 1. Offered each semester. This online course is a prerequisite to the Practical Nursing

program. Student will be presented with an introductory level of the core concepts of nursing practice and other issues such as the legal concerns and ethical/cultural issues that face professional nurses on a consistent basis. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRSG 106 - Nursing Assistant**

Credits: 4. The Nursing Assistant course will prepare students for careers in health care under the supervision of the licensed nurse. Students will learn the basic entry-level nursing skills to work in health care setting as a Certified Nursing Assistant. Course includes providing or assisting in client care, bathing, dressing, grooming, toileting, ambulation, transferring, feeding, using equipment, documenting and reporting the general well-being of the client.

- **NRSG 110 - Dosage Calculation Hlth Prof**

Credits: 2. This course is intended to provide the student the theory and psychomotor skills to correctly and safely calculate medications for clients in diverse health care settings. It will prepare students for the calculations used in health care professions. Students will review various systems of weights and measures (metric, apothecary, and household), conversions between these systems, ratio/proportions, dosage calculations, percentage preparations, reducing and enlarging formulas, dilution, concentrations, and intravenous flow rates.

- **NRSG 130 - Fundamentals of Nursing**

Credits: 7. Offered autumn and spring. Prereq: acceptance into the Practical Nursing Program. Introduces learners to the clinical skills essential for the nursing role. Also includes complex concepts and behaviors of nursing roles within the context of the nursing process, holistic care and health care. Emphasizes the theoretical and practical concepts of nursing skills required to meet the needs of clients in a variety of settings. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRSG 131 - Fundamentals of Nursing Lab**

Credits: 3. Offered autumn and spring. Prereq., SCN 201N-202N, M 115, WRT 101, SCN 150N, PSYX 100S, CHMY 121N with lab, and acceptance into the practical nursing program. Introduces the student to basic principles and psychomotor skills to provide a framework for developing initial competencies in patient care. Campus lab experience is used initially. Off campus clinical experience in a long term care setting completes the hands on portion. Successful students are qualified to apply for certification as certified nurse assistants.

- **NRSG 135 - Nursing Pharmacology**

Credits: 3. Offered autumn and spring. Prereq: acceptance into the Practical Nursing Program. Students learn a structured systematic approach to the study of drug therapy through caring, communication, professionalism, critical thinking, and clinical judgment. Medications are studied according to drug classes, and therapeutic families. Students will learn to apply the nursing process to drug therapy with an emphasis on accessing relevant information to ensure client safety. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRSG 138 - Gerontology for Nursing**

Credits: 2. Offered autumn and spring. Prereq: acceptance into the Practical Nursing Program. Introduces the student to the skills and knowledge needed to provide nursing care to aging clients. Topics explored include current trends (including legal and ethical issues) in gerontological nursing, developmental stages and transitions associated with aging, expected age-related physiological changes, and assessment findings, recognition and management of acute and chronic illness that commonly occur in the older adult population, promotion of health for the older adult client, end-of-life issues and care. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRSG 140 - Core Concepts of Adult Nursing**

Credits: 7. Offered spring and autumn. Prereq: successful completion of semester 1 of the PN nursing program. Prepares the student to care for clients experiencing common, well-defined health alterations in settings where stable clients are anticipated. Students are introduced to standardized nursing procedures and customary nursing and collaborative therapeutic modalities.

Course Attributes: Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRS 142 - Concepts of Maternal Child Nursing**

Credits: 3. Offered autumn and spring. Prereq: successful completion of semester 1 of the PN nursing program. Information about fetal development and prenatal and postnatal care of the mother and newborn emphasizing caring, communication, professionalism, and critical thinking. Role of the nurse in meeting the needs of the family is emphasized. Clinical application of caring for the mother and newborn will allow the student to demonstrate acquired knowledge. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRS 143 - Concepts Maternal Child Nursing Clinical**

Credits: 3. Offered intermittently. Prereq: all first semester practical nursing courses and consent of instr. Capstone course that allows the student to work collaboratively with an identified LPN preceptor, performing the role expectations for care in that workplace setting.

- **NRS 144 - Concepts of Mental Health Nursing**

Credits: 2. Offered autumn and spring. Prereq: successful completion of semester 1 of the PN nursing program. Exploration of physiological, psychological, sociocultural, spiritual, and environmental factors associated with mental health/illness affecting individuals and families. Focus will be placed on basic concepts of psychiatric nursing, therapeutic modalities, as well as psychiatric disorders including psychopharmacological management. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRS 147 - Practical Nursing NCLEX Review**

Credits: 2. Offered autumn and spring. Prereq: Successful completion of all courses in the first semester of the practical nursing program. Preparation for the national test for LPN licensure.

- **NRS 148 - Leadership Issues**

Credits: 2. Offered autumn and spring. Prereq: successful completion of semester 1 of the PN nursing program. Capstone course that provides the Practical Nursing student information regarding the current status of vocational nursing. There is a forty-five hour clinical/precepted component to provide the student opportunity to apply theoretical knowledge in the long-term care setting. **Course Attributes:** Practical Nursing Prog Rqrmnt Registered Nursing Prog Rqrmnt

- **NRS 191 - Special Topics**

Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

- **NRS 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

- **NRS 250 - LPN to RN Transition**

Credits: 3. Offered autumn and spring. Prereq., admission to the registered nursing program and current unencumbered LPN license. Focus on the role transition from LPN to RN in relation to the concepts and principles of holistic nursing care. Focus is on the continuing development of roles and responsibilities of the RN as defined by the scope of practice standards, nursing theory and conceptual models.

- **NRS 252 - Complex Care Maternal/Child Client**

Credits: 3. Offered spring and autumn semester. Prepares the student to provide care to maternal/child clients experiencing acutely changing conditions in settings where outcomes are less predictable. Topics include care of the client during childbirth, high-risk pregnancies, obstetrical emergencies, neonatal emergencies, and infants and children requiring complex collaborative care.

- **NRS 254 - Complex Care/Mental Health Client**

Credits: 2. Offered spring and autumn. Explores physiological, psychological, sociocultural, spiritual and environmental factors associated with mental health/illness. Focus is placed on psychotherapeutic management in the continuum of care, milieu management and special populations with emphasis on individuals, families and communities.

- **NRS 256 - Pathophysiology**

Credits: 3. Offered spring and autumn. Prereq: successful acceptance into the ASRN Nursing Program. An introduction to the basic principles and processes of pathophysiology including cellular communication, genes and genetic disease, forms of cellular injury, fluid and electrolyte/acid base balance, immunity, stress coping and illness, and tumor biology. Pathophysiology of the most common alterations according to body system will also be discussed as well as the latest developments in research related to each area.

- **NRS 262 - Complex Care Needs - Adult Cli**

Credits: 4. Offered spring and autumn. Prepares the student to provide nursing care to adult client's experience acutely changing conditions in setting where outcome is less predictable. Emphasis is placed on the nurse's response to emergent/life-threatening/rapidly changing conditions. Topics covered include collaborative therapeutic modalities related to acute/complex neurological, cardiac, respiratory, hematological, endocrinologic events, shock, sepsis/SARS, complex burns, etc.

- **NRS 265 - Advanced Clinical Skills**

Credits: 1. Offered spring and autumn. Prepares students to carry out complex nursing interventions. Topics covered include central venous therapy, parenteral nutrition hemodynamic monitoring, advanced airway/ventilator support, intracranial pressure monitoring, IV medication administration, high risk IV infusions, blood/blood product administration, conscious sedation, advanced wound care, etc.

- **NRS 266 - Managed Client Care**

Credits: 4. Offered spring and autumn. Covers topics related to integrated nursing care of individual clients and groups as well as basic principles related to supervision of nursing practice and management of resources.

- **NRS 291 - Special Topics**

Credits: 1 TO 6. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **NRS 292 - Independent Study**

Credits: 1 TO 6. (R-6) Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

Pharmacy Technology

- **PHA 196 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently.

Pharmacy

- **PHAR 100 - Intro Pharm Practice for Techs**

Credits: 3. Offered autumn. Prereq., admission into Pharmacy Technology program. This course offers information regarding careers in pharmacy. It includes the history of pharmacy practice and defines roles of personnel relating to pharmaceutical services. Ethical standards of the occupation and federal and state laws regulating pharmacy practice with emphasis on Montana State Pharmacy Law regulating pharmacy technicians are studied. Day-to-day operations including preparation, maintenance, and storage of pharmaceuticals and records, and basic concepts of computer operations and latest technologies are reviewed. Skills will be developed with are necessary for the pharmacy technician to communicate effectively in the following ways: 1) as a

representative of the profession of pharmacy, 2) as an intermediary between the pharmacist and patient, and 3) as an intermediary between the pharmacist and other health care professionals.

- **PHAR 101 - Pharmacy Calculations**

Credits: 3. Offered autumn. Calculations used in pharmacy practice; includes various systems of weights and measures, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution, and concentration.

- **PHAR 102 - Pharmacology for Technicians**

Credits: 6. Offered autumn. Prereq., admission into Pharmacy Technology program. Study of the properties, reactions, and therapeutic value of the primary agents in the major drug classes.

- **PHAR 104 - Pharmacy Dispensing Lab**

Credits: 4. Offered autumn. Prereq., admission into Pharmacy Technology Program. Develop dispensing and distributive skills with hands-on lab, and lecture format.

- **PHAR 120 - Medication Safety**

Credits: 3. Offered spring online only. Prereq., PHAR 100, 101, 102, 104 and second semester standing in Pharmacy Technology Program. This course will introduce students to national safety initiatives developed by the Institute of Medicine, The Joint Commission, The Institute of Safe Medicine Practices and others. This awareness will help students become part of the solution in promoting safe medication practices.

- **PHAR 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

- **PHAR 198 - Internship: Pharmacy**

Credits: 4. Offered spring. Prereq., PHAR 100, 101, 102, 104 and second semester standing in Pharmacy Technology Program. Training and experience in either hospital, compounding, home infusion, nursing home or other alternative pharmacy settings under supervision of a pharmacist. Emphasizes special skills unique to that pharmacy setting. **Course Attributes:**
Internships/Practicums

Practical Nursing A.A.S.

Dixie McLaughlin, Interim Program Director

The Missoula College offers an Associate of Applied Science degree (A.A.S.) in Practical Nursing (PN). Applicants for the PN program must have a high school diploma or equivalency, have completed the AA prerequisite courses with a minimum grade of C, except in BIOH 201N/BIOH 211N & BIOH 211N/BIOH 212N (SCN 201N and 202N) which requires a B or higher grade, and possess a cumulative GPA of at least 2.75.

Admission to the program also requires completion of the application which can be obtained on the Missoula College UM Nursing webpage. The number of students accepted into the A.A.S. Program is limited to 20 each autumn and spring. Application deadlines are April 1 and November 1. A student may apply while enrolled in the final semester of the A.A.S. pre-nursing courses with acceptance to the program to be determined after the currently completed semester grades are finalized. All candidates who meet the admission requirements will be considered.

Students learn practical nursing skills through independent study, lectures, simulations, demonstrations, and practice in a nursing skills lab. Under instructor supervision, students also provide patient care in a variety of health care settings. The program is approved by the Montana State Board of Nursing (301 South Park, Helena, MT 59601).

Students must provide proof of having met the following requirements to the Nursing Program Administrative Associate on or before the first day of class:

1. Two step Tuberculosis testing using the PPD (Purified Protein Derivative) or chest x-ray (positive results will require a physician's letter before a student can continue in clinical settings);
2. Hepatitis B vaccine, (HBV, a three injection series that may be obtained at Curry Health Center and other health care providers). The Hepatitis B vaccine must be started on or before acceptance into the program so the three injections series is completed by the time clinical begins;
3. Measles, mumps and rubella (MMR) immunization (for those born before 1956, it is not required to have an MMR, but a titer must be completed);
4. Influenza Vaccination;
5. Varicella (Chicken Pox) Vaccination;
6. BLS training for health care providers;
7. Proof of insurance;
8. Criminal Background Check

Many licensing bodies and employing institutions in health care have increasingly stringent requirements and background checks as conditions for licensing or employment. If a student has concerns about this, she/he should contact the licensing board for nursing at dlibsdnur@mt.gov.

Practical Nursing program graduates are eligible to write the National Council Licensing Examination (NCLEX) for Practical Nurses. Completion of the A.A.S. Practical Nursing Program does not guarantee a student licensure. This is a decision of the Montana State Board of Nursing.

After licensure, graduates typically find employment in hospitals, long term care facilities, physician offices and other health care agencies. They work under the supervision of a registered nurse, physician, dentist, osteopath or other health care provider as specified in the State of Montana Nurse Practice Act.

Associate of Applied Science - Practical Nursing

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 52

Required Cumulative GPA: 3.0

Note: A minimum cumulative GPA of 2.75, successful completion of pre-nursing courses within 2 attempts, and acceptance through an application process is needed for entrance into the Practical Nursing Program. Total credits for the AAS Practical Nursing degree are 52. This includes pre-nursing credits (26 credits) and AAS Practical Nursing credits (26 credits).

Pre-Nursing

Rule: All courses required.

Note: Minimum cumulative in Pre-Nursing course of 2.75. BIOH 201N, 202N, 211N, and 212N must be completed with a 'B'.

CHMY 121N, CHMY 122, BIOH 201N, BIOH 202N, BIOH 211N and BIOH 212N must be completed within 5 years of application.

Course	Credits
BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits
BIOH 202N - Human Anat and Phys I Lab	4 Credits

	BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
	BIOH 212N - Human Anat Phys II Lab	4 Credits
	CHMY 121N - Intro to General Chemistry	3 Credits
	CHMY 122 - Intro to Gen Chem Lab	1 Credits
	M 121 - College Algebra	3 Credits
	NRSB 100 - Introduction to Nursing	1 Credits
	NUTR 221N - Basic Human Nutrition	3 Credits
	PSYX 100S - Intro to Psychology	4 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C		26 Total Credits Required

Mathematics Pre-Nursing Requirement

Rule: Must complete 1 of the following courses

Note: M 121 is the recommended math. Courses that substitute for M 121 College Algebra can be Probability and Linear Math, Pre-calculus with Algebra, or Pre-calculus with Trig , or Calculus.

—	Course	Credits
	M 115 - Probability and Linear Math	3 Credits
	M 121 - College Algebra	3 Credits
	M 151 - Precalculus	4 Credits
	M 171 - Calculus I	4 Credits
Minimum Required Grade: C		3-4 Total Credits Required

Practical Nursing

Rule: All courses are required

Note: NRSB 147 Practical Nursing NCLEX Review is an elective course.

—	Course	Credits
	NRSB 130 - Fundamentals of Nursing	7 Credits
	NRSB 135 - Nursing Pharmacology	3 Credits

	NRSG 138 - Gerontology for Nursing	2 Credits
	NRSG 140 - Core Concepts of Adult Nursing	7 Credits
	NRSG 142 - Core Concepts of Maternal Child Nursing	3 Credits
	NRSG 144 - Core Concepts of Mental Health Nursing	2 Credits
	NRSG 147 - Practical Nursing NCLEX Review	2 Credits
	NRSG 148 - Leadership Issues	2 Credits
Minimum Required Grade: B		26 Total Credits Required

Radiologic Technology A.A.S.

Anne Delaney, Program Director

A Radiologic Technologist (Radiographer) uses critical thinking and independent judgment to obtain a diagnostic imaging study while maintaining quality patient care and minimizing radiation exposure. Technologists are employed in acute care settings, ambulatory care settings, physicians' offices, in education and in management or sales positions. With additional education and training, radiographers may be employed in radiation therapy, computed tomography, mammography, magnetic resonance imaging, diagnostic medical ultrasound, nuclear medicine, special vascular imaging and cardiac catheterization.

The Associate of Applied Science degree in Radiologic Technology requires students to successfully complete the Pre-Radiology prerequisite courses prior to applying to the program. Students admitted to the University of Montana may enroll in the Pre-Radiology prerequisite courses. Students must pass BIOH 201N-202N (SCN 201N-202N) with a minimum grade of 'B' and have a minimum cumulative GPA of 2.75 in all course work including prerequisite courses to apply to the Radiologic Technology program. Students must prove competence with computer technology in one of the following three ways; Acceptable transfer credit for CAPP 120; Pass the challenge exam for CAPP 120; take and pass CAPP 120. A course may be attempted a maximum of two times. As some courses are offered autumn or spring semester only, it is important to obtain advising with the Program Director each semester prior to registration. Application to the program is required spring semester the year prior to the autumn semester program start. Students may apply while enrolled in the Pre-Radiology prerequisite courses with acceptance to the program to be determined after spring grades are finalized. Students who apply twice to the program and are not accepted are strongly encouraged to contact Career Services for counseling toward another degree. The program classes begin autumn semester each year with four semesters consisting of classroom and clinical education. A ten-week summer clinical rotation is required between the first and second years and consists of 40 hour per week of clinical and classroom instruction.

Once accepted into the program, all students are expected to complete BIOH 211N-212N (SCN 202N) and all courses with an AHXR rubric with a minimum grade of "B" to continue in the program.

The Radiologic Technology program is approved by the American Registry of Radiologic Technologists (ARRT) and accredited by the Northwest Association of Schools and Colleges. When all requirements for the associate degree are completed, the student will be eligible to take the national certification examination administered by the American Registry of Radiologic Technologists. Upon successful completion of this examination, the student becomes a Registered Radiologic Technologist, R.T. (R) ARRT.

Students entering the program are required to rotate to clinical sites outside the Missoula area on a periodic basis. These rotations will take place during any term or session beginning the second semester of the program. These sites may include, but are not limited to, Ronan, Hamilton, and Polson, Montana. Transportation and

housing are the student's responsibility.

Associate of Applied Science - Radiologic Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 83

Required Cumulative GPA: 2.75

Note: It is preferred that students have the prerequisite core completed by the end of the semester in which they intend to apply to the program (i.e. applying to the program in the spring and completing the core by the end of that spring semester.) Students must also prove competence with computer technology prior to application to the Radiology Technology Program in one of the following three ways: a) Acceptable transfer credit for CAPP 120, b) Passing challenge exam for CAPP 120, or c) Take and pass CAPP 120

Radiologic Technology Prerequisite Courses

Rule: All courses required

Note: Must pass A&P I with a B to apply to the program

Course	Credits
BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits
BIOH 202N - Human Anat and Phys I Lab	4 Credits
M 115 - Probability and Linear Math	3 Credits
SCN 175N - Integrated Physical Science I	3 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C	13 Total Credits Required

Radiologic Technology Courses

Rule: All courses required

Note: These courses can not be taken unless accepted into the program through the application process. AHXR 195 represents spring at 8 credits and summer at 12 credits. AHXR 295 is taken Fall at 8 credits and second year spring at 9 credits

Course	Credits
AHMS 270E - Medical Ethics	3 Credits
AHXR 100 - Intro to Diagnostic Imaging	3 Credits
AHXR 121 - Radiographic Imaging I	4 Credits

	AHXR 140 - Radiographic Methods	3 Credits
	AHXR 195 - Radiographic Clinical: I	1 To 12 Credits
	AHXR 221 - Radiographic Imaging II	3 Credits
	AHXR 225 - Radiobiology/Radiation Protctn	2 Credits
	AHXR 240 - Radiological Methods II	3 Credits
	AHXR 270 - Radiographic Registry Review	2 Credits
	AHXR 295 - Radiographic Clinical: III	8 Credits
	BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
	BIOH 212N - Human Anat Phys II Lab	4 Credits
	COMX 115S - Intro to Interpersonal Communc	3 Credits
	PSYX 161S - Fund of Organizational Psych	3 Credits
Minimum Required Grade: C		70 Total Credits Required

Registered Nursing A.A.S.

Dixie McLaughlin, Interim Program Director

The Associate of Science degree (A.S.N.) program articulates with the PN program and requires at least two additional semesters of full-time study. Applicants must have completed a PN program with the A.A. pre-nursing courses listed in the practical nursing course of study, and have a cumulative GPA of at least 2.75. A.A.S. PN students are eligible to apply to the A.S.N. program during the final semester of the A.A.S. PN program.

Admission to the program also requires completion of the application which can be obtained on the Missoula College UM Nursing webpage. The number of students accepted into the A.S.N. program is limited to 18 each autumn and spring. Of the 18 students accepted, 10 are in the on campus, face-to-face program and 8 are part of the Goodman hybrid program. Application deadlines are April 1 and November 1. All candidates who meet the admission requirements will be considered. Students learn Registered Nursing skills through independent study, lectures, simulations, demonstrations and advanced skills practice in the nursing lab. Under instructor supervision and preceptorship, students also provide patient care in a variety of acute care settings.

The A.S.N. degree program is approved by the State Board of Nursing (301 South Park, Helena, MT 59601). The program is accredited by the National League of Nursing Accrediting Commission (NLNAC) (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326).

Associate of Science - Registered Nursing

Catalog Year: 2014-2015

Degree Specific Credits: 26

Required Cumulative GPA: 3.0

Note: Successful completion of pre-nursing courses and Practical Nursing courses within 2 attempts and acceptance through an application process is needed for entrance into the Associate of Science Nursing Program. Students may apply to the Associate of Science Nursing Program transferring directly from successful completion of a Practical Nursing Program or as a Licensed Practical Nurse.

Registered Nursing

Rule: All courses required

Note: Students must pass all NRSNG courses with a minimum grade of a B.

It is highly recommended that students have BIOM 250N, BIOM 251N and SOCI 101S completed prior to admission to the ASN program. BIOM 250N, BIOM 251N and SOCI 101S are required for graduation from the program. Total credits for the ASN Registered Nursing Degree is 78. This includes pre-nursing credits (26 credits), AAS Practical Nursing credits (26 credits), and ASN Registered Nursing credits (26 credits).

Course	Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
BIOM 251 - Microbiology Hlth Sciences Lab	1 Credits
NRSNG 250 - LPN to RN Transition	2 Credits
NRSNG 252 - Cmplx Care Maternal/Child Clnt	3 Credits
NRSNG 254 - Complex Care/Mntl Hlth Client	2 Credits
NRSNG 256 - Pathophysiology	3 Credits
NRSNG 262 - Complex Care Needs - Adult Cli	4 Credits
NRSNG 265 - Advanced Clinical Skills	1 Credits
NRSNG 266 - Managed Client Care	4 Credits
SOCI 101S - Introduction to Sociology	3 Credits
Minimum Required Grade: B	26 Total Credits Required

Respiratory Care A.A.S.

Nicholas Arthur, Program Director

Respiratory Care is an allied health specialty. It is an important part of modern medicine and health care. Respiratory Care encompasses the care of patients with respiratory problems in the hospital, clinic, and home.

Respiratory therapists, as members of a team of health care professionals, work to evaluate, treat, and manage patients of all ages with respiratory illnesses and other cardiopulmonary disorders in a wide variety of clinical settings. Respiratory therapists must behave in a manner consistent with the standards and ethics of all health care professionals. In addition to performing respiratory care procedures, respiratory therapists are involved in clinical decision-making (such as patient evaluation, treatment selection, and assessment of treatment efficacy) and patient education. The scope of practice for respiratory therapist includes, but is not limited to:

- acquiring and evaluating clinical data;
- assessing the cardiopulmonary status of patients;
- performing and assisting in the performance of prescribed diagnostic studies, such as drawing blood samples, performing blood gas analysis, pulmonary function testing, and applying adequate recording electrodes using polysomnographic techniques;
- utilizing data to assess the appropriateness of prescribed respiratory care;
- establishing therapeutic goals for patients with cardiopulmonary disease;
- participating in the development and modification of respiratory care plans;
- case management of patients with cardiopulmonary and related diseases;
- initiating ordered respiratory care, evaluating and monitoring patients' responses to such care, modifying the prescribed respiratory therapy and cardiopulmonary procedures, and life support endeavors to achieve desired therapeutic objectives;
- initiating and conducting prescribed pulmonary rehabilitation;
- providing patient, family, and community education;
- promoting cardiopulmonary wellness, disease prevention, and disease management;
- participating in life support activities as required; and
- promoting evidence-based medicine, research, and clinical practice guidelines.

Starting salaries are excellent with premiums paid for evening, night, and weekend shifts. Jobs are plentiful throughout the United States. Graduates are eligible to take the credentialing examinations administered by the National Board for Respiratory Care (NBRC) which lead to the Registered Respiratory Therapist (RRT) credential. Licensure requirements in the state of Montana also are met by successful completion of the NBRC Entry Level (CRT) examination.

The goal of the program is, "To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) domains of respiratory care practice as performed by registered respiratory therapists (RRTs)" CoARC standard 3.01.

The program is 4 ½ semesters in length which includes the AA prerequisite courses and a summer session. The Respiratory Care Program at The University of Montana Missoula College, is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com), 1248 Harwood Road, Bedford, Texas 76021-4244. Graduates receive the degree of Associate of Applied Science in Respiratory Care.

Students accepted to the program are required to rotate to clinical sites outside the Missoula area on a periodic basis. These rotations take place during the spring semester, summer session and autumn semester of the second year. These sites may include, but are not limited to: Kalispell, Ronan, Polson, Butte, Billings, Bozeman, Hamilton, Helena, Coeur d'Alene and Lewiston, Idaho and Spokane, Washington. Transportation and housing are the student's responsibility.

Associate of Applied Science - Respiratory Care

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.75

Note: It is preferred that students have the prerequisite core completed by the end of the semester in which they intend to apply to the program (i.e. applying to the program in the spring and completing the core by the end of that spring semester.) However, those students who anticipate completing the core by the end of the summer semester are still encouraged to apply in the spring and may be granted provisional acceptance. Computer competency must be demonstrated by taking CAPP 120 or may be challenged by testing out.

Pre- Respiratory Care Prerequisite Courses

Rule: All courses required

Note: Must have completed or be in the process of completing when applying to the program

Course	Credits
BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits
BIOH 202N - Human Anat and Phys I Lab	4 Credits
BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
BIOH 212N - Human Anat Phys II Lab	4 Credits
M 115 - Probability and Linear Math	3 Credits
PSYX 161S - Fund of Organizational Psych	3 Credits
SCN 175N - Integrated Physical Science I	3 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: B	20 Total Credits Required

Respiratory Care Courses

Rule: All courses required

Course	Credits
AHRC 101 - Communication Management	1 Credits
AHRC 115 - Blood Gas Analysis	2 Credits
AHRC 129 - Patient Care & Assessment	4 Credits
AHRC 130 - Respiratory Care Lab IB	1 Credits
AHRC 131 - Resp Care Fundamentals	5 Credits
AHRC 133 - Resp Care Pharmacology	3 Credits
AHRC 150 - Respiratory Care Lab I	1 Credits

	AHRC 231 - Resp Crit Care	4 Credits
	AHRC 232 - Resp Path & Disease	3 Credits
	AHRC 235 - Cardiopulm Anat & Phys	3 Credits
	AHRC 243 - Perinat & Pediat Res Care	3 Credits
	AHRC 250 - Respiratory Care Lab II	2 Credits
	AHRC 252 - Respiratory Care Review	2 Credits
	AHRC 255 - Clinical Experience I	5 Credits
	AHRC 260 - Resp Care Lab III	1 Credits
	AHRC 265 - Clinical Experience II	5 Credits
	AHRC 270 - Resp Care Lab IV	1 Credits
	AHRC 275 - Clinical Exp III	6 Credits
Minimum Required Grade: B		52 Total Credits Required

Surgical Technology A.A.S.

Debbie Fillmore, Program Director

Students in the program are educated to be Surgical Technologists who work as part of the surgical team to ensure the operative procedure is conducted under optimal conditions. The ST is responsible for three phases (preoperative, intraoperative, and postoperative) of patient care with minimal direction. All surgical team members must adhere to the principles of asepsis and the practice of sterile technique. The ST normally functions in a sterile capacity by passing instruments, equipment and supplies to the surgeon during the surgical procedure but may also perform many non-sterile duties throughout the workday.

Students admitted to the University of Montana enter as Associate of Arts (AA) General Studies majors with an emphasis in the program of their choice. Students must select the specific prerequisite courses required for their chosen area of study after meeting with the program advisor. Students must apply to the program by October 1. Students may apply while enrolled in the A.A. prerequisite courses with acceptance to the program to be determined after the Autumn semester grades are finalized. BIOH 201N/202N, Anatomy and Physiology I, and lab, must be passed with a grade of B (3.0) and be a face-to-face course. The program-specific courses begin spring semester.

Once accepted to the program, a student must complete each Surgical Technology-specific course (those courses with an AHST with a minimum grade of 'C' (80%) in order to continue in the ST program. Course grading scales may vary. If a student does not pass the required courses, he/she will not be able to continue in the program and will need to apply for readmission. If a student is re-admitted, he/she will be required to complete skills labs, AHST 115 and AHST 215, to ensure sterile technique skills are acceptable for patient care. A student may take any required course a maximum of two (2) times. A student may apply to the program a maximum of two (2) times.

A student will become a member of the Association of Surgical Technologists (www.ast.org) during the first year in the program. A student anticipating program completion will write the National Certification Exam prior to graduation. A student who successfully completes the ST program is awarded an A.A.S. degree in Surgical

Technology. The credential of Certified Surgical Technologist (CST) will be awarded to a student upon passing the National Certification Exam and graduation from the ST program. The credential of Certified is awarded by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Students are required to rotate sites during the clinical portion of their education. During the last semester of the program, internships may be outside the Missoula area. Transportation and housing are the student's responsibility. Prior to entering a healthcare facility for clinical experiences, a student will be required to submit a background check. Many healthcare facilities have increasingly stringent requirements. A student could be refused entry into a clinical facility based on information disclosed in a background check. If this is a concern for you, please consult the Program Director. If a student is denied agency access based on the Background Check, there will be no placement at an alternate site, and the subsequent inability of the student to complete the clinical education will result in inability to continue in the Surgical Technology program.

The University of Montana Missoula College Surgical Technology Program also has Outreach campuses in Butte and Billings. The Butte site is the Montana Tech of The University of Montana Highlands College campus in collaboration with St James Healthcare. The Billings site is the Montana State University-Billings City College campus in collaboration with St Vincent Healthcare and Billings Clinic. Students at those sites take the equivalent prerequisite courses on their respective campuses. The Surgical Technology-specific courses begin spring semester. Students must apply to the ST program by October 1. Students may apply while enrolled in the prerequisite courses with acceptance to the program to be determined after fall grades are finalized. The classroom portion of the ST program curriculum is delivered in web-based format using the Moodle course delivery system from the Missoula campus. Lab and clinical courses are conducted on each Outreach campus. Outreach students are required to travel to Missoula to write the National Certification Exam and to participate in Commencement exercises. Prospective students may contact the Health Professions' Office at 406-243-7868 for more information regarding the ST Program on the Butte and Billings campuses. Please refer to the specific course catalogs on the Butte and Billings campuses for prerequisite requirements.

The ST program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park St., Clearwater, FL 33756; phone 727-210-2350, www.caahep.org.

Associate of Applied Science - Surgical Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 68

Required Cumulative GPA: 2.75

Note: It is preferred that students have the prerequisite core completed by the end of the semester in which they intend to apply to the program (i.e. applying to the program in the fall semester and completing the core by the end of that fall semester.) CAPP 120 may be challenged by testing out. WRIT 101 or WRIT 121 only one is required. BIOM 250 and AHMS 270E may be taken prior to applying.

Surgical Technology Prerequisite Courses

Rule: All courses required

Note: WRIT 101 College Writing can be taken instead of WRIT 121 Intro to Technical Writing; BIOH 201N/202N must be passed with a minimum of a B

Course	Credits
AHMS 144 - Medical Terminology	3 Credits
BIOH 201N - Human Anat Phys I (equiv 301)	4 Credits

BIOH 202N - Human Anat and Phys I Lab	4 Credits
CAPP 120 - Introduction to Computers	3 Credits
M 105 - Contemporary Mathematics	3 Credits
PSYX 100S - Intro to Psychology	4 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-	20 Total Credits Required

Surgical Technology Courses

Rule: All courses required

Course	Credits
AHMS 270E - Medical Ethics	3 Credits
AHST 101 - Introduction to Surgical Techn	3 Credits
AHST 115 - Surgical Lab I	2 Credits
AHST 154 - Surgical Pharmacology	3 Credits
AHST 200 - Operating Room Techniques	5 Credits
AHST 201 - Surgical Procedures I	4 Credits
AHST 215 - Surgical Lab II	2 Credits
AHST 250 - Surgical Clinical I	4 Credits
AHST 251 - Surgical Clinical II	5 Credits
AHST 298 - Surgical Internship	5 Credits
BIOH 211N - Human Anat Phys II (equiv 311)	4 Credits
BIOH 212N - Human Anat Phys II Lab	4 Credits
BIOM 250N - Microbiology for Hlth Sciences	3 Credits
Minimum Required Grade: C	48 Total Credits Required

Pharmacy Technology Certificate

Mary McHugh, Program Director

The American Society of Health System Pharmacists (ASHP) - accredited Pharmacy Technology Program at the University of Montana-Missoula College prepares students to function in hospital-based pharmacies, community pharmacies, and a number of other types of pharmacies. The two-semester program includes classroom, lab, and experiential learning opportunities. Lab and experiential hours allow students to integrate their classroom knowledge into the practical setting. Students are required to rotate to experiential sites and some may be outside the Missoula area. Transportation and housing are the student's responsibility.

The Pharmacy Technology Program is an autumn entry program. Applicants to the Pharmacy Technology program must complete the program specific application packet which can be obtained on the UM Missoula College Pharmacy Technology webpage. Please note that application deadlines are also found on the program webpage. Generally, applications to the program are due April 1 during the spring semester prior to the autumn semester program start. Documentation of required math and writing assessments must be included in the application packet. Transcripts are not accepted in place of the assessments. Students should place in Level 3 or higher in the ALEKS Math Assessment, and should attain a 7 or better on the E-Write Assessment, or provide alternate assessment scores as instructed in the application packet. Students who do not score high enough on assessments should consult with an advisor to arrange enrollment in the necessary courses to build their skills. Students must either complete Intro to Computers (CAPP 120) or pass the challenge for CAPP 120 prior to enrollment in the Pharmacy Technology Program. The challenge is offered several times each year. Instructions for scheduling the challenge and assessments are found in the application on the program website:<http://www.cte.umt.edu/health/pharmacytech/>.

Once accepted into the program, all students are expected to register with the State of Montana as Pharmacy Technicians in Training. Please note the requirements of registration as a Pharmacy Technician in Training found on the application form on the Montana State Board of Pharmacy website:http://bsd.dli.mt.gov/license/bsd_boards/pha_board/pdf/pha_tech.pdf

Students must complete the required autumn PHAR classes with a B or higher to proceed to the spring semester. If a student does not pass the required courses with a B or better, he/she will not be able to continue in the program and will need to apply for readmission. A student may take any required course a maximum of two (2) times.

After successfully completing the program, students are awarded a Certificate of Applied Science and are well prepared for and encouraged to sit for the national technician certification examination such as offered through the Pharmacy Technician Certification Board (PTCB). Some students may be prepared to take the PTCE as early as December of the first semester of the program, so that they may complete their experiential training as certified Pharmacy Technicians rather than Certified Technicians in Training.

Being convicted of a crime (misdemeanor or felony) could leave an individual ineligible for participation in the certifying test and/or becoming registered in Montana as a certified pharmacy technician. Background checks are required prior to internships. Additionally, the Montana State Board of Pharmacy Application for Pharmacy Technician Registration includes a number of questions regarding personal history, including but not limited to criminal charges. Please contact the PTCB (Pharmacy Technician Certification Board), www.ptcb.org, and the Montana State Board of Pharmacy (http://bsd.dli.mt.gov/license/bsd_boards/pha_board/board_page.asp) if this is a potential problem.

Current salary range in Montana is from \$7 per hour to \$20 per hour, depending on employer, job duties, and experience.

Certificate of Applied Science - Pharmacy Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 30

Required Cumulative GPA: 3.0

Note: Math: Placement into Level 3 using a proctored ALEKS assessment
Writing: Score of 7 on the E-Write assessment
Computers: Completion of CAPP 120 Introduction to Computers or challenge test

Degree Core Courses

Rule: Complete all courses

Note: AHMS 144 May be taken before application to the program.
There are two different sections of PHAR 198 and both are required to receive the certificate.

Course	Credits
AHMS 144 - Medical Terminology	3 Credits
PHAR 100 - Intro Pharm Practice for Techs	3 Credits
PHAR 101 - Pharmacy Calculations	3 Credits
PHAR 102 - Pharmacology for Technicians	6 Credits
PHAR 104 - Pharmacy Dispensing Lab	4 Credits
PHAR 120 - Medication Safety	3 Credits
PHAR 198 - Internship: Pharmacy	4 Credits
Minimum Required Grade: C-	30 Total Credits Required

Pharmacy Technology Program Curriculum:

First Year	A	S
PHAR 100 (PHA 100) Introduction to Pharmacy Practice for Techs.	3	-
PHAR 101 (PHA 101) Pharmacy Calculations	3	-
PHAR 191 (PHA 102) Pharmacology for Technicians	3	-
PHAR 104 (PHA 104195) Pharmacy Dispensing Lab	4	-
BIOH 108 (SCN 115N) Basic Anatomy	3	-
PHAR 198 (PHA 106) Internship: Pharmacy Technology Retail	-	4
PHAR 198 (PHA 107) Internship: Pharmacy Technology Alternate	-	4

PHAR 120 (PHA 110) Medication Safety	-	3
AMHS 144 (MED 195T) Medical Terminology	-	3
Total	16	14

Industrial Technology Department

Rodney Front, Interim Chair

The mission of the Department of Industrial Technology is to provide the regional workforce with credentialed, skilled, and competent entry-level technicians and to be responsive to emerging workforce needs. The Department encourages the development of teamwork and interpersonal communication skills required in the workplace. It also stresses the importance of a strong work ethic and the value of continuing education and lifelong learning. The instruction for the Department of Industrial Technology Certificate of Applied Science and Associate of Applied Science (A.A.S.) degree programs are primarily delivered at the West Campus at 3639 South Avenue West. Some instruction is delivered at the East Campus or Mountain Campus.

All students admitted to Industrial Technology programs are required to submit writing and math placement scores immediately upon admission to the Missoula College or make arrangements to take these assessments as soon as possible. Thereafter, students needing to take a math and/or writing assessment should contact the Academic Support Center at 406-243-7826 to schedule an appointment to take the placement assessments as soon as possible. Students who live outside of the Western Montana area may take a math and writing assessment at their local community college. Contact the Academic Support Center at 406-243-7826.

Course Descriptions

Buildg Maintenance Engineering

- **BME 122 - Electricity**

Credits: 5. Offered spring. The electrical laws and principles pertaining to DC and AC circuits. Includes current, voltage, resistance, power, load, panels, feeders, lamps, motors, and fuses. Introduction to wiring methods and materials in conformance with the National Electric Code (NEC). Includes installation and replacement of light fixtures, heaters, GFCI's, switches, receptacles, and electrical thermostats.

- **BME 123 - Carpentry**

Credits: 6. Offered autumn. Application of carpentry principles and techniques. Construction and maintenance of foundation, floor, wall, ceiling, and roof systems. Includes safe use of tools and materials common to the industry. Additional topics are painting, masonry, insulation, and ventilation of commercial buildings.

- **BME 127 - Low Pressure Boilers**

Credits: 3. Offered spring. The fundamentals of low pressure boiler operation and maintenance. Covers steam, feed-water, fuel, and draft systems. Includes boiler water treatment and hot water heating systems. Introduces safe mechanical operating procedures used in the industry.

- **BME 128 - Maintenance**

Credits: 6. Offered autumn. Maintenance principles pertaining to lawns, groundcovers, trees, swimming pools, plumbing, and building cleaning. Emphasis is placed on safe application of chemicals; maintenance frequency; and the identification and safe uses of associated tools and materials.

- **BME 130 - Heating & Air Conditioning**

Credits: 6. Offered spring. The fundamentals of heating, ventilating, and air conditioning. Covers heating and refrigeration cycles, gas furnaces, refrigerants, system evacuation and charging, and components used in associated systems. Introduces the basic mechanical service procedures used in the industry.

- **BME 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **BME 192 - Independent Study**

Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.

Construction Trades

- **CSTN 120 - Carpentry Bscs & Rough-In Frmg**

Credits: 5. Introduction to the carpentry trade, including history, career opportunities, and requirements. The course covers building materials, fasteners, adhesives, hand tools, and power tools. OSHA rules and regulations for a safe working place and procedures for compliance are covered. This course includes a two-credit imbedded lab. Students will also learn how to install windows and an exterior door. **Course Attributes:** Technical Course

- **CSTN 122 - Beginning Carpentry Lab**

Credits: 5. Lab to support CSTN 102 and 120.

- **CSTN 142 - Int & Ext Finish Carpentry**

Credits: 4. Prereq: CSTN 120 and 122. Study of various types of siding, gutter systems, roof venting requirements, and framing with metal studs. Installation of sheathing, exterior siding, roofing felt, shingles, insulation vapor barriers, and stairs on small building constructed in CSTN 120. Installation of wood and metal doors. Demonstration of materials, layout and installation of suspended ceilings. Selection and installation of countertops, base cabinets and wall cabinets. Window, door, floor, ceiling trim and drywall are installed in a small building. This course includes a one-credit imbedded lab.

- **CSTN 143 - Intermediate Carpentry Lab**

Credits: 4. Lab to accompany CSTN 142. Prereq: CSTN 102, CSTN 120 and CSTN 122.

- **CSTN 171 - Site Prep, Found, Concrete Ins**

Credits: 3. Offered Autumn. Prereq., CSTN 100 or consent of instr. Introduces the process of distance measurement as well as differential and trigonometric leveling for site layout. It covers the principles, equipment, and methods used to perform the site layout tasks that require making angular measurements. This course is designed to let students apply the blueprint reading skills learned so far to a practical exercise.

- **CSTN 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CSTN 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

- **CSTN 201 - Advanced Concrete Working**

Credits: 3. Offered spring. Prereq., CSTN 171. Provides basic knowledge of concrete materials and tools and provides hands-on experience in which the student applies with supervision those basic skills and knowledge presented in the area of concrete. The course is designed as a practical task-

oriented application utilizing the basic skills learned in CSTN 171. The course will emphasize the advanced application in the area of concrete foundations, flatwork, forms, reinforcing, handling, and placing concrete.

- **CSTN 205 - Advanced Carpentry Lecture**

Credits: 6. Prereq: CSTN 102, 120, 122, 142, and 143. Study of the process for angular measurement, using transits, theodolites, electronic distance measuring devices, lasers, and trigonometric calculating to lay out foundations and determine elevations. Installation of standing seam, lap seam, and built-up roofing systems; concrete, vinyl, wooden, tile, and carpeted floors as well as radiant heating; paneling, wainscoting, movable partitions, curtain walls and fire-rated commercial wall construction. Advanced stair systems, including shop built and prefabricated stairs, balustrades, mitered risers and treads, and layout of elliptical fastening methods, and assembly techniques. Project planning, scheduling, estimating, and management skills included. This course includes a two-credit lab. **Course Attributes:** Technical Course

- **CSTN 206 - Advanced Carpentry Lab**

Credits: 2. Laboratory to accompany CSTN 205. Prereq: CSTN 102, 120, 122, 142, and 143. **Course Attributes:** Technical Course

- **CSTN 261 - Building Management**

Credits: 4. Prereq: CSTN 120, 122, 142, 143, 171. Introduction to building business and project management including overhead costs, payroll costs, estimating and scheduling. Covers elements of payroll computation and preparation, payroll tax returns, information returns, and identification and compensation of independent contractors. Students are introduced to building cost estimating, and scheduling of subcontractors and building inspections. This course includes a one-credit imbedded lab.

- **CSTN 278 - Applied Building Practices Lab**

Credits: 6. Offered spring. Prereq., CSTN 102, 103, 120, 122, 142, 143. Students work on a variety of projects either at the college or in the community to practice and develop their skills as well as learn new skills. Knowing and following OSHA rules and regulations is emphasized. Students are expected to produce a professional quality product.

- **CSTN 279 - Commercial Construction**

Credits: 4. Prereq. CSTN 171, 120, 122, 142, and 143. Study and develop skills in metal stud framing, commercial roofing systems, metal and masonry buildings, metal doors and door hardware, suspended ceilings, and fire rated commercial walls.

- **CSTN 282 - Green Bldg Concept & Design I**

Credits: 4. Offered fall semester of the 2nd year. This course takes a holistic approach to natural resource conservation and energy efficiency in the construction industry. From integrated design, building site selection and evaluation, through building design, material selection and efficiencies, passive heating and cooling, and construction techniques. Students design an energy efficient residence to be built by next years class.

- **CSTN 283 - Green Bldg Concept & Design II**

Credits: 3. Prereq., CSTN 282. Spring semester. A course fee of \$50.00 is required. This course builds on concepts learned in CSTN 282 Green Building Concepts and Design I. Students learn how to weatherize existing buildings and green remodeling and preservation techniques, design and build outdoor living spaces, and green landscaping practices. They learn how to document building for green rating for both NAHB Standards and LEED. They will conduct blower door tests and learn to test for and mitigate radon gas. Students will also refine the energy efficient residential plan they produced in Green Building Concepts and Design I.

- **CSTN 291 - Special Topics**

Credits: 3 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **CSTN 299 - Capstone: Carpentry**

Credits: 2. Capstone laboratory to accompany CSTN 102, 120, 122, 142, 143, 205, 206, and 261. This course provides hands-on experience in which the student applies the skills and knowledge presented in the Carpentry Program. The course will emphasize advanced application in the areas of exterior finishing and interior finishing, and other constructed topics.

Diesel Service Tech

- **DST 120 - Electrical Systems**

Credits: 8. Offered spring. The theory of AC/DC electricity including Ohm's Law, magnetism, wiring diagrams, and circuit analysis. Starting, charging, and related systems are covered in-depth using test equipment commonly found in heavy equipment repair facilities. Electronic systems are reviewed and tested using common electronic test equipment. **Course Attributes:**
Technical Course

- **DST 128 - Engine Service I**

Credits: 4. Offered autumn. Introduction to the construction and operation of internal combustion engines with the diesel engine being examined in detail. The use of measuring tools and related special tools is covered extensively along with common manufacture rebuild procedures. Start-up and running practices are demonstrated on various running diesel engines. Students must complete this course with a letter grade of "C" or better to enroll in U 135T Power Trains the second-half of the semester. **Course Attributes:** Technical Course

- **DST 135 - Power Trains (UMCOT)**

Credits: 7. Offered autumn. Chassis and drive train components used in light and heavy-duty trucks and other equipment. Clutches, manual transmissions, differentials, and final drives are covered. **Course Attributes:** Technical Course

- **DST 191 - Special Topics**

Credits: 1 TO 6. (R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **DST 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered every term. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

- **DST 221 - Brakes Susp and Undercarr**

Credits: 6. Offered autumn. Air brake design, construction, and operating principles including an in-depth study of diagnostic procedures for troubleshooting and repairing brake systems. Suspension systems and undercarriage design and repair are covered along with common axle alignment procedures found in industry. Students must complete this course with a letter grade of "C" or better to enroll in U225T Hydraulics in the second-half of the semester. **Course Attributes:**
Technical Course

- **DST 225 - Hydraulics (UMCOT)**

Credits: 6. Offered autumn. Theory and application of hydraulics relative to mobile construction equipment and industrial hydraulic systems. Includes valves, pumps, motors, actuators, and related hydraulic components, system maintenance, troubleshooting, and repair. **Course Attributes:** Technical Course

- **DST 229 - Engine Service II**

Credits: 7. Offered spring. Prereq., DET 128T. A continuation of Engine Service I with a major emphasis placed on the rebuilding of a diesel engine. Engine components repair and failure analysis are reviewed along with tune-up and running of diesel engines commonly found in the heavy equipment trade. Shop flat-rate procedures, work order procedures, and warranty requirements are covered. Students must complete this course with a letter grade of "C" or better to enroll in U230T Air Conditioning in the second-half of the semester. **Course Attributes:**
Technical Course

- **DST 230 - Air Conditioning**

Credits: 3. Offered spring. Prereq., DET 120T, DET 225T. Principles, theories, and the hazards of working with R-12 and R-34, including laws governing these refrigerants. An in-depth study of the components of an air conditioning system including hands-on practice. Discharging and charging principles are discussed, including leakage testing and other general diagnostic principles found in the field.

- **DST 231 - Fuel Systems**

Credits: 5. Offered spring. A comprehensive study of diesel fuel injection systems to include: Cummins, Roosa Master, Caterpillar, Detroit Diesel, and Bosch. Disassembly and repair of these systems are covered in-depth along with calibration practices. Installation, timing, and on-engine adjustments are made on diesel engines. On-engine diagnosis of the fuel systems using special diesel engine diagnostic tools is reviewed. **Course Attributes:** Technical Course

- **DST 235 - Advanced Power Trains**

Credits: 2. Offered spring. Prereq., DET 135T. A continuation of DET 135T with an emphasis on heavy automatic transmission, torque converters, and powershift transmission. In-depth coverage of component review troubleshooting and repair. **Course Attributes:** Technical Course

- **DST 270 - Diesel and Gaseous Fueled Engi**

Credits: 3. Offered summer. Prereq., completion of an accredited diesel program or consent of instr. Overview of the diesel engine and its operating principles including the fuel systems found in the power generation field. Both mechanical and electronic type systems studied in depth. Gaseous/spark ignited internal combustion with in-depth look at both the ignition system and fuel system. Emission systems, preventive maintenance and general tune-up included. **Course Attributes:** Technical Course

- **DST 271 - Power Generators**

Credits: 5. Offered summer. Prereq., completion of accredited diesel program and DET 270T. Introduction to generators as found in the power generation field including the review of electrical laws that pertain to A/C and D/C current. The operation of a typical internal combustion powered generator will be covered in depth including troubleshooting and rebuilding practices found in the power generation field. Generator mounting/alignment practices and generator installations, including flow requirements for combustion and cooling. **Course Attributes:** Technical Course

- **DST 272 - Power Generation Controls**

Credits: 4. Offered summer. Prereq., completion of accredited diesel program and DET 271T. Operation of the generator and controls including governing devices and other specialized devices such as reverse power relays and volt/amp reactive power factor (VAR) controllers. Intensive troubleshooting including in depth coverage of service and repair of control systems. **Course Attributes:** Technical Course

Heavy Equipment Operation

- **HEO 146 - Safety & Basic Controls**

Credits: 5. Offered autumn. Co-reqs., M 111 and CAPP 120. Orientation to the safe operation and basic control of crawler-tractors, scrapers, front-end loaders, motor graders, backhoes, trucks, and other heavy equipment units. Sufficient time is allowed for the development of basic machine operational skills.

- **HEO 148 - Operational Skill Bldg**

Credits: 5. Offered autumn. Prereq., HEO 146T. Advancement of basic skills. Proper understanding and operation of heavy equipment is pursued. Time is allowed for development of proper operational techniques.

- **HEO 150 - Job Simulation**

Credits: 6. Offered spring. Prereq., HEO 146, HEO 148T Incorporates learned skills into entry-level, industrial situations. Emphasis is on advanced equipment usage, problem definition and resolution, project-type earth moving assignments, proper equipment, and safety regulations. Course may allow participation in cooperative project efforts within the community.

- **HEO 151 - Service & Maintenance**

Credits: 2. Offered autumn. Different types of lubricants and their applications, scheduled and preventive maintenance procedures, and importance of periodic services and maintenance. Also included are safety procedures and regulations.

- **HEO 153 - Const. Theory & Spec. Equip.**

Credits: 5. Offered spring. Prereq., M 111, HEO 148. Study of construction principles, specialized equipment, production estimates, and various related subjects.

- **HEO 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

- **HEO 192 - Independent Study**

Credits: 1 TO 6. Course material appropriate to the needs and objectives of the individual student.

Metals & Machining Technology

- **MCH 112 - Related Metals Processes I**

Credits: 1. Offered spring. Use of hand tools and machines which relate to the repair of heavy equipment. Instruction covers fasteners, layout, bench metal, threads and threading, drills and drilling, and tool sharpening. **Course Attributes:** Technical Course

- **MCH 114 - Related Metals Processes II**

Credits: 3. Offered autumn. Instruction and use of drills, files, threads and threading processes, basic lathe, drill press, and band saw operation, including precision measuring instruments. Fasteners, layout procedures, and basic hand tools are covered. **Course Attributes:** Technical Course

- **MCH 115 - Related Metals Processes III**

Credits: 3. Offered autumn and spring. A basic metalworking course covering fasteners, layout, bench metal, heat treating, threads and threading, drills and drilling, basic machining, and tool sharpening. **Course Attributes:** Technical Course

- **MCH 191 - Special Topics**

Credits: 1 TO 6. (R-6). Offered intermittently. Prereq. Consent of instr.

- **MCH 196 - Independent Study Variable**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Service Learning/Volunteer Technical Course

- **MCH 198 - Internship**

Credits: 1 TO 6. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

- **MCH 214 - Advanced Related Metals Proc**

Credits: 3. Offered autumn. Prereq., MPR 114T or 115T. Advanced skill development using machine tools such as milling machines, lathes, surface grinders, and drill presses, emphasizing safety and

providing greater complexity than provided in MPR 114T. Welding and machining are used together demonstrating how sequencing work improves quality and productivity. **Course Attributes:**
Technical Course

- **MCH 292 - Independent Study**
Credits: 1 TO 6. (R-6) Offered intermittently

Small Engine Technology

- **SET 160 - Basic Electricity for RPE**
Credits: 3. Offered autumn. The theory of AC/DC electricity including Ohm's Law, magnetism, series circuits, parallel circuits, the use of meters, and electrical test equipment. Includes electrical symbols, soldering, storage batteries, cranking motors, and electrical safety. **Course Attributes:**
Technical Course
- **SET 176 - Motorcy/ATV Eng, Sus, Chas**
Credits: 3. Offered autumn. Study of the design and function of several types of engines, transmissions, suspension, and brake systems. **Course Attributes:** Technical Course
- **SET 177 - Motorcy/ATV Elect & Fuel**
Credits: 4. Offered autumn. Prereq., SET 160T. Principles of ignition, charging, and cranking systems. Design and function of carburetor, fuel injection, and lubrication systems. Hands-on diagnosis of problems and testing of systems. **Course Attributes:** Technical Course
- **SET 178 - Marine Elec & Fuel Syst**
Credits: 5. Offered spring. Prereq., SET 160T. Theory of and testing and troubleshooting of problems with ignition, charging, and cranking systems. Includes the design, testing, and troubleshooting of marine carburetion and fuel injection systems. **Course Attributes:**
Technical Course
- **SET 179 - Marine Powerhds/Low Units**
Credits: 6. Offered spring. Prereq., SET 178T. Theory of design, function and components of outboard motor powerheads and lower units. Includes basic rigging, power trim and tilt, propping, and personal watercraft design, function, and maintenance. **Course Attributes:**
Technical Course
- **SET 180 - Snowmobile Main & Rep I**
Credits: 2. Offered autumn. Prereq., SET 177T. The repair and maintenance of air cooled and liquid cooled engines. Includes clutch, track, and rear suspension service and maintenance. **Course Attributes:** Technical Course
- **SET 181 - Snowmobile Main & Rep II**
Credits: 2. Offered spring. Prereq., SET 180T. Principles and theory of snowmobile electrical, fuel, front suspension, and brake systems. **Course Attributes:** Technical Course
- **SET 182 - Comp Apps Motorsports**
Credits: 1. Offered spring. Prereq., CRT 100. Use of recreational power equipment software for parts retrieval, invoicing and payment methods. Students build, query, and create reports using database software, and create a business plan for a hypothetical dealership. **Course Attributes:**
Technical Course
- **SET 191 - Special Topics**
Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Technical Course
- **SET 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

Surveying

- **SRVY 108 - Construction Surveying**

Credits: 2. Offered autumn. Basic principles of surveying and the use of surveying equipment. Calculation of angles and distances to determine grade elevations. Introduction to Global Positioning Systems, lasers and their relationship to the heavy equipment operator. **Course Attributes:** Technical Course

Welding

- **WLDG 101 - Welding Fund Auto Tech/Diesel**

Credits: 2. Offered autumn. Basic and intermediate processes of shielded metal arc welding (SMAW) and oxyacetylene welding are covered in flat, horizontal, and vertical positions in a variety of joint configurations. Instruction in the oxyacetylene cutting process. This course is designed for Diesel students only. **Course Attributes:** Technical Course

- **WLDG 103 - Welding Fund Constructn Trades**

Credits: 2. Offered spring. Basic welding processes of shielded metal arc welding (SMAW), flux core arc welding (FCAW) are covered in the flat, horizontal, and vertical positions in a variety of joint configurations. The instruction in flux core arc welding is focused on the carpentry building trades. Instruction in the oxyacetylene cutting process is also provided. Safe operation of equipment is covered and work is evaluated to industrial standards. This course is designed for carpentry students.

- **WLDG 117 - Blueprint Rdng & Weldng Symls**

Credits: 3. Offered spring. Prereq., WLDG 150 (Practical experience in reading and drawing orthographic projections, interpreting dimensions, notes, scales, and welding symbols. Isometric projection (pictorial), sections, and auxiliary views with practical experience using conventional drafting tools and computer aided drafting (CAD). **Course Attributes:** Technical Course

- **WLDG 139 - Welding Maint & Repair -Diesel**

Credits: 1. Offered autumn. Prereq., MPR 115T, WLDG 101. Combines the skills gained in welding and machine shop for practical applications such as repairing a broken cylinder block. Major emphasis is placed on repair techniques. Common repair procedures using machine shop and welding equipment is demonstrated. This course is designed for Diesel students only. **Course Attributes:** Technical Course

- **WLDG 145 - Fabrication Basics**

Credits: 4. Offered spring. Prereq., MPR 114T; WLDG 180; coreq., WLDG 117, 187. Conception, design, and construction of a metal structure to industry standards using shears, presses, and other machine tools common to the welding industry. Skills are developed in the areas of shielded metal arc welding and flux core arc welding, oxyacetylene cutting, plasma arc cutting, and air carbon arc cutting. **Course Attributes:** Technical Course

- **WLDG 150 - Welding Layout Techniques**

Credits: 2. Using practical layout techniques students develop basics for blueprint construction, layout on pipe and structural steel, and use of tools common to material layout. **Course Attributes:** Technical Course

- **WLDG 180 - Shielded Metal Arc Welding**

Credits: 4. Offered autumn. Theory and safe operation of shielded metal arc welding (SMAW) of carbon steel on plate and structural components in all positions to industry standards. Visual inspection and destructive testing used to determine acceptability based upon industry standards

(American Welding Society Structural Welding Code-Steel). Power sources and electrodes are covered in depth. Materials are prepared using mechanical plate shears and thermal cutting techniques. Thermal cutting techniques are examined relative to theory of operation and safe practices. Processes used are oxy-fuel cutting, plasma arc cutting, and air carbon arc cutting. Theory and operation of oxyacetylene welding examined. **Course Attributes:**
Technical Course

- **WLDG 184 - OSHA Rules & Regulations Wldng**

Credits: 1. Offered spring. Study of the Occupational Safety and Health Administration rules and regulations that affect the welding and construction industries. **Course Attributes:**
Technical Course

- **WLDG 187 - Flux Core Arc Welding**

Credits: 4. Offered spring. Prereq., WLDG 180 (Theory, practice, and safe operation of flux core arc welding equipment. Coupons are welded in the flat, horizontal, and vertical positions to industry standards using a variety of welding electrodes, diameters, and power sources, which prepare students for welding qualification to the American Welding Society Structural Welding Code specifications. **Course Attributes:** Technical Course

- **WLDG 191 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:**
Technical Course

- **WLDG 192 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. **Course Attributes:** Technical Course

- **WLDG 205 - Applied Metallurgy**

Credits: 4. Offered autumn. Covers the manufacturing of iron and steel. Examination of physical and mechanical properties. Phase changes with the application of heating and cooling cycles. Ferrous crystal types and properties. Suggested welding procedures for low, medium, and high carbon steels, alloy steels, and cast iron. **Course Attributes:** Technical Course

- **WLDG 210 - Pipe Welding - Integrated Lab**

Credits: 4. Offered autumn. Prereq., WLDG 180; coreq., WLDG 215. Emphasis on skill development in the welding of pipe sections to extremely high quality levels as required by national codes and standards. Pipe welding using GTAW for the root pass and SMAW for the remaining passes in all positions. Visual inspection and destructive testing used to evaluate work according to industry standards. **Course Attributes:** Technical Course

- **WLDG 215 - GTAW (integrated lab)**

Credits: 4. Offered autumn. Prereq., WLDG 180, 187, 210 The theory and safe operation of Gas Tungsten Arc Welding (GTAW). Examination of power source controls and operation along with associated consumables such as gasses, electrode filler materials for carbon steel, stainless steel, and aluminum. Welding skill development according to industry standards using these materials in the flat, horizontal, and vertical positions. **Course Attributes:** Technical Course

- **WLDG 245 - Metal Fab Design/Construction**

Credits: 4. Offered spring. Prereq., MPR 114T, MPR 214T; WLDG 117, 180, 187, 215, 275. Students combine all knowledge and skills developed in the welding program to design and draw a full set of plans (blueprints) for an instructor-approved project using extensive welding, metal fabrication equipment, machining processes and automation. High quality performance, consistent with business and industry required. **Course Attributes:** Technical Course

- **WLDG 275 - Gas Metal Arc Welding**

Credits: 4. Offered spring. Prereq., WLDG 187. Theory and safe operation of Gas Metal Arc Welding (GMAW). Theory of flux core arc welding applied to GMAW. Primary focus on application, practical

skill development, and producing welds that meet industry standards. Metals welded are low carbon steel, stainless steel, and aluminum. Short circuit arc and spray arc transfer used. Examination of gas and electrode selection. **Course Attributes:** Technical Course

- **WLDG 280 - Weld Testing Certification**

Credits: 2. Offered spring. Prereq., WLDG 180, 187, 215, 275. Fundamental concepts and requirements of the American Society of Mechanical Engineers (ASME) and American Welding Society (AWS) are examined. Through laboratory experience students are provided the opportunity to qualify (certify) under the two codes mentioned above. **Course Attributes:** Technical Course

- **WLDG 285 - Automation in Welding**

Credits: 3. Offered spring. Prereq., WLDG 117, 150, 187, 215, CADX 110 Application of the welding process to automation. Examination of simple automation techniques such as tools, clamping, and fixturing to aid in the rapid joining of production runs. Increasing complexity is examined leading into equipment that carries the welding gun, tractors, and carriages by fully automated systems with the student performing set-up and troubleshooting (Submerged Arc Welding) and automated parts processing (optical tracer torch). Programmable controllers are investigated and used. Programming and use of a PUMA 650 Industrial Robot. **Course Attributes:** Technical Course

- **WLDG 291 - Special Topics**

Credits: 1 TO 6. (R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Technical Course

Carpentry A.A.S.

The mission of the Carpentry Program is to provide the regional workforce with credentialed, skilled and competent carpenters and to be responsive to emerging workforce needs.

The Carpentry program provides students the opportunity to learn carpentry skills in a competency-based learning environment. Students work hand-in-hand with professional carpenters both on campus and at construction sites.

Students use hand and power tools with blueprints to build foundation forms, frame buildings, side and roof buildings, and apply roofing materials. They install windows, doors, stairs, attic vents, insulation, vapor barriers, and drywall. Students learn methods for installing trim, locksets, suspended ceilings, countertops, cabinets, and flooring. They also learn to operate construction equipment.

In addition to general education courses, students in the program learn the various steps of becoming a carpenter, including safe practices. Students construct real-world projects and can earn a Certificate of Applied Science or an Associate of Applied Science degree from the University of Montana. The program often has a waiting list. Prospective students are encouraged to apply one year prior to anticipated school attendance. Contact Dennis Daneke, Program Director, at 406-243-7692 or Dennis.Daneke@umontana.edu for more information.

Associate of Applied Science - Carpentry

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Carpentry

Rule: Associate in Applied Sciences

Course	Credits
BMGT 242 - Front Line Supervision	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
CSTN 120 - Carpentry Bscs & Rough-In Frmg	5 Credits
CSTN 122 - Beginning Carpentry Lab	5 Credits
CSTN 142 - Int & Ext Finish Carpentry	4 Credits
CSTN 143 - Intermediate Carpentry Lab	4 Credits
CSTN 171 - Site Prep, Found, Concrete Ins	3 Credits
M 111 - Technical Mathematics	3 Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	33 Total Credits Required

Carpentry

Rule: Associate in Applied Sciences

Course	Credits
CSTN 205 - Advanced Carpentry Lecture	6 Credits
CSTN 206 - Advanced Carpentry Lab	2 Credits
CSTN 261 - Building Management	4 Credits
CSTN 278 - Applied Building Practices Lab	6 Credits
CSTN 279 - Commercial Construction	4 Credits
CSTN 282 - Green Bldg Concept & Design I	4 Credits
CSTN 283 - Green Bldg Concept & Design II	3 Credits

	CSTN 299 - Capstone: Carpentry	2 Credits
	DDSN 114 - Introduction to CAD	3 Credits
	WLDG 103 - Welding Fund Constructn Trades	2 Credits
Minimum Required Grade: C-		36 Total Credits Required

Diesel Equipment Technology A.A.S.

The mission of the Diesel Technology Program is to provide the regional workforce with credentialed, skilled and competent diesel technicians and to be responsive to emerging workforce needs.

Students in the Diesel Technology program train to be diesel mechanics that repair diesel-powered trucks and heavy equipment. Students study hydraulics, electrical systems, fuel systems, power trains, air conditioning, brakes and suspension, engine theory, and engine diagnosis, beginning with basic principles and proceeding to an advanced level of system technology. Along with these core courses, students take classes in welding, machining, computers, communications, and math. Credit for independent study is available to those desiring additional instruction in diesel mechanics. Students who complete the program successfully are awarded the Associate of Applied Science degree.

The program often has a waiting list. Prospective students are encouraged to apply one year prior to anticipated school attendance. Contact the Jim Headlee, Program Director, at 406-243-7648 or Jim.Headlee@umontana.edu for more information.

Associate of Applied Science - Diesel Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 66

Required Cumulative GPA: 2.0

Diesel Equipment Technology

Rule: Required courses for Diesel Mechanics

Course	Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 102 - Interprsnl Skills in Workplace	1 Credits
DST 120 - Electrical Systems	8 Credits
DST 128 - Engine Service I	4 Credits

	DST 135 - Power Trains (UMCOT)	7 Credits
	M 111 - Technical Mathematics	3 Credits
	MCH 115 - Related Metals Processes III	3 Credits
	WLDG 101 - Welding Fund Auto Tech/Diesel	2 Credits
Minimum Required Grade: C-		33 Total Credits Required

Diesel Equipment Technology

Rule: Required to achieve Certification in Diesel Mechanics

Course	Credits
DST 221 - Brakes Suspns and Undercarr	6 Credits
DST 225 - Hydraulics (UMCOT)	6 Credits
DST 229 - Engine Service II	7 Credits
DST 230 - Air Conditioning	3 Credits
DST 231 - Fuel Systems	5 Credits
DST 235 - Advanced Power Trains	2 Credits
WLDG 139 - Welding Maint & Repair -Diesel	1 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-	33 Total Credits Required

Welding Technology A.A.S.

The mission of the Welding Technology Program is to provide the regional workforce with credentialed, skilled, and competent welders and to be responsive to emerging workforce needs. The Welding Technology Program prepares students to operate and troubleshoot a variety of welding power sources and related equipment. The program prepares students to solve problems using computational skills and other problem-solving techniques essential to welding and steel fabrication. It also encourages the development of the teamwork and interpersonal skills required on the job.

Welding students develop skills in six different welding processes: oxyacetylene (OAW), shielded metal arc (SMAW), gas metal arc (GMAW), flux core arc, (FCAW), submerged arc (SAW), and gas tungsten arc welding (GTAW). Students also develop additional skills, such as blueprint reading and layout, metallurgy, and gain an understanding of how heating and cooling cycles affect the properties of metals. Students also study the design of jigs and fixtures and how to incorporate these into an automated welding system.

Courses such as Computer Aided Design and Drafting (CADD), OSHA Rules and Compliance, and Related Metals Processes provide for a solid background in the metals industry. Fabrication basics and Metal Design and Construction utilize all of the gained knowledge in an instructor-approved/student-designed project.

Welding technology students have the opportunity to become certified to American Welding Society Standards and receive documentation stating qualifications.

Students are awarded the Certificate of Applied Science upon successful completion of the first year of the Welding Technology program. Students are awarded the Associate of Applied Science degree upon successfully completing the two-year program.

The program often has a waiting list. Prospective students are encouraged to apply one year prior to their anticipated school attendance. For more detailed information including program costs, tool lists, class schedules, and course syllabi, visit our web site at: <http://www.mc.umt.edu/industrialtech/welding/>. Contact Mark Raymond, Program Director, at 406-243-7647 or Mark.Raymond@umontana.edu

Associate of Applied Science - Welding Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

First Year Welding Program

Rule: All Courses Required for Certification in Welding

Course	Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 102 - Interprsnl Skills in Workplace	1 Credits
M 111 - Technical Mathematics	3 Credits
MCH 114 - Related Metals Processes II	3 Credits
WLDG 117 - Blueprint Rdng & Weldng Symls	3 Credits
WLDG 145 - Fabrication Basics	4 Credits
WLDG 150 - Welding Layout Techniques	2 Credits
WLDG 180 - Shielded Metal Arc Welding	4 Credits
WLDG 184 - OSHA Rules & Regulations Wldng	1 Credits
WLDG 187 - Flux Core Arc Welding	4 Credits

	WLDG 205 - Applied Metallurgy	4 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		37 Total Credits Required

Second Year Welding Program

Rule: All Courses Required for Certification in Welding

Course	Credits
BMGT 242 - Front Line Supervision	3 Credits
DDSN 114 - Introduction to CAD	3 Credits
MCH 214 - Advanced Related Metals Proc	3 Credits
WLDG 210 - Pipe Welding - Integrated Lab	4 Credits
WLDG 215 - GTAW (integrated lab)	4 Credits
WLDG 245 - Metal Fab Design/Construction	4 Credits
WLDG 275 - Gas Metal Arc Welding	4 Credits
WLDG 280 - Weld Testing Certification	2 Credits
WLDG 285 - Automation in Welding	3 Credits
Minimum Required Grade: C-	30 Total Credits Required

Building Maintenance Certificate

The mission of the Building Maintenance Program is to provide the regional workforce with credentialed, skilled and competent building maintenance professionals, and to be responsive to emerging workforce needs.

Students in the Building Maintenance program are trained as building maintenance professionals capable of maintaining commercial buildings. Subject matter in the program includes plumbing, electricity, carpentry, and heating/air conditioning. Students learn physical and electrical theories that enable them to understand building systems. In addition, they study building cleaning, landscape maintenance, pool care, computers, and boiler operation. Water treatment is discussed in both the pool and boiler courses. The program introduces current environmental and energy problems that can be reduced through efficient building operation. It also encourages resource development, teamwork and interpersonal skills required on the job.

Students are awarded a Certificate of Applied Science upon successfully completing the program. Contact John Walker, Program Director, at 406-243-7645 or john.walker@umontana.edu for more information.

Carpentry Certificate

The mission of the Carpentry Program is to provide the regional workforce with credentialed, skilled and competent carpenters and to be responsive to emerging workforce needs.

The Carpentry program provides students the opportunity to learn carpentry skills in a competency-based learning environment. Students work hand-in-hand with professional carpenters both on campus and at construction sites.

Students use hand and power tools with blueprints to build foundation forms, frame buildings, side and roof buildings, and apply roofing materials. They install windows, doors, stairs, attic vents, insulation, vapor barriers, and drywall. Students learn methods for installing trim, locksets, suspended ceilings, countertops, cabinets, and flooring. They also learn to operate construction equipment.

In addition to general education courses, students in the program learn the various steps of becoming a carpenter, including safe practices. Students construct real-world projects and can earn a Certificate of Applied Science or an Associate of Applied Science degree. The program often has a waiting list. Prospective students are encouraged to apply one year prior to anticipated school attendance. Contact Dennis Daneke, Program Director, at 406-243-7692 or Dennis.Daneke@umontana.edu for more information.

Certificate of Applied Science - Carpentry

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Certificate of Applied Science

Rule: Carpentry Certificate requirements

Course	Credits
BMGT 242 - Front Line Supervision	3 Credits
CAPP 120 - Introduction to Computers	3 Credits
CSTN 120 - Carpentry Bscs & Rough-In Frmg	5 Credits
CSTN 122 - Beginning Carpentry Lab	5 Credits
CSTN 142 - Int & Ext Finish Carpentry	4 Credits
CSTN 143 - Intermediate Carpentry Lab	4 Credits
CSTN 171 - Site Prep, Found, Concrete Ins	3 Credits

	M 111 - Technical Mathematics	3 Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		33 Total Credits Required

Heavy Equipment Operation Certificate

The mission of the Heavy Equipment Operation Program is to provide the regional workforce with credentialed, skilled and competent heavy equipment operators and to be responsive to emerging workforce needs. The Heavy Equipment Operation Program provides students with a basic understanding of fundamental machine functions and is designed to develop apprentice-level skills in the operation of heavy equipment.

Students are trained to safely and properly operate and maintain a variety of heavy equipment, including crawler-tractors, graders, scrapers, front-end loaders, excavators, backhoes, and dump trucks. Students develop an understanding of basic surveying techniques, receive extensive training in safety regulations and procedures, and learn how to handle controls precisely and judge distances accurately. The program also promotes an awareness of potential job site difficulties and allows students to gain knowledge of the work ethic expected by employers in the construction industry.

A Certificate of Applied Science is awarded upon successful completion of the program.

The program often has a waiting list for admittance. Prospective students are encouraged to apply one year prior to anticipated school attendance. Contact Rod Frost, Program Director, at 406-243-7843 or Rodney.Frost@umontana.edu for more information.

Certificate of Applied Science - Heavy Equipment Operation

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Note: TRK 106T Commercial Driver's License (CDL) Training non-credit is a recommended elective.

Heavy Equipment Operation

Rule: Required for Certification in Heavy Equipment Operation

Course	Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 102 - Interprsnl Skills in Workplace	1 Credits
HEO 146T - Safety & Basic Controls	5 Credits

	HEO 148T - Operational Skill Bldg	5 Credits
	HEO 150T - Job Simulation	6 Credits
	HEO 151T - Service & Maintenance	2 Credits
	HEO 153T - Const Theory & Spec Equip	5 Credits
	M 111 - Technical Mathematics	3 Credits
	MCH 112 - Related Metals Processes I	1 Credits
	SRVY 108 - Construction Surveying	2 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		36 Total Credits Required

Recreational Power Equipment Certificate

The mission of the Recreational Power Equipment Program is to provide the regional workforce with credentialed, skilled, and competent power equipment technicians and to be responsive to emerging workforce needs.

The Recreational Power Equipment Program prepares students to repair and maintain a wide variety of two-cycle and four-cycle engines and related equipment. Students work on motorcycles, ATVs, snowmobiles, outboard motors, and personal watercraft. Units of instruction include mechanical, fuel, and electrical systems. The program also encourages the development of teamwork and interpersonal skills required on the job.

For more detailed information including program costs, tool requirements, student class schedules, and course syllabi, visit: <http://www.cte.umt.edu/industrialtech/rpe/>

Contact Mike Steffenson, Program Director, at 406-243-7693 or Michael.Steffenson@umontana.edu for more information.

Certificate of Applied Science - Recreational Power Equipment

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Recreational Power Equipment

Rule: Required for Certification in Recreational Power Equipment

Note: Please note: SET 160 is first half only, SET 176 is first half only, SET 177 second half first 5 weeks and SET 180 is second half last 5 weeks.

Course	Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 102 - Interprsnl Skills in Workplace	1 Credits
M 111 - Technical Mathematics	3 Credits
MCH 115 - Related Metals Processes III	3 Credits
SET 160 - Basic Electricity for RPE	3 Credits
SET 176 - Motorcy/ATV Eng, Sus, Chas	3 Credits
SET 177 - Motorcy/ATV Elect & Fuel	4 Credits
SET 178 - Marine Elec & Fuel Syst	5 Credits
SET 179 - Marine Powerhds/Low Units	6 Credits
SET 180 - Snowmobile Main & Rep I	2 Credits
SET 181 - Snowmobile Main & Rep II	2 Credits
SET 182 - Comp Apps Motorsports	1 Credits
WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-	39 Total Credits Required

Welding Technology Certificate

The mission of the Welding Technology Program is to provide the regional workforce with credentialed, skilled, and competent welders and to be responsive to emerging workforce needs. The Welding Technology Program prepares students to operate and troubleshoot a variety of welding power sources and related equipment. The program prepares students to solve problems found within the welding industry using computational skills and other problem-solving techniques essential to welding and steel fabrication. It also encourages the development of teamwork and interpersonal skills required on the job.

Welding students develop skills in six different welding processes—oxyacetylene (OAW), shielded metal arc (SMAW), gas metal arc (GMAW), flux core arc, (FCAW), submerged arc (SAW), and gas tungsten arc welding (GTAW). Beyond the development of welding skills and understanding of the process, they also study other skills, such as

blueprint reading and layout, metallurgy, and gain an understanding of how heating and cooling cycles affect the properties of metals. Students also study the design of jigs and fixtures and how to incorporate these into an automated welding system.

The Welding Technology Program also has courses that provide for a solid background in the metals industry. Such courses are Computer Aided Design and Drafting (CADD), OSHA Rules and Compliance, and Related Metals Processes. Fabrication basics and Metal Design and Construction utilize all of the gained knowledge with an instructor approved/student designed project.

Welding technology students have the opportunity to become certified to American Welding Society Standards and receive documentation stating qualifications.

Students are awarded the Certificate of Applied Science upon successful completion of the first year of the Welding Technology program. Students are awarded the Associate of Applied Science degree upon successfully completing the two-year program.

The program often has a waiting list. Prospective students are encouraged to apply one year prior to their anticipated school attendance. For more detailed information including program costs, tool lists, class schedules, and course syllabi, visit our web site at: <http://www.mc.umt.edu/industrialtech/welding/>. Contact Mark Raymond, Program Director, at 406-243-7647 or Mark.Raymond@umontana.edu

Certificate of Applied Science - Welding Technology

Missoula College

Catalog Year: 2014-2015

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Welding

Rule: All courses are required

Course	Credits
CAPP 120 - Introduction to Computers	3 Credits
COMX 115S - Intro to Interpersonal Communc	3 Credits
M 111 - Technical Mathematics	3 Credits
MCH 114 - Related Metals Processes II	3 Credits
WLDG 117 - Blueprint Rdng & Weldng Symbls	3 Credits
WLDG 145 - Fabrication Basics	4 Credits
WLDG 150 - Welding Layout Techniques	2 Credits
WLDG 180 - Shielded Metal Arc Welding	4 Credits

	WLDG 184 - OSHA Rules & Regulations Wldng	1 Credits
	WLDG 187 - Flux Core Arc Welding	4 Credits
	WLDG 205 - Applied Metallurgy	4 Credits
	WRIT 121 - Intro to Technical Writing	3 Credits
Minimum Required Grade: C-		37 Total Credits Required

School of Extended and Life Long Learning

Roger Maclean, Dean

The School of Extended & Lifelong Learning (SELL) is the outreach arm of the University of Montana. SELL partners with external organizations and academic units to provide innovative and flexible education experiences and personal growth opportunities for a variety of audiences. SELL's mission is realized through service, innovation and collaboration. By creating relationships based on integrity and professionalism, SELL advances quality lifelong learning opportunities that transform lives.

SELL is located in the James E. Todd building, east of the University Center. The building includes meeting space, available to rent by both on and off-campus entities, including state-of-the-art technology in every room and video conferencing capabilities. In addition, SELL provides conference and event planning, including equipment rental, technical support and logistical assistance.

We provide educational opportunities for community members

SELL is responsive to community needs, and seeks partnerships that help enrich the lives of community members. We design training programs tailored to help local companies meet their goals, and provide meeting space or planning services for educational conferences.

Individuals aged +50, enjoy MOLLI short courses in the fine arts, humanities, current and political affairs and natural and social sciences. These lifetime learners enjoy courses without the added pressure of grades, tests, or homework.

Community members who are looking to enhance their career potential need not look any further than our [Professional Development program](#).

Working through a major life challenge? Consider taking a [Life Transitions workshop](#) in the areas of movement, creative expression, or resilience.

Interested in Beekeeping? We even have something for you. SELL offers an online certificate program for serious beekeepers that is taught by one of the nation's premier bee research teams. Beekeeping is just one example of the creative educational programming that is incubated at SELL.

We Support UM

SELL supports the entire campus community by offering a range of administrative, design and technical services associated with [Summer Semester](#), [Wintersession](#), and [UMOnline](#). SELL's Innovation Studio helps faculty members bring their subject matter to life with instructional design, content creation, and accessibility support.

We accommodate all your conference planning and meeting needs

If you need help planning a conference, symposium, or large educational event, SELL has a [Conference Planning Services](#) team that can help make your event a success.

Need meeting space? The [Continuing Education Conference Center](#) at SELL can accommodate your needs with meeting rooms that can seat anywhere from 2-300 people.

These are just a sampling of the ways SELL meets educational needs and provides diverse learning opportunities. We strive to broaden educational access by meeting our audiences where they are, thinking outside the box, and providing excellent customer service.

College of Visual and Performing Arts

Stephen Kalm, Dean

The College of Visual and Performing Arts (CVPA) is comprised of four professionally accredited schools; Art, Media Arts, Music and Theatre & Dance. CVPA is committed to leadership in pedagogy, creative scholarship and professional performances and exhibitions. The College prides itself on its high achieving faculty, successful alumni and talented students. CVPA:

- serves UM students by teaching performing and visual arts with rigor and devotion, and by offering preparation and experience that enable students to succeed in the world of art, to perform and create with grace and maturity, and to teach with expertise and perspective
- serves the University, the community, state, region and nation, by presenting concerts, productions, and exhibitions of high quality, and by offering educational and research opportunities in the arts for all disciplines
- serves as the cultural center of the state and region
- provides national leadership in the arts by enhancing the excellence of traditional arts curricula, instruction and research with innovative and imaginative programs that utilize new technologies, incorporate various media, and enhance cultural and intellectual environments
- inspires the pursuit of excellence by encouraging creativity and expression through the arts

In addition, the College of Visual and Performing Arts offers *Creative Pulse: Master's Degree in Integrated Arts and Education* program for educators and education administrators during summer sessions. Creative Pulse students embrace and explore critical thinking processes and habits of the mind, enabling participants to develop, refine and integrate these processes into their own thinking and learning abilities, as well as those of their students.

For more information visit the [College of Visual and Performing Arts website](#).

Name	Minor	Certificate	Associate	Bachelor
Art				Requirements
Art History/Criticism	Requirements			
Art Studio	Requirements			
Dance	Requirements			Requirements
Dance Specialization Education	Requirements			
Media Arts	Requirements			Requirements
Music	Requirements			Requirements

<u>Music Education</u>				<u>Requirements</u>
<u>Theatre</u>	<u>Requirements</u>			<u>Requirements</u>

Art

Julia Galloway, Director

The School of Art provides a comprehensive education in studio art, including intensive hands-on studio practice, art history, criticism, and theory. Programs provide thorough professional training for students interested in careers in the field of art.

Degree offerings include the B.A., B.F.A., M.A., and M.F.A. in Art. Areas of specialization are Ceramics, Drawing, Painting, Photography, Printmaking and Sculpture. An M.A. degree in Art with concentrations in Studio Art and/or Art History is also offered, as well as courses that prepare students for licensure for teaching art.

Advanced Placement Policy

All students, including those who have taken AP examinations, must submit a portfolio to challenge art classes. Undergraduate students may challenge foundations courses only (ARTZ 105A (Art 101A), Visual Language-Drawing; ARTZ 106A (ART 102A), Visual Language-2-D Fndtns; and ARTZ 108A (ART 103A), Visual Language-3-D Fndtns).

Portfolios are reviewed at the beginning of each semester. The challenge process waives the requirement to take a specific class, but does not provide any credits. The process of portfolio reviews is as follows: students submit a portfolio of ten .jpeg files or pieces of actual work to the school office two weeks prior to the beginning of the semester. If challenging more than one course, students submit examples of work for each course, for example: ten drawing samples for ARTZ 105A (ART 101A), ten color works for ARTZ 106A (ART 102A), and/or ten 3-D pieces for ARTZ 108A (ART 103A).

Transfer Students

Students with transfer credits from another institution must contact the school director for review of transfer transcripts to assess course equivalents.

Department Faculty

Professors

James Bailey, Professor
Maryann Bonjorni, Professor
H. Rafael Chacon, Professor
Julia Galloway, Professor and Director
Valerie Hedquist, Professor
Elizabeth Lo, Professor

Associate Professors

Bradley Allen, Associate Professor
Kevin Bell, Associate Professor
Trey Hill, Associate Professor

Assistant Professors

Jennifer Combe, Assistant Professor
Matthew Hamon, Assistant Professor

Adjunct Faculty

Steven Krutek, Adjunct Assistant Professor
Edgar Smith, Adjunct Assistant Professor

Course Descriptions

Art History

- **ARTH 160L - Global Visual Culture**
Credits: 3. Offered autumn and spring. An introduction to the visual arts exploring various approaches to understanding art, art history and terminology, techniques and media, motivating factors behind the creative act. **Course Attributes:** Literary & Artistic Stds Crse
- **ARTH 200H - Art of World Civilization I**
Credits: 3. Offered autumn. Survey of history of visual art from prehistory to 1400. **Course Attributes:** Historical & Cultural Course Indigenous and Global
- **ARTH 201H - Art of World Civilization II**
Credits: 3. Offered spring. Survey of history of visual art from 1400 to the Present. **Course Attributes:** Historical & Cultural Course American and European
- **ARTH 250L - Introduction to Art Criticism**
Credits: 3. Offered autumn and spring. Prereq., ARTH 200H-201H. An overview of the description, and interpretation, and evaluation of visual art as practiced in the discipline of art criticism. **Course Attributes:** Literary & Artistic Stds Crse Writing Course-Approved Writing Course-Intermediate
- **ARTH 333H - Architectural History I**
Credits: 3. Offered autumn. Prereqs., ARTH 200H or 201H. Knowledge and understanding of architectural styles, designs and choices of the built environment from prehistory megalithic architecture to the start of the modern age. **Course Attributes:** Historical & Cultural Course
- **ARTH 334H - Architectural History II**
Credits: 3. Prereqs., ARTH 201H and ARTH 250L or consent of instructor. Exploration of architectural styles, designs, and choices of the built environment from 1850 to the present. **Course Attributes:** Historical & Cultural Course
- **ARTH 350 - Contemp Art and Art Criticism**
Credits: 3. Offered autumn and spring. Prereq., ARTH 250L or consent of instructor. Survey of artists, art works, critics and theories from 1960's to the present. Introduction to major art movements and ideas of the Post-Modern era. Special emphasis given to firsthand experiences with art at local venues and direct engagement with contemporary art criticism published in newspapers, journals, magazines, and other media. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced
- **ARTH 391 - Special Topics**
Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ARTH 400 - Art & Architecture of Egypt**
 Credits: 3. Offered autumn. Prereq., ARTH 200H or consent of instr. Exploration of the development of Egyptian art from its earliest roots to the present, including Orientalism and Egyptomania.
- **ARTH 402H - Greek Art & Architecture**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Same as LS 340H and MCLG 360H. Ancient Greek works of art and architecture, related to and explained by contemporary ideas and values of Greek society. **Course Attributes:**
 Historical & Cultural Course
- **ARTH 407 - Roman and Early Christian Art**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Same as LS 341H and MCLG 361H. A survey of the various media used in Roman art; the social political, and economic contexts in which the media were developed; and the transition (technical, iconographic, and contextual) to the art of the Early Christian period.
- **ARTH 425 - Art of the Renaissance**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Exploration of the arts of 1450-1600 in western Europe. Focus on themes such as the recovery of the classical past, development of scientific naturalism and linear perspective, and the evolution of major art forms architecture, urbanism, religious altarpieces and devotional images, fresco and oil paintings, monumental sculpture, etc. **Course Attributes:** Writing Course-Approved
- **ARTH 430 - 19th Century Art**
 Credits: 3. Offered autumn. Prereq., ARTH 200H or 201H or consent of instructor. Exploration of major themes in European art from 1800 to 1900. Focus on major cultural and intellectual trends such as Neoclassicism, Romanticism, Realism, Impressionism and early Modernism.
- **ARTH 433H - Ancient American Art**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Development of major ceremonial and urban centers throughout the Americas before the coming of Europeans. Analysis of how the visual arts articulate ancient world views or cosmologies in relation to nature. Focus on various strategies of reading the structure and meaning encoded in the layout of cities, stone sculpture, wall murals, ceramics, precious metals, and textiles. **Course Attributes:** Historical & Cultural Course
- **ARTH 434 - Latin American Art**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instr. Exploration of themes in the development of Latin American art from the colonial period to the present including Renaissance ideals in the New World, syncretism of European, African, and indigenous roots, the Black Legend, and the advent of such movements as Academism, Modernism, Social Realism, Magic Realism and Post-Modernism. **Course Attributes:** Historical & Cultural Course
 Non-Western Course Writing Course-Upper-Division Writing Course-Advanced
- **ARTH 435 - Art of the United States**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H (ART 150H or 151H) or consent of instructor. American painting, sculpture and architecture from the Civil War to the present. **Course Attributes:** Historical & Cultural Course American and European
- **ARTH 436 - The History of Women in Art**
 Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. A survey of major women artists in context of social history and aesthetics from ancient to modern times. Analysis of feminism and works by contemporary women artists in film and video. **Course Attributes:** Historical & Cultural Course
- **ARTH 440 - 20th Century Art**
 Credits: 3. Offered spring. Prereq., ARTH 200H or 201H or consent of instructor. Exploration of major themes in the development of art of the 20th century. Focus on major cultural and

intellectual trends of the Modern and Post-Modern ages.

- **ARTH 450 - Renaissance Theory & Criticism**

Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. An exploration of the writings of major thinkers of the 14th-16th centuries, including theoretical treatises, works of literature, contracts, and personal diaries. **Course Attributes:**
Literary & Artistic Stds Crse

- **ARTH 458 - Adv Research in Art History**

Credits: 2 TO 6. (R-9) Offered autumn and spring. Prereq., ARTH 200H or 201H, a 300-level art history course and consent of instructor. Advanced research in art history topics agreed upon by student and instructor.

- **ARTH 459 - Advanced Research Art Crit**

Credits: 3 TO 6. (R-9) Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Advanced Research in Art Criticism.

- **ARTH 464 - African Art**

Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Broad investigation of the visual arts of Africa; historical civilizations, including Egypt, and colonial and post-colonial societies; methodologies for study of non-western societies; "Primitivism;" and the importance of African Art for the development of western art.

- **ARTH 465 - Spanish Art**

Credits: 3. Offered intermittently. Prereq., ARTH 200H or 201H or consent of instructor. Exploration of the history of Spanish art from the cave paintings to the 21st century. Focus on Spanish art and aesthetics and Spain's cultural identity through the visual arts. **Course Attributes:**
Historical & Cultural Course

- **ARTH 491 - Special Topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ARTH 494 - Sem Art Hist & Crit**

Credits: 3. (R-9) Offered intermittently. Prereq., ARTH 200H or 201H, a 300-level art history course and consent of instructor. Upper-division seminar in varying topics of art history and criticism. **Course Attributes:** Historical & Cultural Course

- **ARTH 498 - Internship**

Credits: 1 TO 6. (R-12) Offered intermittently. Prereq., consent of instructor. Special internships under direction of department faculty allowing students practical experience in a chosen area. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **ARTH 503 - Crit Theories Visual Arts**

Credits: 3. Prereq., consent of instructor. Seminar on the history of art criticism as a particular type of discourse about art. Contemporary theories of Modernism including Formalism, Abstraction, Marxism, and Social Realism; and Postmodernism including Deconstruction, Revisionism, and Feminism. Required of all M.A. and M.F.A. students in art. Level: Graduate

- **ARTH 509 - Crit Theories Visual Arts II**

Credits: 3. Prereq., ARTH 503 or consent of instructor. This course is a continuation of ARTH 503 Critical Theories in Visual Arts I, with an emphasis on contemporary theories, topics and ideas related to visual arts. Students will engage with course material through research and reading of primary documents, writing and presentations. Students will have the opportunity to investigate specific topics that relate to and expand their creative studio practice. Level: Graduate

- **ARTH 550 - Graduate Studies/Art History**

Credits: 2 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instructor. Research in art

history and art theories. Level: Graduate

- **ARTH 597 - Research in Art History**

Credits: 3 TO 9. (R-24) Offered intermittently. Prereq., consent of instructor. Level: Graduate

- **ARTH 698 - Methodologies in Art History**

Credits: 3 TO 9. (R-9) Offered intermittently. Prereq., consent of instr. Investigation of the discipline of art history, its elements, boundaries, historiography, and practitioners. Level: Graduate

Art

- **ARTZ 103A - Art for Non-Majors**

Credits: 3. This course introduces students to visual art and culture from both contemporary and historical perspectives through lectures, readings, writing, and studio projects. It explores visual literacy including terminology, techniques, aesthetics, studio practice, and cultural context. **Course Attributes:** Expressive Arts Course

- **ARTZ 105A - Visual Language - Drawing**

Credits: 3. Offered autumn and spring. Introduction to visual language, concept development, and studio practicum. Focus on basic skills development based on observation, imagination, and memory. Some research in historical and contemporary approaches to drawing required. **Course Attributes:** Expressive Arts Course

- **ARTZ 106A - Visual Language - 2-D Fndtns**

Credits: 3. Offered autumn and spring. Prereq. or coreq., ARTZ 105A. An introduction to the formal elements and principles of design, color theory, and predominant western and non-western historical styles. Emphasis on solving specific design problems. **Course Attributes:** Expressive Arts Course

- **ARTZ 108A - Visual Language - 3-D Fndtns**

Credits: 3. Offered autumn and spring. Basic three-dimensional course for both general education and beginning art students. Prerequisite to beginning sculpture and beginning ceramics. Emphasis placed on conceptualization and formal development of the 3-D object in the areas of form, mass, scale, texture, space and color. **Course Attributes:** Expressive Arts Course

- **ARTZ 131A - Ceramics for Non-majors**

Credits: 3. Offered intermittently. A general introduction to art using ceramics. Less specialized than Ceramics I for art majors. Credit not allowed toward a B.A., B.F.A., or minor in art. **Course Attributes:** Expressive Arts Course

- **ARTZ 191 - Special Topics**

Credits: 1 TO 6. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ARTZ 211A - Drawing I**

Credits: 3. Offered autumn and spring. Prereq., ARTZ 105A, and ARTH 200H or 201H. Study of human anatomy with an emphasis on rendering and interpreting the figure. Students complete a variety of homework assignments. Some research in historical and contemporary figuration required. **Course Attributes:** Expressive Arts Course

- **ARTZ 221A - Painting I**

Credits: 3. Offered autumn and spring. Prereq., ARTZ 105A, 106A, ARTH 200H and 201H. Acrylic and oil painting emphasizing composition and application of color theory. Research in historical and contemporary strategies. **Course Attributes:** Expressive Arts Course

- **ARTZ 231A - Ceramics I**

Credits: 3. Offered autumn and spring. Prereq., ARTZ 108A. Introduction to clay as a historical and

contemporary art-making medium. Basic methods of building with clay, with emphasis on handbuilding; elementary solutions to problems of glazing and surface treatment. **Course Attributes:** Expressive Arts Course

- **ARTZ 251A - Sculpture I**

Credits: 3. Offered autumn and spring. Prereq., ARTZ 108A. Introduction to fundamental technical skills and new processes in various materials. Further development of the formal concerns within three-dimensional design. Issues of content and formal criticism as it relates to personal expression. **Course Attributes:** Expressive Arts Course

- **ARTZ 271A - Printmaking I**

Credits: 3. (R-9) Offered autumn and spring. Prereq., ARTZ 105A. Introduction to various printmaking media. **Course Attributes:** Expressive Arts Course

- **ARTZ 284A - Photo I-Techs and Processes**

Credits: 3. Offered autumn and spring. Prereq., ARTZ 105A. Introduction to photography as an art form. Exposure, digital camera basics, composition, digital image processing, printing, print finishing techniques. Discussion of historical and contemporary uses of photography. Focus on technical expertise and issues of content and personal expression. **Course Attributes:** Expressive Arts Course

- **ARTZ 291 - Special Topics**

Credits: 1 TO 9. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **ARTZ 302A - Elementary School Art**

Credits: 2. Offered autumn and spring. Visual art teaching methods for future elementary school teachers in a variety of media, methods of critique, and curricular components.

- **ARTZ 311 - Drawing II**

Credits: 3. (R-9) Offered autumn and spring. Prereq., ARTZ 211, ARTH 200H, ARTH 201H, ARTH 250L. Focused time for individual exploration and production of drawings for portfolio development through studio practicum, lectures, critiques, reading and writing.

- **ARTZ 321 - Painting II**

Credits: 3. (R-12) Offered autumn and spring. Prereq., ARTH 200H, 201H, 250L, and ARTZ 221A. Continued development of painting skills and concepts development of painting skills and concepts with an emphasis on contemporary ideas, process and materials. Studio practicum, lectures, critiques, reading and writing.

- **ARTZ 331 - Ceramics II**

Credits: 3. (R-12) Offered autumn and spring. Prereq., ARTZ 108A and 231A. Further exploration of the ceramic process introducing more complex ways of handbuilding and developing the art of throwing. Examination of the technology and chemistry of clay, glazes and high temperature oxidation and reduction firing.

- **ARTZ 335 - Clay and Glaze**

Credits: 3. Offered autumn. Prereq., ARTZ 108A, 231A. In-depth study of the physical and chemical properties of clays and glazes. Hands-on testing of various clay and glaze formulas and an introduction to kiln firing.

- **ARTZ 351 - Sculpture II**

Credits: 3. (R-12) Offered autumn and spring. Prereq., 251A. Focus on contemporary issues and a deeper engagement with materials. Development and execution of clear sculptural responses to material-based and topic-based assignments.

- **ARTZ 371 - Printmaking II**

Credits: 3. (R-12) Offered autumn and spring. Prereq., ARTZ 271A. Continued work in various

printmaking media.

- **ARTZ 384 - Photo II-Theory, Crit, Prctice**
Credits: 3. (R-12) Offered autumn and spring. Prereq., ARTZ 105A, 284A. Further exploration of photography as an art form. Survey of different approaches to cameras, films, chemical and digital processes, presentation techniques. Emphasis on issues of content and personal expression.
- **ARTZ 385 - The Art of Digital Photography**
Credits: 3. Offered autumn or spring. Prereq., ARTZ 105A, 284A. Introduction to digital photographic manipulation. Survey of techniques, theory and potential for creative expression as an art form.
- **ARTZ 388 - Alternative Process Photog**
Credits: 3. Offered intermittently. Prereq., ARTZ 105A, 284A. Introduction to historic, experimental and alternative process photography. Survey of techniques, theory and potential for creative expression as an art form.
- **ARTZ 391 - Special Topics**
Credits: 1 TO 9. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ARTZ 394A - Seminar- Environmental Drawing**
Credits: 3. Offered Spring. A drawing seminar specifically designed for the Wilderness and Civilization program. Students will explore and develop individual ideas with various media based on the curriculum of the Wilderness Program. **Course Attributes:** Expressive Arts Course
- **ARTZ 398 - Internship**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Special internships under direction of department faculty allowing students practical experience in a chosen area. **Course Attributes:** Internships/Practicums
- **ARTZ 400 - Art & Architecture of Egypt**
Credits: 3. Offered autumn. Prereq., ARTH 200H or consent of instr. Exploration of the development of Egyptian art from its earliest roots to the present, including Orientalism and Egyptomania.
- **ARTZ 402 - Teaching Art I-- K-12**
Credits: 3. Offered autumn. Prereq., ARTZ 105A, 106A, 108A; ARTH 200H, 201H; and junior standing. Preparation for art specialists to include history and current trends in curriculum development, teaching procedures, child growth and development in art, resources, evaluation, advocacy and directed teaching experiences in school setting. **Course Attributes:** Service Learning
- **ARTZ 403 - Teaching Art II-- K-12**
Credits: 3. Offered spring. Prereq., ARTZ 105A, 106A, 108A, and 402. Continuation and practical application of ARTZ 402.
- **ARTZ 410 - Advanced Research- Drawing**
Credits: 3. (R-9) Offered intermitently. Prereq. ARTZ 211, ARTH 200H, ARTH 201H, and ARTH 250L or consent of instructor. Focused time for individual exploration and production of drawings for portfolio development through studio practicum, lectures, critiques, reading and writing. Sections providing a forum for performance art are taught intermittently.
- **ARTZ 420 - Advanced Research- Painting**
Credits: 3. (R-9) Offered intermittently. Prereqs., ARTZ 105A, 106A, ARTH 200H, 201H, 250L, ARTZ 211A, 221A, 311, 321, and 422, and/or consent of instructor. Investigation of painting with emphasis on student proposals, including specific technical and conceptual aspects.
- **ARTZ 422 - Painting III**
Credits: 3. (R-9) Offered autumn and spring. Prereq., ARTH 200H, 201H, 250L, and ARTZ 321.

Includes ARTZ 422: Process and Abstraction and ARTZ 422: Portfolio Development. Studio and ARTZ 422: Finding Language. Exploration and production of paintings with emphasis on individual expression. Studio practicum, lectures, critiques, reading and writing.

- **ARTZ 430 - Advanced Research- Ceramics**
Credits: 3. (R-9) Offered intermittently. Investigation of ceramics with emphasis on student proposals, including specific technical and conceptual aspects.
- **ARTZ 451 - Advanced Research- Sculpture**
Credits: 3. (R-9) Offered intermittently. Prereq., ARTZ 351 or consent of instructor. Thorough investigation and articulation of the communicative elements of art. Emphasis on the craftsmanship of ideas and the refinement of personal aesthetics as they pertain to sculptural production.
- **ARTZ 470 - Advanced Research- Printmaking**
Credits: 3. (R-9) Offered intermittently. Investigation of printmaking with emphasis on student proposals, including specific technical and conceptual aspects.
- **ARTZ 484 - Photo III- Studio Projects**
Credits: 3. (R-9) Offered autumn or spring. Prereq., ARTZ 105A, 284A, 384. Further exploration of photographic theory, criticism, technique and expression as an art form.
- **ARTZ 486 - Advanced Research- Photography**
Credits: 3. (R-9) Offered intermittently. Pre-req., consent of instructor. Investigation of photography with emphasis on student proposals, including specific technical and conceptual aspects.
- **ARTZ 491 - Special Topics**
Credits: 1 TO 6. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **ARTZ 492 - Independent Study**
Credits: 2 TO 6. (R-24) Offered intermittently. Prereq. Consent of instructor. Advanced studio techniques with emphasis on student initiated projects.
- **ARTZ 494 - Seminar- Professional Practices**
Credits: 3. Offered autumn. Prereq., senior status. Required of all graduating B.F.A. students. Introduction to professional practices and standards in the visual arts, including presentation, portfolio development, career and exhibition opportunities, arts advocacy and graduate school.
- **ARTZ 498 - Internship**
Credits: 1 TO 12. (R-12) Offered intermittently. Prereq., consent of instructor. Special internships under direction of department faculty allowing students practical experience in a chosen area.
Course Attributes: Internships/Practicums
- **ARTZ 499 - Senior Thesis/Capstone**
Credits: 3. Offered spring. Prereq., senior status, ARTZ 494, and successful passage of B.F.A. review. Required of B.F.A. students. Focus on completion of artwork and preparation for the required spring B.F.A. exhibition. Further exploration of professional practices topics and career opportunities.
- **ARTZ 501 - Graduate Critique Seminar**
Credits: 2. (R-4) Offered autumn and spring. Prereq., consent of instr. Weekly meetings to critique graduate student work. Level: Graduate
- **ARTZ 502 - Grad Assist Sem/ Prof Develop**
Credits: 3. Offered autumn. Prereq., Graduate student status. A seminar-based course emphasizing various approaches to teaching, along with professional practices in art. Level: Graduate

- **ARTZ 504 - Pre-Candidacy**

Credits: 1. Offered autumn and spring. Prereq., consent of instructor. Graduate Standing concurrent with Art 500-level Graduate Research and Studio Processes. Course emphasizes one-on-one instruction with faculty from the student's area of concentration in preparation for the student's all-faculty review prior to thesis work. Level: Graduate

- **ARTZ 505 - Grad Studio Res: Art**

Credits: 1 TO 3. (R-24) Offered autumn and spring. Graduate program. Students meet during regularly scheduled times with faculty or in small groups throughout the semester to discuss the development of their individual work. Level: Graduate

- **ARTZ 506 - Graduate Pedagogy**

Credits: 3. Offered Fall. Lecture-style course discussing current pedagogical practices in college-level art education. Includes development of a syllabus, teaching philosophy, assignments, and public speaking skills as well as information on the day-to-day challenges of teaching. Prepares graduate students for TA application and must be taken during first semester of graduate study. This course also includes a semester of course shadowing, working closely with an instructor from the beginning of the assigned course until finals. Assist the assigned faculty member with activities pertaining to teaching. Level: Graduate

- **ARTZ 507 - Beyond Art School**

Credits: 2. Introduction to professional practices and standards in the visual arts, including portfolio development, presentation, exhibition opportunities and resources, approaching galleries, developing a web presence, grant writing and artist residencies. Additional topics will cover transition and progression from graduate study into the workforce. Topics will include; career opportunities, resume development, CAA, preparation of job applications, interviewing and public speaking. Level: Graduate

- **ARTZ 508 - Expanded Studio Practice**

Credits: 3 TO 6. Offered autumn and spring. Studio-based course that offers graduate students the opportunity to work together in a studio art environment with the possibility of engaging diverse media and themes. May take the form of topic-based studio assignments, thematic inquiry, studio response to readings, and/or specific studio processes depending on faculty. Rotates amongst the faculty. Level: Graduate

- **ARTZ 511 - Grad Res/Studio Pr: Drawing**

Credits: 2 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instructor. Graduate research in drawing, based on student's direction. Level: Graduate

- **ARTZ 521 - Grad Res/Studio Pr: Painting**

Credits: 3 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instructor. Advanced research in painting. Level: Graduate

- **ARTZ 531 - Grad Res/Studio Pr: Ceramics**

Credits: 3 TO 6. (R-24) Offered autumn and spring. Prereq. consent of instructor. Advanced research in ceramics. Level: Graduate

- **ARTZ 551 - Grad Res/Studio Pr: Sculpt**

Credits: 2 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instructor. Advanced research in sculpture. Level: Graduate

- **ARTZ 571 - Grad Res/Studio Pr: Print**

Credits: 2 TO 12. (R-24) Offered autumn and spring. Prereq., consent of instr. Advanced research in printmaking. Level: Graduate

- **ARTZ 594 - Seminar**

Credits: 1 TO 6. (R-6) Offered intermittently. Level: Graduate

- **ARTZ 595 - Special Topics**
Credits: 1 TO 9. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums
- **ARTZ 596 - Independent Study**
Credits: 2 TO 6. (R-18) Prereq., consent of instructor. Offered intermittently. Level: Graduate
Course Attributes: Service Learning/Volunteer
- **ARTZ 597 - Research in Art History**
Credits: 2 TO 6. (R-18) Offered intermittently. Prereq., consent of instr. Level: Graduate
- **ARTZ 598 - Internship**
Credits: 2 TO 6. (R-12) Offered intermittently. Prereq., consent of instructor. Level: Graduate
Course Attributes: Internships/Practicums
- **ARTZ 697 - Thesis Paper**
Credits: 1 TO 3. (R-3) Prereq., ARTZ 699. Guided one-on-one instruction with the chair of the thesis committee working toward researching and writing the thesis paper. Level: Graduate
- **ARTZ 699 - Thesis Exhibition**
Credits: 1 TO 12. Offered intermittently. Prereq., consent of instructor. Investigation of the discipline of art history, its elements, boundaries, historiography, and practitioners. Level: Graduate

Art Studio Minor

Minor - Art Studio (Minor)

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 3.0

Note: A Minor In Studio Art-27 Credits

Studio Art Fundamentals

Rule: Must complete the following subcategories

24 Total Credits Required

Visual Language

Rule: All courses are required

—	Course	Credits
	ARTZ 105A - Visual Language - Drawing	3 Credits
	ARTZ 106A - Visual Language - 2-D Fndtns	3 Credits
	ARTZ 108A - Visual Language - 3-D Fndtns	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Beginning Art History

Rule: All courses are required

—	Course	Credits
	ARTH 200H - Art of World Civilization I	3 Credits
	ARTH 201H - Art of World Civilization II	3 Credits
Minimum Required Grade: C+		6 Total Credits Required

Studio I Courses

Rule: 3 courses are required

—	Course	Credits
	ARTZ 211A - Drawing I	3 Credits
	ARTZ 221A - Painting I	3 Credits
	ARTZ 231A - Ceramics I	3 Credits
	ARTZ 251A - Sculpture I	3 Credits
	ARTZ 271A - Printmaking I	3 Credits
	ARTZ 284A - Photo I-Techs and Processes	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Upper Division Studio Course

Rule: 1 300-400 Level Studio Course Required

—	Course	Credits
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	ARTZ 311 - Drawing II	3 Credits
	ARTZ 321 - Painting II	3 Credits
	ARTZ 331 - Ceramics II	3 Credits
	ARTZ 335 - Clay and Glaze	3 Credits
	ARTZ 351 - Sculpture II	3 Credits
	ARTZ 371 - Printmaking II	3 Credits
	ARTZ 372 - Printmaking II- Lithography	3 Credits
	ARTZ 385 - The Art of Digital Photography	3 Credits
	ARTZ 388 - Alternative Process Photog	3 Credits
	ARTZ 391 - Special Topics	1 To 9 Credits
	ARTZ 398 - Internship	1 To 12 Credits
	ARTZ 422 - Painting III	3 Credits
	ARTZ 430 - Advanced Research- Ceramics	3 Credits
	ARTZ 451 - Advanced Research- Sculpture	3 Credits
	ARTZ 470 - Advanced Research- Printmaking	3 Credits
	ARTZ 484 - Photo III- Studio Projects	3 Credits
	ARTZ 486 - Advanced Research- Photography	3 Credits
	ARTZ 492 - Independent Study	2 To 6 Credits
	ARTZ 498 - Internship	1 To 12 Credits
Minimum Required Grade: C		3 Total Credits Required

Art History and Criticism Minor

Minor - Art History/Criticism (Minor)

Catalog Year: 2014-2015

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Note: Minor in Art History For Those Not Majoring In Art

Studio Art Fundamentals

Rule: Must complete the following subcategories

12 Total Credits Required

Visual Language

Rule: The following course is required

—	Course	Credits
	ARTZ 105A - Visual Language - Drawing	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Beginning Art History

Rule: All courses are required

—	Course	Credits
	ARTH 200H - Art of World Civilization I	3 Credits
	ARTH 201H - Art of World Civilization II	3 Credits
	Minimum Required Grade: C	6 Total Credits Required

Beginning Art Criticism

Rule: The following course is required

—	Course	Credits
	ARTH 250L - Introduction to Art Criticism	3 Credits
	Minimum Required Grade: C	3 Total Credits Required

Upper Division Art History And Criticism

Rule: 12 Credits Of 300-400 Level Art History And/Or Criticism Courses Required

Course	Credits
ARTH 333H - Architectural History I	3 Credits
ARTH 350 - Contemp Art and Art Criticism	3 Credits
ARTH 391 - Special Topics	1 To 6 Credits
ARTH 402H - Greek Art & Architecture	3 Credits
ARTH 407 - Roman and Early Christian Art	3 Credits
ARTH 425 - Art of the Renaissance	3 Credits
ARTH 430 - 19th Century Art	3 Credits
ARTH 433H - Acient American Art	3 Credits
ARTH 434H - Latin American Art	3 Credits
ARTH 435Y - Art of the United States	3 Credits
ARTH 436 - The History of Women in Art	3 Credits
ARTH 440 - 20th Century Art	3 Credits
ARTH 450 - Renaissance Theory & Criticism	3 Credits
ARTH 458 - Adv Research in Art History	2 To 6 Credits
ARTH 459 - Advanced Research Art Crit	3 To 6 Credits
ARTH 464 - African Art	3 Credits
ARTH 465 - Spanish Art	3 Credits
ARTH 491 - Special Topics	1 To 6 Credits
ARTH 494 - Sem Art Hist & Crit	3 Credits
ARTH 498 - Internship	1 To 6 Credits
Minimum Required Grade: C	12 Total Credits Required

Art B.A.

Bachelor of Arts - Art

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 57

Required Cumulative GPA: 3.0

Lower Division Requirements

Rule: All Courses Are Required Unless Waived Via Departmental Advanced Placement Policy

Note: Students seeking the Bachelor of Arts degree with a major in Art must complete 36 credits of lower division art courses: Studio Art Fundamentals, 9; Beginning Art History, 6; Introductory Art Criticism, 3; Photography, 3; Ceramics, 3; Printmaking 3; Sculpture, 3; Painting, 3; Drawing, 3;

Minimum Required Grade: C

36 Total Credits Required

Studio Art Fundamentals

Rule: All Courses Required Unless Waived Via Deaprtmental Advanced Placement Policy

Course	Credits
ARTZ 105A - Visual Language - Drawing	3 Credits
ARTZ 106A - Visual Language - 2-D Fndtns	3 Credits
ARTZ 108A - Visual Language - 3-D Fndtns	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Studio I Courses

Rule: All Courses Required

Course	Credits
ARTZ 211A - Drawing I	3 Credits
ARTZ 221A - Painting I	3 Credits

	ARTZ 231A - Ceramics I	3 Credits
	ARTZ 251A - Sculpture I	3 Credits
	ARTZ 271A - Printmaking I	3 Credits
	ARTZ 284A - Photo I-Techs and Processes	3 Credits
Minimum Required Grade: C		18 Total Credits Required

Beginning Art History And Criticism

Rule: All Courses Required

—	Course	Credits
	ARTH 200H - Art of World Civilization I	3 Credits
	ARTH 201H - Art of World Civilization II	3 Credits
	ARTH 250L - Introduction to Art Criticism	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Upper Division Studio Courses

Rule: 12 Credits of Upper Division (300-400 Level) Courses Are Required

—	Course	Credits
	ARTZ 311 - Drawing II	3 Credits
	ARTZ 321 - Painting II	3 Credits
	ARTZ 331 - Ceramics II	3 Credits
	ARTZ 335 - Clay and Glaze	3 Credits
	ARTZ 351 - Sculpture II	3 Credits
	ARTZ 371 - Printmaking II	3 Credits
	ARTZ 372 - Printmaking II- Lithography	3 Credits
	ARTZ 384 - Photo II-Theory, Crit, Prctice	3 Credits
	ARTZ 385 - The Art of Digital Photography	3 Credits

ARTZ 391 - Special Topics	1 To 9 Credits
ARTZ 398 - Internship	1 To 12 Credits
ARTZ 410 - Advanced Research- Drawing	3 Credits
ARTZ 420 - Advanced Research- Painting	3 Credits
ARTZ 430 - Advanced Research- Ceramics	3 Credits
ARTZ 451 - Advanced Research- Sculpture	3 Credits
ARTZ 470 - Advanced Research- Printmaking	3 Credits
ARTZ 484 - Photo III- Studio Projects	3 Credits
ARTZ 486 - Advanced Research- Photography	3 Credits
ARTZ 491 - Special Topics	1 To 6 Credits
ARTZ 492 - Independent Study	2 To 6 Credits
ARTZ 494 - Seminar- Professional Prctices	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Upper Division Art History

Rule: 6 credits in Upper Division (300-400 Level) Courses are Required

Course	Credits
ARTH 333H - Architectural History I	3 Credits
ARTH 391 - Special Topics	1 To 6 Credits
ARTH 402H - Greek Art & Architecture	3 Credits
ARTH 407 - Roman and Early Christian Art	3 Credits
ARTH 425 - Art of the Renaissance	3 Credits
ARTH 430 - 19th Century Art	3 Credits
ARTH 433H - Acient American Art	3 Credits
ARTH 434H - Latin American Art	3 Credits
ARTH 435Y - Art of the United States	3 Credits

	ARTH 436 - The History of Women in Art	3 Credits
	ARTH 440 - 20th Century Art	3 Credits
	ARTH 450 - Renaissance Theory & Criticism	3 Credits
	ARTH 458 - Adv Research in Art History	2 To 6 Credits
	ARTH 459 - Advanced Research Art Crit	3 To 6 Credits
	ARTH 464 - African Art	3 Credits
	ARTH 465 - Spanish Art	3 Credits
	ARTH 491 - Special Topics	1 To 6 Credits
	ARTH 494 - Sem Art Hist & Crit	3 Credits
	ARTH 498 - Internship	1 To 6 Credits
Minimum Required Grade: C		6 Total Credits Required

Upper Division Art Criticism

Rule: The following course is required

Course	Credits
ARTH 350 - Contemp Art and Art Criticism	3 Credits
Minimum Required Grade: C	
3 Total Credits Required	

18 Additional Upper Division (300-400 Level) Credits

Rule: May Be In Any Subject- Student's Choice Of Courses

Note: Any 300-400 level courses may be used to satisfy this requirement.

Minimum Required Grade: C

18 Total Credits Required

Art Education Licensure Requirements

Rule: The Art Education Licensure is earned through taking classes in both the School of Art and the Phyllis J. Washington College of Education and Human Sciences. Students complete their BA or BFA in Art in conjunction with courses required from the College of Education. A student must be accepted into the College of Education.

Note: Montana Teaching Certification in Art K-12 requires a BA or BFA in Art with a specialization in Art Education, which extends beyond the 120-credit limit, or an MA in Curriculum and Instruction with the required undergraduate credits for teacher certification in art. Students earning a BA or a BFA in Art must also take ARTZ 402 Teaching Art I -- K-12 , ARTZ 403 Teaching Art II -- K-12 as well as THTR 239 or

DANC 497. In addition student are required to take 35 credits of EDU classes as well as HHP 233 Health Issues for Children & Adolescents, and a Native American Studies Course. Please see the College of Education and Human Sciences degree builder for more details.

—	Course	Credits
	ARTZ 402 - Teaching Art I-- K-12	3 Credits
	ARTZ 403 - Teaching Art II-- K-12	3 Credits
	Minimum Required Grade: C	6 Total Credits Required

Fine Arts B.F.A.

Bachelor of Fine Arts - Art

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 75

Required Cumulative GPA: 3.0

Lower Division Requirements

Rule: All Courses Are Required Unless Waived Via Departmental Advanced Placement Policy

Note: Students seeking the Bachelor of Fine Arts degree with a major in Art must complete 36 credits of lower division art courses: Studio Art Fundamentals, 9; Beginning Art History, 6; Introductory Art Criticism, 3; Photography, 3; Ceramics, 3; Printmaking 3; Sculpture, 3; Painting, 3; Drawing, 3;

Minimum Required Grade: C

36 Total Credits Required

Studio Art Fundamentals

Rule: All Courses Required Unless Waived Via Deaprtmental Advanced Placement Policy

—	Course	Credits
	ARTZ 105A - Visual Language - Drawing	3 Credits
	ARTZ 106A - Visual Language - 2-D Fndtns	3 Credits

ARTZ 108A - Visual Language - 3-D Fndtns	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Studio I Courses

Rule: All Courses Required

Course	Credits
ARTZ 211A - Drawing I	3 Credits
ARTZ 221A - Painting I	3 Credits
ARTZ 231A - Ceramics I	3 Credits
ARTZ 251A - Sculpture I	3 Credits
ARTZ 271A - Printmaking I	3 Credits
ARTZ 284A - Photo I-Techs and Processes	3 Credits
Minimum Required Grade: C	18 Total Credits Required

Begining Art History And Criticism

Rule: All Courses Required

Course	Credits
ARTH 200H - Art of World Civilization I	3 Credits
ARTH 201H - Art of World Civilization II	3 Credits
ARTH 250L - Introduction to Art Criticism	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Upper Division Studio Courses I

Rule: 12 Credits of Upper Division (300-400 Level) Courses Inside Area Of Concentration Are Required

Course	Credits
ARTZ 311 - Drawing II	3 Credits
ARTZ 321 - Painting II	3 Credits

	ARTZ 331 - Ceramics II	3 Credits
	ARTZ 335 - Clay and Glaze	3 Credits
	ARTZ 351 - Sculpture II	3 Credits
	ARTZ 371 - Printmaking II	3 Credits
	ARTZ 372 - Printmaking II- Lithography	3 Credits
	ARTZ 384 - Photo II-Theory, Crit, Prctice	3 Credits
	ARTZ 385 - The Art of Digital Photography	3 Credits
	ARTZ 391 - Special Topics	1 To 9 Credits
	ARTZ 398 - Internship	1 To 12 Credits
	ARTZ 410 - Advanced Research- Drawing	3 Credits
	ARTZ 420 - Advanced Research- Painting	3 Credits
	ARTZ 430 - Advanced Research- Ceramics	3 Credits
	ARTZ 451 - Advanced Research- Sculpture	3 Credits
	ARTZ 470 - Advanced Research- Printmaking	3 Credits
	ARTZ 484 - Photo III- Studio Projects	3 Credits
	ARTZ 486 - Advanced Research- Photography	3 Credits
	ARTZ 491 - Special Topics	1 To 6 Credits
	ARTZ 492 - Independent Study	2 To 6 Credits
	ARTZ 498 - Internship	1 To 12 Credits
Minimum Required Grade: C		12 Total Credits Required

Upper Division Studio Courses

Rule: 12 Credits of Upper Division (300-400 Level) Courses Outside Area Of Concentration Are Required

	Course	Credits
	ARTZ 311 - Drawing II	3 Credits
	ARTZ 321 - Painting II	3 Credits

ARTZ 331 - Ceramics II	3 Credits
ARTZ 335 - Clay and Glaze	3 Credits
ARTZ 351 - Sculpture II	3 Credits
ARTZ 371 - Printmaking II	3 Credits
ARTZ 372 - Printmaking II- Lithography	3 Credits
ARTZ 384 - Photo II-Theory, Crit, Prctice	3 Credits
ARTZ 385 - The Art of Digital Photography	3 Credits
ARTZ 388 - Alternative Process Photog	3 Credits
ARTZ 391 - Special Topics	1 To 9 Credits
ARTZ 398 - Internship	1 To 12 Credits
ARTZ 410 - Advanced Research- Drawing	3 Credits
ARTZ 420 - Advanced Research- Painting	3 Credits
ARTZ 430 - Advanced Research- Ceramics	3 Credits
ARTZ 451 - Advanced Research- Sculpture	3 Credits
ARTZ 470 - Advanced Research- Printmaking	3 Credits
ARTZ 484 - Photo III- Studio Projects	3 Credits
ARTZ 486 - Advanced Research- Photography	3 Credits
ARTZ 491 - Special Topics	1 To 6 Credits
ARTZ 492 - Independent Study	2 To 6 Credits
ARTZ 498 - Internship	1 To 12 Credits
Minimum Required Grade: C	12 Total Credits Required

Upper Division Art History

Rule: 6 Credits in Upper Division (300-400 Level) Courses are Required

Course	Credits
ARTH 333H - Architectural History I	3 Credits

	ARTH 391 - Special Topics	1 To 6 Credits
	ARTH 402H - Greek Art & Architecture	3 Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	ARTH 425 - Art of the Renaissance	3 Credits
	ARTH 430 - 19th Century Art	3 Credits
	ARTH 433H - Ancient American Art	3 Credits
	ARTH 434H - Latin American Art	3 Credits
	ARTH 435Y - Art of the United States	3 Credits
	ARTH 436 - The History of Women in Art	3 Credits
	ARTH 440 - 20th Century Art	3 Credits
	ARTH 450 - Renaissance Theory & Criticism	3 Credits
	ARTH 458 - Adv Research in Art History	2 To 6 Credits
	ARTH 459 - Advanced Research Art Crit	3 To 6 Credits
	ARTH 464 - African Art	3 Credits
	ARTH 465 - Spanish Art	3 Credits
	ARTH 491 - Special Topics	1 To 6 Credits
	ARTH 494 - Sem Art Hist & Crit	3 Credits
	ARTH 498 - Internship	1 To 6 Credits
Minimum Required Grade: C		6 Total Credits Required

Upper Division Art Criticism

Rule: The following course is required

—	Course	Credits
	ARTH 350 - Contemp Art and Art Criticism	3 Credits
Minimum Required Grade: C		3 Total Credits Required

18 Additional Upper Division (300-400 Level) Credits

Rule: May Be In Any Subject- Student's Choice Of Courses

Note: Any 300-400 level courses may be used to satisfy this requirement.

Minimum Required Grade: C

18 Total Credits Required

Art Education Licensure Requirements

Rule: The Art Education Licensure is earned through taking classes in both the School of Art and the Phyllis J. Washington College of Education and Human Sciences. Students complete their BA or BFA in Art in conjunction with courses required from the College of Education. A student must be accepted into the College of Education.

Note: Montana Teaching Certification in Art K-12 requires a BA or BFA in Art with a specialization in Art Education, which extends beyond the 120-credit limit, or an MA in Curriculum and Instruction with the required undergraduate credits for teacher certification in art. Students earning a BA or a BFA in Art must also take ARTZ 402 Teaching Art 1 -- K-12 , ARTZ 403 Teaching Art II -- K-12 as well as THTR 239 or DANC 497. In addition student are required to take 35 credits of EDU classes as well as HHP 233 Health Issues for Children & Adolescents, and a Native American Studies Course. Please see the College of Education and Human Sciences degree builder for more details.

Course	Credits
ARTZ 402 - Teaching Art I-- K-12	3 Credits
ARTZ 403 - Teaching Art II-- K-12	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Senior Thesis Capstone

Rule: All courses are required

Course	Credits
ARTZ 494 - Seminar- Professional Prctices	3 Credits
ARTZ 499 - Senior Thesis/Capstone	3 Credits
Minimum Required Grade: C	6 Total Credits Required

Teaching Art B.A.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program
- Licensure Degree Requirements

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Art; Track: Teaching Art

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 66

Required Cumulative GPA: 3.0

Lower Division Requirements

Rule: All Courses Are Required Unless Waived Via Departmental Advanced Placement Policy

Note: Students seeking the Bachelor of Arts degree with a major in Art must complete 36 credits of lower division art courses: Studio Art Fundamentals, 9; Beginning Art History, 6; Introductory Art Criticism, 3; Photography, 3; Ceramics, 3; Printmaking 3; Sculpture, 3; Painting, 3; Drawing, 3;

Minimum Required Grade: C

36 Total Credits Required

Studio Art Fundamentals

Rule: All Courses Required Unless Waived Via Departmental Advanced Placement Policy

Course	Credits
ARTZ 105A - Visual Language - Drawing	3 Credits
ARTZ 106A - Visual Language - 2-D Fndtns	3 Credits
ARTZ 108A - Visual Language - 3-D Fndtns	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Studio I Courses

Rule: All Courses Required

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Course	Credits
ARTZ 211A - Drawing I	3 Credits
ARTZ 221A - Painting I	3 Credits
ARTZ 231A - Ceramics I	3 Credits
ARTZ 251A - Sculpture I	3 Credits
ARTZ 271A - Printmaking I	3 Credits
ARTZ 284A - Photo I-Techs and Processes	3 Credits
Minimum Required Grade: C	18 Total Credits Required

Beginning Art History And Criticism

Rule: All Courses Required

Course	Credits
ARTH 200H - Art of World Civilization I	3 Credits
ARTH 201H - Art of World Civilization II	3 Credits
ARTH 250L - Introduction to Art Criticism	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Upper Division Studio Courses

Rule: 12 Credits of Upper Division (300-400 Level) Courses Are Required

Course	Credits
ARTZ 311 - Drawing II	3 Credits
ARTZ 321 - Painting II	3 Credits
ARTZ 331 - Ceramics II	3 Credits
ARTZ 335 - Clay and Glaze	3 Credits
ARTZ 351 - Sculpture II	3 Credits
ARTZ 371 - Printmaking II	3 Credits
ARTZ 372 - Printmaking II- Lithography	3 Credits

	ARTZ 384 - Photo II-Theory, Crit, Prctice	3 Credits
	ARTZ 385 - The Art of Digital Photography	3 Credits
	ARTZ 391 - Special Topics	1 To 9 Credits
	ARTZ 398 - Internship	1 To 12 Credits
	ARTZ 410 - Advanced Research- Drawing	3 Credits
	ARTZ 420 - Advanced Research- Painting	3 Credits
	ARTZ 430 - Advanced Research- Ceramics	3 Credits
	ARTZ 451 - Advanced Research- Sculpture	3 Credits
	ARTZ 470 - Advanced Research- Printmaking	3 Credits
	ARTZ 484 - Photo III- Studio Projects	3 Credits
	ARTZ 486 - Advanced Research- Photography	3 Credits
	ARTZ 491 - Special Topics	1 To 6 Credits
	ARTZ 492 - Independent Study	2 To 6 Credits
	ARTZ 494 - Seminar- Professional Prctices	3 Credits
	Minimum Required Grade: C	12 Total Credits Required

Upper Division Art History

Rule: 6 Credits in Upper Division (300-400 Level) Courses are Required

—	Course	Credits
	ARTH 333H - Architectural History I	3 Credits
	ARTH 391 - Special Topics	1 To 6 Credits
	ARTH 402H - Greek Art & Architecture	3 Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	ARTH 425 - Art of the Renaissance	3 Credits
	ARTH 430 - 19th Century Art	3 Credits

	ARTH 433H - Acient American Art	3 Credits
	ARTH 434H - Latin American Art	3 Credits
	ARTH 435Y - Art of the United States	3 Credits
	ARTH 436 - The History of Women in Art	3 Credits
	ARTH 440 - 20th Century Art	3 Credits
	ARTH 450 - Renaissance Theory & Criticism	3 Credits
	ARTH 458 - Adv Research in Art History	2 To 6 Credits
	ARTH 459 - Advanced Research Art Crit	3 To 6 Credits
	ARTH 464 - African Art	3 Credits
	ARTH 465 - Spanish Art	3 Credits
	ARTH 491 - Special Topics	1 To 6 Credits
	ARTH 494 - Sem Art Hist & Crit	3 Credits
	ARTH 498 - Internship	1 To 6 Credits
Minimum Required Grade: C		6 Total Credits Required

Upper Division Art Criticism

Rule: The Following Course is Required

—	Course	Credits
	ARTH 350 - Contemp Art and Art Criticism	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Art Education Courses

Rule: All courses are required

Note: ARTZ 402 must be taken prior to ARTZ 403. Students can choose to take either DANC 497 or THTR 239A

—	Course	Credits
	ARTZ 402 - Teaching Art I-- K-12	3 Credits
	ARTZ 403 - Teaching Art II-- K-12	3 Credits

DANC 497 - Methods: Tchng Movmnt in Schls	3 Credits
THTR 239A - Creative Drama/Dance: K-8	2 Credits
Minimum Required Grade: C	9 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Art B.F.A.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Fine Arts - Art; Track: Teaching Art

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 75

Required Cumulative GPA: 3.0

Lower Division Requirements

Rule: All Courses Are Required Unless Waived Via Departmental Advanced Placement Policy

Note: Students seeking the Bachelor of Fine Arts degree with a major in Art must complete 36 credits of lower division art courses: Studio Art Fundamentals, 9; Beginning Art History, 6; Introductory Art Criticism, 3; Photography, 3; Ceramics, 3; Printmaking 3; Sculpture, 3; Painting, 3; Drawing, 3;

Minimum Required Grade: C

36 Total Credits Required

Studio Art Fundamentals

Rule: All Courses Required Unless Waived Via Departmental Advanced Placement Policy

—	Course	Credits
	ARTZ 105A - Visual Language - Drawing	3 Credits
	ARTZ 106A - Visual Language - 2-D Fndtns	3 Credits
	ARTZ 108A - Visual Language - 3-D Fndtns	3 Credits
Minimum Required Grade: C		9 Total Credits Required

Studio I Courses

Rule: All Courses Required

—	Course	Credits
	ARTZ 211A - Drawing I	3 Credits
	ARTZ 221A - Painting I	3 Credits
	ARTZ 231A - Ceramics I	3 Credits
	ARTZ 251A - Sculpture I	3 Credits
	ARTZ 271A - Printmaking I	3 Credits
	ARTZ 284A - Photo I-Techs and Processes	3 Credits
Minimum Required Grade: C		18 Total Credits Required

Beginning Art History And Criticism

Rule: All Courses Required

—	Course	Credits
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ARTH 200H - Art of World Civilization I	3 Credits
ARTH 201H - Art of World Civilization II	3 Credits
ARTH 250L - Introduction to Art Criticism	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Upper Division Studio Courses I

Rule: 12 Credits of Upper Division (300-400 Level) Courses Inside Area Of Concentration Are Required

Course	Credits
ARTZ 311 - Drawing II	3 Credits
ARTZ 321 - Painting II	3 Credits
ARTZ 331 - Ceramics II	3 Credits
ARTZ 335 - Clay and Glaze	3 Credits
ARTZ 351 - Sculpture II	3 Credits
ARTZ 371 - Printmaking II	3 Credits
ARTZ 372 - Printmaking II- Lithography	3 Credits
ARTZ 384 - Photo II-Theory, Crit, Prctice	3 Credits
ARTZ 385 - The Art of Digital Photography	3 Credits
ARTZ 391 - Special Topics	1 To 9 Credits
ARTZ 398 - Internship	1 To 12 Credits
ARTZ 410 - Advanced Research- Drawing	3 Credits
ARTZ 420 - Advanced Research- Painting	3 Credits
ARTZ 430 - Advanced Research- Ceramics	3 Credits
ARTZ 451 - Advanced Research- Sculpture	3 Credits
ARTZ 470 - Advanced Research- Printmaking	3 Credits
ARTZ 484 - Photo III- Studio Projects	3 Credits
ARTZ 486 - Advanced Research- Photography	3 Credits

ARTZ 491 - Special Topics	1 To 6 Credits
ARTZ 492 - Independent Study	2 To 6 Credits
ARTZ 498 - Internship	1 To 12 Credits
Minimum Required Grade: C	12 Total Credits Required

Upper Division Studio Courses

Rule: 12 Credits of Upper Division (300-400 Level) Courses Outside Area Of Concentration Are Required

Course	Credits
ARTZ 311 - Drawing II	3 Credits
ARTZ 321 - Painting II	3 Credits
ARTZ 331 - Ceramics II	3 Credits
ARTZ 335 - Clay and Glaze	3 Credits
ARTZ 351 - Sculpture II	3 Credits
ARTZ 371 - Printmaking II	3 Credits
ARTZ 372 - Printmaking II- Lithography	3 Credits
ARTZ 384 - Photo II-Theory, Crit, Prctice	3 Credits
ARTZ 385 - The Art of Digital Photography	3 Credits
ARTZ 388 - Alternative Process Photog	3 Credits
ARTZ 391 - Special Topics	1 To 9 Credits
ARTZ 398 - Internship	1 To 12 Credits
ARTZ 410 - Advanced Research- Drawing	3 Credits
ARTZ 420 - Advanced Research- Painting	3 Credits
ARTZ 430 - Advanced Research- Ceramics	3 Credits
ARTZ 451 - Advanced Research- Sculpture	3 Credits
ARTZ 470 - Advanced Research- Printmaking	3 Credits
ARTZ 484 - Photo III- Studio Projects	3 Credits

	ARTZ 486 - Advanced Research- Photography	3 Credits
	ARTZ 491 - Special Topics	1 To 6 Credits
	ARTZ 492 - Independent Study	2 To 6 Credits
	ARTZ 498 - Internship	1 To 12 Credits
Minimum Required Grade: C		12 Total Credits Required

Upper Division Art History

Rule: 6 Credits in Upper Division (300-400 Level) Courses are Required

—	Course	Credits
	ARTH 333H - Architectural History I	3 Credits
	ARTH 391 - Special Topics	1 To 6 Credits
	ARTH 402H - Greek Art & Architecture	3 Credits
	ARTH 407 - Roman and Early Christian Art	3 Credits
	ARTH 425 - Art of the Renaissance	3 Credits
	ARTH 430 - 19th Century Art	3 Credits
	ARTH 433H - Ancient American Art	3 Credits
	ARTH 434H - Latin American Art	3 Credits
	ARTH 435Y - Art of the United States	3 Credits
	ARTH 436 - The History of Women in Art	3 Credits
	ARTH 440 - 20th Century Art	3 Credits
	ARTH 450 - Renaissance Theory & Criticism	3 Credits
	ARTH 458 - Adv Research in Art History	2 To 6 Credits
	ARTH 459 - Advanced Research Art Crit	3 To 6 Credits
	ARTH 464 - African Art	3 Credits
	ARTH 465 - Spanish Art	3 Credits
	ARTH 491 - Special Topics	1 To 6 Credits

	ARTH 494 - Sem Art Hist & Crit	3 Credits
	ARTH 498 - Internship	1 To 6 Credits
Minimum Required Grade: C		6 Total Credits Required

Upper Division Art Criticism

Rule: The following course is required

—	Course	Credits
	ARTH 350 - Contemp Art and Art Criticism	3 Credits
Minimum Required Grade: C		3 Total Credits Required

Art Education Courses

Rule: All courses are required.

Note: ARTZ 402 must be taken prior to ARTZ 403. Students can choose to take either DANC 497 or THTR 239A.

—	Course	Credits
	ARTZ 402 - Teaching Art I-- K-12	3 Credits
	ARTZ 403 - Teaching Art II-- K-12	3 Credits
	DANC 497 - Methods: Tchng Movmnt in Schls	3 Credits
	THTR 239A - Creative Drama/Dance: K-8	2 Credits
Minimum Required Grade: C		9 Total Credits Required

Senior Thesis Capstone

Rule: All courses are required

—	Course	Credits
	ARTZ 494 - Seminar- Professional Prctices	3 Credits
	ARTZ 499 - Senior Thesis/Capstone	3 Credits
Minimum Required Grade: C		6 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for

student teaching.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching.

Media Arts

Mark Shogren, Director

The School of Media Arts has degree programs at both undergraduate and graduate levels. The undergraduate program offers a B.A. degree that consists of a uniquely integrated curriculum centered in digital technology as a storytelling and artistic medium. The course of instruction is comprehensive and combines the areas of digital filmmaking and integrated digital media. The undergraduate program also offers a B.F.A. degree with specializations in Digital Filmmaking, Integrated Digital Media, Animation, and Sonic Arts. The graduate program offers an M.F.A., which provides an intensive, dedicated program in either Digital Filmmaking or Integrated Digital Media. The Digital Filmmaking track offers the student comprehensive training in the areas of writing, directing and editing. The Integrated Digital Media track focuses on the areas of digital compositing, digital image design, animation, and interactive digital media. In addition, the School has a comprehensive Media Arts Minor program and a substantial number of on-line courses and elective summer classes that provide students the opportunity to enhance the artistic part of their educational experience. For more information on the academic programs and to experience the creative work of Media Arts undergraduate and graduate students please visit our website at: <http://www.umt.edu/mediaarts>.

Department Faculty

Course Descriptions

Media Arts-Filmmaking

- **MAR 252 - Screenwriting**

Credits: 3. Offered autumn. Prereq., Media Arts Major. Intermediate level writing class devoted to short films, with an emphasis on writing camera-ready scripts for spring production. Feature film structure and techniques also discussed.

- **MAR 335 - Experimental Animation**

Credits: 3. Offered Spring. This course focuses on the development and creation of experimental animation projects using traditional stop motion animation techniques such as hand drawn, silhouette, object and clay. Projects created in this class may have elements created using iStopmotion, Dragonframe and other digital capture platforms. Open to Media Arts majors only.

- **MAR 415 - Short Form Screenwriting**

Credits: 3. Offered Autumn. Media Arts majors only. Intermediate level writing class devoted to short films, with an emphasis on writing camera-ready scripts for spring production. Feature film structure and techniques are also discussed.

- **MAR 442 - Experimental Film**

Credits: 3. Offered autumn. Media Arts majors only. Surveying a wide range of experimental cinema (film/video) from the 1920's to the present with the central focus being artistic practice in the context of historic and cultural concerns. Students will also create projects focusing on

exploring film/video both as a form of personal expression and as a medium, rather than as mass entertainment.

- **MAR 443 - Documentary**

Credits: 3. Offered autumn. Designed to bring together Film Studies students (theorists) and Media Arts students (filmmakers) so they may draw from their respective fields to collaborate on the production of documentaries. After exposure to both documentary history and criticism, students will be required to work with a team of producers in learning the basic skills involved in documentary production.

- **MAR 456 - Directing**

Credits: 3. Offered autumn. Media Arts majors only. Developing, directing and editing a five to seven minute fiction movie. In depth work on creation of shooting script, casting, work with actors and location work. Emphasis on collaborative process and diligence and preparation in all levels of production.

- **MAR 470 - Adv. Acting for Film I**

Credits: 3. Offered autumn. The class introduces the student to acting techniques needed to work competently in realistic film work. It consists of acting in several exercises and scenes shot in the studio, as well as research into different film acting styles.

- **MAR 471 - Adv. Acting for Film II**

Credits: 3. Offered spring. A project-based course that combines actors and directors in the collaborative creation of a short fiction film.

Media Arts

- **MART 101L - Intro to Media Arts**

Credits: 3. Offered every term. Overview of the media arts and their interaction, integration and development in the creation of story beginning with the early years of photography and movie-making through the introduction of radio and television up to the digital revolution. **Course Attributes:** Literary & Artistic Stds Crse

- **MART 102 - Digital Technology in the Arts**

Credits: 3. Offered every term. An introduction to the relationship between aesthetics and the emerging capacities of digital technology. The course will explore the basic evolution of hardware, system software, and the Internet and will present a brief history of the pioneers of both traditional and digital art. It will also look at contemporary and emerging trends in the artistic application of digital technology.

- **MART 111A - Integrated Digital Art**

Credits: 3. Offered every term. A project-oriented editing and design course that focuses on artistic expression and its relationship to digital technology. Using Adobe Photoshop and Adobe After Effects, students will create audio/visual work in both the still image and time based mediums. **Course Attributes:** Expressive Arts Course

- **MART 112A - Introduction to Film Editing**

Credits: 3. Offered every term. Study of the history, process and philosophy of narrative film/video editing and an introduction to Final Cut nonlinear editing software. **Course Attributes:** Expressive Arts Course

- **MART 230 - Introduction to Still Image**

Credits: 3. Offered every term. This course provides a thorough introduction to the practices of capturing digital still imagery through scanning, photography, internet acquisition and mobile devices. Emphasis on content, composition, and digital manipulation of images is applied through the creation of various still-image projects. Digital capture techniques, project planning, narrative, and the integration of various forms of digital design are fundamental components of this course.

- **MART 235 - Fundamentals of Type**

Credits: 3. Offered every semester. This course is a study of the design and use of basic letterforms, anatomical features, hierarchy of information, major type families and characteristics, and the understanding of typographic grids. Students will learn the historical significance of letterforms and their origins to help fully understand how to use typography correctly within their works and designs. Students will gain experience in the art of typesetting and typographic layout, and learn the necessary skills for expressive typography, conceptual thinking and effective communication.

- **MART 255 - Intro Photshp Media Arts**

Credits: 3. Offered every term. Online Course. An introduction to the basic principles and techniques of still image design and manipulation using Adobe Photoshop. This project-based course demystifies the powerful Photoshop toolsets and workspace and enables students to actualize their ideas by helping them to develop an efficient production process.

- **MART 256 - Illustrator: Vector and Layout Design**

Credits: 3. Offered every term. An introduction to the basic principles and techniques of still image design and manipulation using Adobe Illustrator, the industry leading application for creating vector-based content. This project-based course demystifies the powerful Illustrator toolsets and workspace and enables students to actualize their ideas by helping them to develop an efficient production process. No prerequisites required.

- **MART 300 - Visions of Film**

Credits: 3. Offered spring. Media Arts majors only. Study of major film theories that led to the constitution of visual film language and their application in contemporary film narrative and direction. **Course Attributes:** Writing Course-Intermediate

- **MART 301 - Media Arts Practices**

Credits: 1 TO 6. (R-6) Offered autumn. Prereq., Media Arts majors only. Practical application of the principles of production through work on graduate and upper level undergraduate projects, either as a crew member, production manager, designer, editor, director of photography or actor.

- **MART 302 - Intro to Motion Design**

Credits: 3. Offered spring. Media Arts majors only. This project-oriented course will introduce students to the basic technical and aesthetic components of digital motion design using the industry standard software programs Photoshop and After Effects.

- **MART 304 - Modern Horror Film**

Credits: 3. Offered every term. Online Course. This class explores the changing landscape of the horror film since 1960, studying the movies in filmic terms (Acting, Directing, Cinematography, Music, etc.) and sociological importance. Through online discussions, selected readings, multimedia projects, and video lectures, we will seek to understand the often-controversial genre of horror.

- **MART 305 - 3D Animation I**

Credits: 3. Offered Autumn. This course is an introduction to fundamental concepts, principles, and practices of 3D digital modeling with Maya. Students will develop 3D modeling techniques, including production of geometric and organic objects. Through lectures, tutorials, in-class exercises and projects, students will be exposed to various techniques that may be used for innovative and artistic content such as filmic animation and compositing. Open to Media Arts majors only.

- **MART 320 - Art of Photoshop**

Credits: 3. Offered every term. Online Course. Pre-requisite MAR 230 or consent of instructor. This course provides an understanding of the use of Photoshop as an artistic tool. Exercises and projects will explore areas of customizing & combining tools, depth & perspective, and graphic elements (including text & paths), and will be based on effective production techniques, project planning, and the artistic principles of color theory, content, and layering.

- **MART 323 - 3D Motion Design I**

Credits: 3. Offered autumn. Media Arts majors only. Introduction to fundamental concepts, principles and practices of digital compositing and rendering in order to establish a common aesthetic and technical language necessary to develop quality time-based art and design.

- **MART 324 - Stop Motion Animation**

Credits: 3. Offered winter and summer sessions. Guides students through the active creation of several individual stop motion animation projects while developing their knowledge and expertise in traditional stop motion animation techniques using modern computing technology.

- **MART 325 - Introduction to Animation**

Credits: 3. Offered spring. Media Arts majors only. Introduction to two-dimensional digital animation, focusing on character and motion design animation fundamentals including: cell animation (frame by frame), motion-tweening, working with key frames and motion paths, moving elements on a 2D stage, object choreography and text animation.

- **MART 327 - Intro to Cinematography**

Credits: 3. Offered spring. Media Arts majors only. Preliminary study of digital cinematography including color theory, composition, lens choice, continuity, camera movement/support, lighting for film and video, and grip in both studio and location situations.

- **MART 332 - Introduction to Film Scoring**

Credits: 3. Media Arts / Music Majors only. Intro to Film Scoring focuses on the role of music in movies. It covers composition, orchestration, and dramatic techniques and how they integrate with the elements of dramatic action. Students will analyze iconic movies and scores and working with media arts film students, create two original film scores. Media Arts / Music Majors only.

- **MART 333 - 3D Animation II**

Credits: 3. Offered Spring. Building on the modeling skills learned in 3D Animation I, this course teaches students how to animate, texture map, add visual effects and render. The course will also cover advanced rigging techniques. As a continuation of this series, students will be introduced to animation, dynamics (including particle and fluid systems), and MEL scripting. Open to Media Arts majors only.

- **MART 335 - Experimental Animation**

Credits: 3. Offered spring. This course focuses on the development and creation of experimental animation projects using traditional stop motion animation techniques such as hand drawn, silhouette, object and clay. Projects created in this class may have elements created using iStopmotion, Dragonframe and other digital capture platforms. Open to Media Arts majors only.

- **MART 336 - Directing the Fic Film**

Credits: 3. Offered autumn. Media Arts majors only. Developing, directing and editing a five to seven minute fiction movie. In depth work on creation of shooting script, casting, work with actors and location work. Emphasis on collaborative process and diligence and preparation in all levels of production.

- **MART 340 - Princ of Interactive Media**

Credits: 3. Offered spring. Media Arts majors only. This course is designed to help students gain the skill sets necessary to successfully create work in the constantly evolving internet environment. It covers the fundamentals of website structure, content design and navigation and focuses on directory structure, visual design, user navigation, audio/video integration and domain management.

- **MART 341 - Intro to Web Design**

Credits: 3. Offered every term. Online Course. Students will gain necessary skills in this introduction to the fundamentals of website structure, content design and navigation. Areas of focus will be directory structure, visual design, user navigation, audio/video integration and domain management. This course is open to all university students and geared to non-majors.

- **MART 342 - Art & Sci of Interactive Games**

Credits: 3. Offer every term. Online course. This class is an introduction to the technological achievements and artistic and social impacts involved with the development of interactive games. It will cover the evolution of the gaming profile and the advanced visual, sonic and narrative properties that make interactive games the explosive growth industry that is today.

- **MART 391 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MART 395 - Practicum I**

Credits: 3. Offered every term. This course offers the student the opportunity to apply their media arts skill sets and techniques to a variety of professional level projects that include movies, web site design, and still image design. **Course Attributes:** Internships/Practicums

- **MART 416 - Preproduction for Animation**

Credits: 3. Offered Autumn. This course offers a thorough look at storyboarding/previsuals, idea sketches and writing synopsis, as well as identity and promotion of finished animated works. Promotional imaging, treatments and festival entry work will also be a focus in this class. Open to Media Arts majors only.

- **MART 422 - Digital Compositing II**

Credits: 3. Offered spring. Media Arts majors only. Combines the common aesthetic and technical language with solid design principles. Students immerse themselves in the making of a body of integrated-digital 3D work that explores the technical and aesthetic possibilities of multi-layered x y z plane actualizations.

- **MART 425 - 3D Motion Design II**

Credits: 3. Offered autumn. Media Arts majors only. Advanced techniques of 3D motion graphics and animation.

- **MART 432 - Techniques of Film Scoring**

Credits: 3. Prereq., MART 332. Focuses on the role of music in movies and expands upon the work accomplished in MART 332. It covers composition, orchestration, and harmonic techniques and integrates these with the elements of dramatic action. Students will work with media arts film students to actualize these techniques by creating original film scores of short scenes. The course will include a student project gallery, a peer review area, downloadable videos specific to the curriculum and a wide variety of online resources applicable to the subject matter.

- **MART 440 - Tech Interactive Media Design**

Credits: 3. Offered spring. Media Arts majors only. Pre-requisite MAR 340. Advanced interactive media design class that builds on the foundation of principles taught in MAR 340.

- **MART 445 - Sound for Digital Media**

Credits: 3. Offered spring. Media Arts majors only. This course is targeted at the Integrated Digital Media student and introduces fundamental concepts, principles and practices of digital sound recording and editing. This will enable students to expand their aesthetic by integrating their sonic and visual creative work.

- **MART 446 - Sound for Film**

Credits: 3. Offered spring. Media Arts majors only. This course is targeted at the Digital Filmmaking student and introduces fundamental concepts, principles and practices of digital location sound recording and post-production editing to picture in order to establish a common aesthetic and technical language.

- **MART 450 - Topics in Film/Media Studies**

Credits: 3. Offered spring. Media Arts majors only. Research and exploration of contemporary film, video, digital art and design. Focus on areas of student research both in commercial and non-commercial venues and styles. **Course Attributes:** Writing Course-Upper-Division

- **MART 455 - Visions of Documentary Film**

Credits: 3. Offered spring. Media Arts majors only. Production of short experimental works of non-fiction. Emphasis on pre-production articulation of ideas and goals that lead to competent dramatic footage of actual events and people. Applied concepts: personal point-of-view, metaphor as organizing principle, articulation of subject/thesis, complexity of story, embedded meanings, use of visual motif.

- **MART 457 - Postproduction for Animation**

Credits: 3. Offered Spring. This course covers the principles and techniques of finishing projects/animations. Students will focus on advanced rendering tools and applications, refined editing and titles/credits, enabling students to leave with a well polished finished animation project. Open to Media Arts majors only.

- **MART 491 - Special Topics**

Credits: 1 TO 12. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MART 495 - Practicum II**

Credits: 3. Offered every term. This course offers the student the opportunity to apply their media arts skill sets and techniques to a variety of professional level projects that include movies, web site design, and still image design. **Course Attributes:** Internships/Practicums

- **MART 499 - Senior Project**

Credits: 3. Offered spring. Media Arts majors only. This capstone course gives the student an opportunity to create an integrated senior project which brings together all of the elements of their course of study.

- **MART 500 - Core Research: Digital Technology in the Arts**

Credits: 4. Offered autumn. This course explores the relationship between aesthetics and the emerging capabilities of digital technology. It will cover the historical relationship between science and art up to the end of the 20th century and examine the methodology of critical artistic applications. Level: Graduate

- **MART 508 - Film Production**

Credits: 4. Offered every term.. Introduction to visual composition, photo and video manipulation and layering on the digital platform. Projects begin with static image composition and move to video time-based work using software-compositing programs. Level: Graduate

- **MART 509 - Media Production II**

Credits: 4. Offered spring. Continuation of production and post-production practices and techniques introduced in MAR 508. Level: Graduate

- **MART 510 - Core Research: Narrativity and Experiments in Media**

Credits: 4. Offered spring. This course expands upon the research begun in MAR 500 by exploring the development of emerging 21st century digital technologies and their impact on aesthetics in artistic production. Level: Graduate

- **MART 514 - Advanced Composit Tech**

Credits: 4. Offered spring. This course continues the work begun in MAR 422 by furthering the development of artistic principles and practices and culminates in an in-house presentation of graduate level motion design techniques. Level: Graduate

- **MART 515 - Digital Post-Production**

Credits: 4. Offered spring. Study and application of the principles of editing narrative. Beginning with animated storyboards created from scenes written by the student, the class edits existing footage in action and dialogue scenes. Study of history of editing as well as analysis of classic

editing techniques. Level: Graduate

- **MART 520 - Core Research: Peer Teaching**

Credits: 2. This graduate seminar is designed for prospective graduate teaching assistants and will cover techniques and best practices for both in-class and online delivery. Level: Graduate

- **MART 522 - Intro to Inter Digi Media**

Credits: 4. Offered autumn. Based upon the research developed in MAR 500 and MAR 510, graduate students will explore and begin to develop artistic applications of interactive digital media, which will culminate in a semester end in-house presentation. Level: Graduate

- **MART 523 - Tech in Inter Digi Media**

Credits: 4. Offered spring. This course expands upon the work begun in MAR 522 and will culminate in a semester end public presentation. Level: Graduate

- **MART 524 - Compositing Applications I**

Credits: 4. Offered autumn. Based upon the concepts and principles developed in MAR 422 and MAR 514, graduate students will create a compositing project from pre-production through post-production, which will culminate in a semester end in-house presentation. Level: Graduate

- **MART 525 - Compositing Applic. II**

Credits: 4. Offered spring. This course expands upon the work begun in MAR 524 and culminates in a semester end public presentation. Level: Graduate

- **MART 530 - Core Rsrch: Prof Presentation**

Credits: 3. The purpose of this class is to develop a foundation for your professional media arts practice, to prepare you for seeking career, exhibition, and public presentation opportunities in the field. Level: Graduate

- **MART 557 - Advanced Post-Production**

Credits: 4. Offered Fall. Advanced Post Production is a graduate level course designed to provide students with advanced technical and conceptual instruction in non-linear editing for narrative films. The class provides a platform for engaging in conceptual critiques with their films as they are edited as well as a base for professional certification in the Final Cut Pro Application. Level: Graduate

- **MART 577 - Film Directing I**

Credits: 4. Offered autumn. Study of dramatic action, human psychology, and the patterns of story as applied to script analysis and directing for film. Level: Graduate

- **MART 578 - Graduate Studio**

Credits: 1 TO 6. (R-18) Offered every semester. Each semester students work on individual projects under the supervision of a faculty mentor. Each year begins and ends with a faculty and peer review of projects in progress. Level: Graduate

- **MART 579 - Film Directing III**

Credits: 4. Offered autumn. Continuation of video/film directing techniques at a more advanced level, including the creation of a short film. Level: Graduate

- **MART 580 - Principals of Cinematography**

Credits: 4. Offered autumn. Intermediate study of digital cinematography including color theory, composition, lens choice, continuity, camera movement/support, lighting for film and video, and grip in both studio and location situations. Level: Graduate

- **MART 586 - Screenwriting I**

Credits: 4. Offered autumn. Prereq., MAR 577. Basic development of the short screenplay from idea, through development of characters and action to final shooting script. Level: Graduate

- **MART 587 - Screenwriting II**
Credits: 4. Offered spring. Prereq., MAR 586. Continued work in screenwriting at an advanced level. Level: Graduate
- **MART 591 - Graduate Practicum**
Credits: 3. Offered every term. This course offers the graduate student the opportunity to expand their media arts skill sets and techniques by working on a variety of professional level projects that include movies, web site design, and still image design. Level: Graduate
- **MART 595 - Special Topics**
Credits: 1 TO 6. (R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, and one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums
- **MART 596 - Independent Study**
Credits: 1 TO 6. (R-12) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate
Course Attributes: Service Learning/Volunteer
- **MART 597 - Research**
Credits: 1 TO 12. (R-12) Offered intermittently. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate
- **MART 601 - Final Portfolio Research**
Credits: 3. Offered every semester. Investigation into subjects relevant to the development of the student's Final Portfolio work. Application of qualitative research techniques, with a research presentation or paper due at the end of the semester. Level: Graduate
- **MART 680 - Film Directing IV**
Credits: 4. Offered spring. Prereq., MAR 577, 578, 579. Continued advanced work in directing, including the completion of a short film. Level: Graduate
- **MART 687 - Final Portfolio I**
Credits: 1 TO 12. Offered autumn. Ongoing production and content work relating to thesis projects. Level: Graduate
- **MART 688 - Media Practicum**
Credits: 1 TO 4. (R-12) Offered every term. Pursuit of Practical Experience in Media Arts projects both personal and Professional. Level: Graduate
- **MART 690 - Professional Practices**
Credits: 3. (R-6) Offered every term. Work outside of program in an area of professional interest. Level: Graduate
Course Attributes: Research & Creative Scholarship
- **MART 699 - Final Portfolio II**
Credits: 1 TO 12. Offered spring. Final work on thesis portfolio. Approval by the student's thesis committee is required for graduation. Level: Graduate

Media Arts Minor

The Media Arts minor program offers an integrated curriculum, centered in digital technology as a storytelling medium. The minor is meant to supplement the work of those undergraduate students whose major area of study can be enhanced through the application of Media Arts principles and

technologies and fulfills the prerequisites for those interested in pursuing the B.A. The Media Arts minor is offered both in-class and online. For more information please visit our website at <http://www.umt.edu/mediaarts>.

Minor - Media Arts (Minor)

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Required Courses

Rule: Must complete all.

Course	Credits
MAR 101L - Intro to Media Arts	3 Credits
MAR 112A - Intro to Non-Linear Editing	3 Credits
MART 102 - Digital Technology in the Arts	3 Credits
MART 111A - Integrated Digital Art	3 Credits
Minimum Required Grade: C	12 Total Credits Required

Elective Courses

Rule: Each student must complete 9 additional credits outside of their major that support their work and development in Media Arts. All elective courses need to be approved by the Director of the School of Media Arts.

Note: Students may select from any of the elective Media Arts courses (MAR) offered. These include the online and special topics courses that are offered periodically. In addition, there are a variety of courses offered throughout the College of Visual and Performing Arts. For more information please see the Media Arts Director.

Course	Credits
ARTH 200H - Art of World Civilization I	3 Credits
ARTH 201H - Art of World Civilization II	3 Credits
ARTZ 105A - Visual Language - Drawing	3 Credits
ARTZ 106A - Visual Language - 2-D Fndtns	3 Credits
DANC 100A - Modern Dance I	2 Credits

	DANC 115A - Jazz Dance I	2 Credits
	MAR 304 - Modern Horror Film	3 Credits
	MART 191 - Special Topics	1 To 6 Credits
	MART 255 - Intro Photshp Media Arts	3 Credits
	MART 256 - Intro Illustr for Media Arts	3 Credits
	MART 341 - Intro to Web Design	3 Credits
	MART 342 - Art & Sci of Interactive Games	3 Credits
	MUSE 123 - Techniques: Voice	1 Credits
	MUSI 101L - Enjoyment of Music	3 Credits
	MUSI 108A - Orchestra: UMSO	1 Credits
	MUSI 112 - Choir: UM University Choir	1 Credits
	MUSI 112A - Choir: Chamber Chorale	1 Credits
	MUSI 114A - Band: UM Concert Band	1 Credits
	MUSI 131A - Jazz Ensemble I: UM Jazz Bands	1 Credits
	MUSI 132L - History of Rock & Roll	3 Credits
	MUSI 133L - Cntry Msc: Cowbys, Opry, Nshville	3 Credits
	MUSI 138 - Language of Music I	3 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
	MUSI 207H - World Music (equiv to 307)	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUST 110 - Digital Audio & Multitracking	2 Credits
	THTR 102A - Introduction to Theatre Design	3 Credits
	THTR 120A - Introduction to Acting I	3 Credits
	THTR 121A - Introduction to Acting II	3 Credits

THTR 336 - Costume History	3 Credits
Minimum Required Grade: C	9 Total Credits Required

Media Arts B.A.

The B.A. program provides a uniquely integrated curriculum that combines the areas of Digital Filmmaking and Integrated Digital Media. The courses in Digital Filmmaking focus on the three primary components of pre-production, production and post-production and include directing, writing, sound design, and editing. The courses in Integrated Digital Media focus on the relationship between digital technology and aesthetics and include still image/motion graphics, compositing, 2D animation, sound design and interactive media. History and theory courses in both areas provide students with a deeper understanding of artistic principles and practices. The undergraduate program has a large production space including a green screen area, three computer labs with 60 total stations and an audio recording room. After completion of the prerequisite courses, there is a G.P.A. gate in effect for admission into the Major. For more information on requirements, please see the B.A. program heading under academics or the Media Arts website at <http://www.umt.edu/mediaarts>.

Bachelor of Arts - Media Arts

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Note: Prerequisite courses (MAR 101L, MAR 112A, MART 102, MART 111A) must be completed or be in the process of completion before applying to the B.A. program.

Lower Division Core

Rule: Complete all courses.

Course	Credits
MAR 101L - Intro to Media Arts	3 Credits
MAR 112A - Intro to Non-Linear Editing	3 Credits
MAR 210 - Creation of Media Story	3 Credits
MAR 251 - Dig Video Prod Tech	3 Credits
MART 102 - Digital Technology in the Arts	3 Credits
MART 111A - Integrated Digital Art	3 Credits

MART 221 - Fund of Digital Image Design	3 Credits
Minimum Required Grade: C	21 Total Credits Required

Upper Division Core

Rule: Complete all courses.

Course	Credits
MAR 300 - Visions of Film	3 Credits
MAR 456 - Directing	3 Credits
MART 302 - Intro to Motion Design	3 Credits
MART 325 - Fund of Digital Animation	3 Credits
MART 330 - Principles of Sound Design	3 Credits
MART 340 - Princ of Interactive Media	3 Credits
MART 450 - Topics in Film/Media Studies	3 Credits
Minimum Required Grade: C	24 Total Credits Required

Digital Filmmaking

The Digital Filmmaking curriculum offers an all-inclusive experience in the areas of pre-production, production and post-production with specific courses designed to fully integrate students into the ever-changing digital world of filmmaking.

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Fine Arts - Media Arts; Track: Digital Filmmaking

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.0

Note: B.F.A. Digital Filmmaking.

Prerequisite courses (MAR 101L, MAR 112A, MART 102, MART 111A) must be completed or be in the process of

completion before applying to the B.A. program.

First year requirements of the B.A. program (MAR 210, MAR 251, MAR 300, MART 221, MART 302, MART 325) must be completed or in progress before applying to the B.F.A. Digital Filmmaking program.

Lower Division Core

Rule: Complete all courses.

—	Course	Credits
	MAR 101L - Intro to Media Arts	3 Credits
	MAR 112A - Intro to Non-Linear Editing	3 Credits
	MAR 210 - Creation of Media Story	3 Credits
	MAR 251 - Dig Video Prod Tech	3 Credits
	MAR 252 - Screenwriting	3 Credits
	MART 102 - Digital Technology in the Arts	3 Credits
	MART 111A - Integrated Digital Art	3 Credits
	MART 221 - Fund of Digital Image Design	3 Credits
	Minimum Required Grade: C	24 Total Credits Required

Upper Division Core

Rule: Complete all courses.

—	Course	Credits
	MAR 300 - Visions of Film	3 Credits
	MAR 326 - Intro to Cinematography	3 Credits
	MAR 355 - Directing the Fic Film	3 Credits
	MAR 415 - Short Form Screenwriting	3 Credits
	MAR 442 - Experimental Film	3 Credits
	MAR 446 - Sound for Film	3 Credits
	MAR 455 - Visions of Documentary Film	3 Credits
	MAR 465 - Special Projects	3 Credits

	MART 301 - Media Arts Practices	1 To 6 Credits
	MART 302 - Intro to Motion Design	3 Credits
	MART 325 - Fund of Digital Animation	3 Credits
	MART 330 - Principles of Sound Design	3 Credits
	MART 340 - Princ of Interactive Media	3 Credits
	MART 450 - Topics in Film/Media Studies	3 Credits
	MART 491 - Special Topics	1 To 12 Credits
	MART 499 - Senior Project	3 Credits
Minimum Required Grade: C		48 Total Credits Required

Digital Animation

The Animation curriculum focuses 3D modeling, character animation, motion capture, character rigging, texture and lighting, compositing, etc. Finishing classes in surface texturing, rendering, dynamics, particles and MEL scripting will combine all that students have learned into an animation portfolio that will demonstrate their ability to create professional quality assets for film, television, video games, and more.

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Fine Arts - Media Arts; Track: Digital Animation

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.0

Note: B.F.A. Digital Animation.

Prerequisite courses (MAR 101L, MAR 112A, MART 102, MART 111A) must be completed or be in the process of completion before applying to the B.A. program.

The first year requirements of the B.A. program (MAR 210, MAR 251, MAR 300, MART 221, MART 302, MART 325) must be completed or in progress before applying to the B.F.A. Digital Animation program.

Lower Division Core

Rule: Complete all courses.

—	Course	Credits
	MAR 101L - Intro to Media Arts	3 Credits
	MAR 112A - Intro to Non-Linear Editing	3 Credits
	MAR 210 - Creation of Media Story	3 Credits
	MAR 251 - Dig Video Prod Tech	3 Credits
	MART 102 - Digital Technology in the Arts	3 Credits
	MART 111A - Integrated Digital Art	3 Credits
	MART 221 - Fund of Digital Image Design	3 Credits
Minimum Required Grade: C		21 Total Credits Required

Upper Division Core

Rule: Complete all courses.

—	Course	Credits
	MAR 300 - Visions of Film	3 Credits
	MAR 323 - 3D motion Design	3 Credits
	MAR 326 - Intro to Cinematography	3 Credits
	MAR 465 - Special Projects	3 Credits
	MART 302 - Intro to Motion Design	3 Credits
	MART 305 - 3D Animation I	3 Credits
	MART 325 - Fund of Digital Animation	3 Credits
	MART 330 - Principles of Sound Design	3 Credits
	MART 333 - 3D Animation II	3 Credits
	MART 335 - Experimental Animation	3 Credits
	MART 340 - Princ of Interactive Media	3 Credits
	MART 416 - Preproduction for Animation	3 Credits

	MART 425 - Tech of Digital Animation	3 Credits
	MART 440 - Tech Interactive Media Design	3 Credits
	MART 450 - Topics in Film/Media Studies	3 Credits
	MART 457 - Postproduction for Animation	3 Credits
	MART 499 - Senior Project	3 Credits
Minimum Required Grade: C		51 Total Credits Required

Sonic Arts

The Sonic Arts curriculum offers an in-depth experience in the design, development and production of sonic artwork and provides a platform for students to integrate their work with both filmmaking and integrated digital media.

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Bachelor of Fine Arts - Media Arts; Track: Sonic Arts

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.0

Note: B.F.A. Sonic Arts. Prerequisite courses (MAR 101L, MAR 112A, MART 102, MART 111A) must be completed or be in the process of completion before applying to the B.A. program. The first year requirements of the B.A. program (MAR 210, MAR 251, MAR 300, MART 221, MART 302, MART 325) and MUST 110 and MUST 210 must be completed or in progress before applying to the B.F.A. Sonic Arts program.

Rule: Complete all courses.

Course	Credits
MAR 101L - Intro to Media Arts	3 Credits
MAR 112A - Intro to Non-Linear Editing	3 Credits
MAR 210 - Creation of Media Story	3 Credits
MAR 251 - Dig Video Prod Tech	3 Credits

MART 102 - Digital Technology in the Arts	3 Credits
MART 111A - Integrated Digital Art	3 Credits
MART 221 - Fund of Digital Image Design	3 Credits
MUST 110 - Digital Audio & Multitracking	2 Credits
MUST 210 - Sequencng, Synthesis, Sampling	2 Credits
Minimum Required Grade: C	25 Total Credits Required

Rule: Complete all courses.

Note: Also required: MAR 342: Intro to Film Scoring (offered spring, 3 credits) and MAR 442: Film Scoring Techniques (offered spring, 3 credits)

Course	Credits
MAR 300 - Visions of Film	3 Credits
MAR 446 - Sound for Film	3 Credits
MAR 465 - Special Projects	3 Credits
MART 301 - Media Arts Practices	1 To 6 Credits
MART 302 - Intro to Motion Design	3 Credits
MART 325 - Fund of Digital Animation	3 Credits
MART 330 - Principles of Sound Design	3 Credits
MART 340 - Princ of Interactive Media	3 Credits
MART 440 - Tech Interactive Media Design	3 Credits
MART 445 - Sound for Digital Media	3 Credits
MART 450 - Topics in Film/Media Studies	3 Credits
MART 499 - Senior Project	3 Credits
MUST 310 - Interactivity Digitl Sgnl Proc	2 Credits
MUST 410 - Computer Music Programming	2 Credits
MUST 427 - Mtn Electroacoustc Lptp Ens II	1 Credits
Minimum Required Grade: C	47 Total Credits Required

Integrated Digital Media

Bachelor of Arts - Media Arts; Track: Integrated Digital Media (online)

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 48

Required Cumulative GPA: 2.0

Lower Division Core Courses

Rule: Complete all courses.

Note: Mar 101L, MAR 112A, MART 102, and MART 111A must be completed prior to registering for the higher level courses listed for this degree.

Course	Credits
MAR 101L - Intro to Media Arts	3 Credits
MAR 112A - Intro to Non-Linear Editing	3 Credits
MART 102 - Digital Technology in the Arts	3 Credits
MART 111A - Integrated Digital Art	3 Credits
MART 255 - Intro Photshp Media Arts	3 Credits
MART 256 - Intro Illustr for Media Arts	3 Credits
Minimum Required Grade: C	18 Total Credits Required

Upper Division Core

Rule: Must complete all of the following:courses

Note: MART 340 must be taken prior to registering for MART 440.

Course	Credits
MART 301 - Media Arts Practices	1 To 6 Credits

MART 330 - Principles of Sound Design	3 Credits
MART 340 - Princ of Interactive Media	3 Credits
MART 341 - Intro to Web Design	3 Credits
MART 342 - Art & Sci of Interactive Games	3 Credits
MART 440 - Tech Interactive Media Design	3 Credits
MART 450 - Topics in Film/Media Studies	3 Credits
MART 499 - Senior Project	3 Credits
Minimum Required Grade: C	24 Total Credits Required

Degree Electives

Rule: Must complete 6 credits from the following courses

Note: Other courses within CVPA or other areas may be taken for elective credit upon approval of the director.

Course	Credits
MAR 210 - Creation of Media Story	3 Credits
MAR 251 - Dig Video Prod Tech	3 Credits
MAR 300 - Visions of Film	3 Credits
MART 221 - Fund of Digital Image Design	3 Credits
MART 305 - 3D Animation I	3 Credits
MART 325 - Fund of Digital Animation	3 Credits
MART 332 - Introduction to Film Scoring	3 Credits
MART 333 - 3D Animation II	3 Credits
MART 432 - Techniques of Film Scoring	3 Credits
MUST 110 - Digital Audio & Multitracking	2 Credits
MUST 210 - Sequencng, Synthesis, Sampling	2 Credits
MUST 310 - Interactivity Digitl Sgnl Proc	2 Credits
MUST 410 - Computer Music Programming	2 Credits

MUST 427 - Mtn Electroacoustic Lptp Ens II	1 Credits
Minimum Required Grade: C	6 Total Credits Required

Music

Maxine Ramey, Director

The School of Music offers students who have demonstrated talent in music the opportunity to continue further study either for a profession or an avocation and at the same time acquire a broad general education. Complete sequences of courses are given to prepare a student for a career as a teacher or supervisor of music in the elementary/secondary schools; for a career directed toward composition, the music technology industry, private teaching, or concert work; or, for a thorough training in music within the structure of a broad liberal arts curriculum.

Four year degree programs at the undergraduate level include the Bachelor of Music Education; Bachelor of Music with areas of specialization in performance, piano performance and pedagogy or composition/music technology; and Bachelor of Arts in music. Two year graduate degree programs include the Master of Music with areas of specialization in music education, performance, composition/technology; and musical theater.

The University of Montana-Missoula is an accredited institutional member of the National Association of Schools of Music.

In general, admission as a major in the School of Music is by certificate from the high school from which the student graduates. The faculty of the School of Music is more concerned with evidence of talent, conspicuous achievement in music, promise of development, and scholarship in general than it is in the precise content of the program which the prospective music student has followed prior to admission to the University.

The School of Music welcomes the opportunity for prospective students and parents to consult with faculty and administration by paper and electronic correspondence and/or by appointment interviews on the campus. Every student wishing to become a music major or minor must take the Music Theory Assessment Examination and a Piano Proficiency Evaluation during orientation and also must audition and be accepted officially into the applied studio of a music faculty member prior to confirmation as a fully-admitted major or minor in music. Students may be admitted provisionally for one semester, and at the end of that semester students must reaudition to gain full admittance into a music major degree program

Department Faculty

Professors

Margaret Nichols Baldrige, Professor Violin and Viola
 Anne Basinski, Professor, School of Music - Director, UM Opera Theater - Director, Undergraduate Voice Area
 Fern Glass Boyd, Cello, Music Literature
 Steven Hesla, Keyboard Area Chair
 Stephen Kalm, Dean
 Dr. Robert LedBetter, Director of Percussion Studies
 Luis Millán, Director of Orchestra, Guitar
 Maxine Ramey, Director, School of Music
 Margaret Lund Schuberg, Professor of Flute

Associate Professors

David Cody, Voice, Opera, Musical Theatre
 Jennifer Gookin Cavanaugh, Associate Professor of Oboe & Bassoon

Lori Gray, Associate Professor, Music Education
Kevin Griggs, Director of Marching Band, Trumpet
Christopher Hahn, Professor of Piano and Piano Pedagogy
Kimberly Gratland James, Associate Professor, Voice; Coordinator, MM Vocal Performance Program
James Randall, Associate Professor of Music History
James Smart, Director of Bands, Trumpet

Assistant Professors

Zachary Cooper, Assistant Professor of Horn and Music Theory
David Edmonds, Director of Choral Studies
Johan Eriksson, Assistant Professor of Saxophone and Jazz Studies
Christopher Kirkpatrick, Assistant Professor of Clarinet
Emilie LeBel, Assistant Professor of Composition
Rob Tapper, Professor of Trombone & Director of Jazz Studies

Adjunct Faculty

Jeff Brandt, The Unprofessor
Nancy Cooper, Adjunct Assistant Professor of Music
Elizabeth Crawford, Instructor of Bassoon
John Driscoll, Instructor of Trumpet
Creighton James, Voice
Benedict Kirby, Adjunct Prof. of Tuba & Euphonium
Thomas Pertis, Instructor of Guitar
Amy Smart, Country Music On-line

Course Descriptions

Music-Education

- **MUSE 120 - Techs: String Inst in Class I**
Credits: 1. (R-2) Offered autumn. Group instruction for beginning students on violin, viola, cello and bass, with emphasis on teaching procedures.
- **MUSE 121 - Techs: String Inst in Class II**
Credits: 1. (R-2) Offered spring. Prereq., MUSE 120. Continuation of MUSE 120.
- **MUSE 123 - Techniques: Voice**
Credits: 1. Offered autumn. This course examines vocal function and issues associated with the physical processes of singing such as alignment, breathing, creating sound, amplifying (resonating) sound. Additionally, students will learn basic information about becoming a voice teacher (or choral director). Students will also learn about singers' diction, voice classification, and the appropriate assigning of solo classical repertoire. **Course Attributes:** Expressive Arts Course
Performance Music Course
- **MUSE 126 - Techs: Percussn Instruments I**
Credits: 1. (R-2) Offered autumn. Basic instruction in percussion instruments, with emphasis on teaching procedures.
- **MUSE 127 - Techs: Percussn Instruments II**
Credits: 1. (R-2) Offered spring. Prereq., MUSI 126. Continuation of MUSI 126. Basic instruction in percussion instruments, with emphasis on teaching procedures.
- **MUSE 272 - Techniques: Flute & Single Reed**

Credits: 1. Composers are expected to bring new musical ideas, sketches, and eventually finished pieces to the workshop, while performers are expected to read, critique, practice, and finally perform the new works.

- **MUSE 273 - Techniques: Double Reed**

Credits: 1. (R-2) Offered autumn. Basic instruction in oboe and bassoon, with emphasis on teaching procedures.

- **MUSE 274 - Techniques: Upper Brass**

Credits: 1. (R-2) Offered autumn. Basic instruction in trumpet and horn, with emphasis on teaching procedures.

- **MUSE 275 - Techniques: Lower Brass**

Credits: 1. Offered spring. Basic instruction in trombone, baritone, and tuba, with emphasis on teaching procedures.

- **MUSE 333 - Gen Music Methods & Materls I**

Credits: 2. Offered autumn. Prereq., upper-division standing in music and C&I 200. Development of practical knowledge to effectively instruct and administer general music classes in the public schools, grades K-12.

- **MUSE 334 - Gen Music Methods & Materls II**

Credits: 2. Offered spring. Prereq., upper-division standing in music and C&I 200. Continuation of MUSE 333.

- **MUSE 397 - Methods: K-8 Music**

Credits: 2. Offered autumn and spring. Prereq., C&I 200. Integration of fundamental skills and basic rudiments of music into the various aspects of teaching music creatively in the elementary school. For non-music majors only.

- **MUSE 425 - Technology and Materials**

Credits: 2. Offered autumn semesters, as an elective. The course will provide in-depth examination of technology and print resources appropriate for use in music classrooms K-12, all areas and ensembles. Students will work independently and collaboratively to reflect upon, discuss, and practice utilizing technology and print resources for the music classroom (K-12).

- **MUSE 497 - Methods: Choral & Literature**

Credits: 2. Offered Spring. Prereq., upper-division standing in music and MUSE 123. Development of strategies for directing the secondary choral ensemble. Focus on rehearsal techniques and literature selection for the developing choir.

- **MUSE 521 - Psychology of Music**

Credits: 2. Offered intermittently. Prereq., graduate standing in music. Investigation of the perception, processing and cognition of music. Psychological foundations of musical behavior: psychoacoustics, measurement and prediction of musical ability, functional music, music and society, music learning, and effective response to music. Level: Graduate

- **MUSE 522 - Philosophy of Music**

Credits: 2. Offered intermittently. Prereq., graduate standing in music. An investigation of the meaning of music, the relationship to various societies and social structures and the leading philosophical ideas which relate to music and music instruction. Level: Graduate

- **MUSE 581 - Arts Educ Institute**

Credits: 2. (R-4) Offered summer. Same as ART 581, THTR 581. Open forum with national and regional speakers, panels, and symposia to promote discussion, understanding, and direction on significant national issues in the arts and arts education. Level: Graduate

- **MUSE 582 - Arts Educ Seminar I**

Credits: 1 TO 2. (R-4) Same as CP 582. Offered summers. Topics vary. Level: Graduate

- **MUSE 583 - Arts Educ Seminar II**

Credits: 1 TO 2. (R-4) Prereq., MUSE 582. Same as CP 583. Offered summers. Topics vary. Level: Graduate

- **MUSE 584 - Arts Educ Seminar III**

Credits: 1 TO 2. (R-18) Prereq., MUSE 583. Same as CP 584. Continuation MUSE 583. Level: Graduate

- **MUSE 585 - Arts Educ Seminar IV**

Credits: 1 TO 2. (R-4) Prereq., MUSE 584. Same as CP 585. Continuation of MUSE 584. Level: Graduate

- **MUSE 586 - Arts Educ Seminar V**

Credits: 1 TO 2. (R-8) Offered summer. Prereq., MUSE 585. Same as CP 586. Continuation and synthesis of preceding seminars. Level: Graduate

- **MUSE 588 - Arts Ed Apprenticeship**

Credits: 1 TO 3. (R-24) Offered summer. Same as CP 588. Exploration of art forms to develop new artistic and communicative perceptions and awareness. Level: Graduate

Music

- **MUSI 101L - Enjoyment of Music**

Credits: 3. Offered autumn and spring. The development of music listening skills. Exploration of the relationship between musical materials and the expressive qualities of a musical composition or performance. Concert attendance required. No musical background is expected. For non majors only. Credit not allowed for both MUSI 101L and 202L (MUS 134L and 135L). **Course Attributes:** Literary & Artistic Stds Crse

- **MUSI 102A - Performance Study**

Credits: 1 TO 2. Offered autumn and spring. Prereq., consent of instr. Individual instruction in voice, piano, organ, harpsichord, carillon, string, wind and percussion instruments. A total of 6 credits is allowed in any one performance area. All private instruction requires concurrent ensemble participation. **Course Attributes:** Expressive Arts Course Performance Music Course

- **MUSI 104 - Music Fundamentals**

Credits: 2. Offered autumn. Basic principles of notation, including clefs, scales, intervals, chords and rhythm.

- **MUSI 105 - Music Theory I**

Credits: 2. Offered autumn. Coreq., MUSI 140. Material and structure of music. Application of principles in two-, three-, and four-part writing and the keyboard.

- **MUSI 106 - Music Theory II**

Credits: 2. Offered spring. Prereq., MUSI 105. Coreq., MUSI 141. Continuation of MUSI 105.

- **MUSI 108A - Orchestra: UMSO**

Credits: 1. Offered autumn and spring. See MUSI 112A for repeatability limitations. Open to all University students by audition. Rehearsal and performing experience in a broad range of symphonic, choral, operatic and concerto repertoire in the University Orchestra and the Missoula Symphony. **Course Attributes:** Ensemble Music Course Expressive Arts Course

- **MUSI 110A - Opera Theatre I**

Credits: 1. (R-8) Offered autumn and spring. Prereq., consent of instr. Study and performance of the standard opera repertoire. **Course Attributes:** Ensemble Music Course Expressive Arts Course

- **MUSI 111A - Singing for Non-Majors**
 Credits: 2. Offered autumn and spring. An introduction to the skills which enable and enhance artistic singing. As a group, students work to understand and exercise good tone production, musicality, and performance skills. **Course Attributes:** Expressive Arts Course
- **MUSI 112A - Choir: Chamber Chorale**
 Credits: 1. Offered autumn and spring. Open to all University students. Audition places students according to appropriate ensemble and proper seating/section. Music majors refer to curricula for specific requirements. Non-music majors may apply 8 credits of MUSI 112A-114A, 110A/310, 131A/331, and 122A/322 toward graduation. **Course Attributes:** Ensemble Music Course Expressive Arts Course
- **MUSI 114A - Band: UM Concert Band**
 Credits: 1. Offered autumn and spring. See MUSI 112A for repeatability limitations. Major musical organizations open to all University students. Audition required for Symphonic Wind Ensemble. **Course Attributes:** Ensemble Music Course Expressive Arts Course
- **MUSI 122A - Percussion Ensemble: UM**
 Credits: 1. Offered autumn and spring. See MUSI 112A for repeatability limitations. Prereq., consent of instr. String, woodwind, brass, percussion, piano and vocal ensembles as appropriate to meet student needs. **Course Attributes:** Ensemble Music Course Expressive Arts Course
- **MUSI 123A - World Percussion Ensemble**
 Credits: 1. Offered autumn and spring. See MUS 107A for repeatability limitations. Prereq., consent of instr. String, woodwind, brass, percussion, piano and vocal ensembles as appropriate to meet student needs. **Course Attributes:** Expressive Arts Course
- **MUSI 130L - History of Jazz**
 Credits: 3. Offered autumn. The development of jazz in the 20th century with emphasis on critical listening and the recognition of important trends and people in its history. **Course Attributes:** Literary & Artistic Stds Crse
- **MUSI 131A - Jazz Ensemble I: UM Jazz Bands**
 Credits: 1. (R-8) Offered autumn and spring. Prereq., consent of instr. Study and performance of the jazz repertoire. **Course Attributes:** Ensemble Music Course Expressive Arts Course
- **MUSI 132L - History of Rock & Roll**
 Credits: 3. Offered autumn and spring. A study of the roots, components, and development of the musical art form "Rock and Roll". Significant performing artists and movements with the style identified and presented. Includes traditional lecture with substantial use of audio and visual aids. **Course Attributes:** Literary & Artistic Stds Crse
- **MUSI 133L - Cntry Msc:Cowbys,Opry,Nshville**
 Credits: 3. This course will explore the country music genre, including its major performers, songwriters, songs and impact on culture from the early times on the radio to the beginning of the twenty-first century. **Course Attributes:** Literary & Artistic Stds Crse
- **MUSI 135A - Keyboard Skills I**
 Credits: 1. Offered autumn. Music reading, techniques, and harmonization skills acquired through study of solo and ensemble repertoire in a contemporary electronic piano laboratory. **Course Attributes:** Expressive Arts Course Performance Music Course
- **MUSI 136A - Keyboard Skills II**
 Credits: 1. Offered spring. Prereq., MUSI 135A. Continuation of MUSI 135A. **Course Attributes:** Expressive Arts Course Performance Music Course
- **MUSI 138 - Language of Music I**

Credits: 3. Offered autumn. Music fundamentals including scales, intervals, triads, and rhythm as they are written and heard. Practical application to the voice and/ or keyboard.

- **MUSI 139 - Language of Music II**

Credits: 3. Offered spring. Prereq., MUSI 138. Continuation of MUSI 138 with emphasis on analysis of musical examples and aural recognition of basic harmonic patterns.

- **MUSI 140 - Aural Perception I**

Credits: 2. Offered autumn. Coreq., MUSI 105. A laboratory course in singing and dictation to supplement Theory I.

- **MUSI 141 - Aural Perception II**

Credits: 2. Offered spring. Prereq., MUSI 140; coreq., MUSI 106. Continuation of MUSI 140.

- **MUSI 155A - Marching: Grizzly Marching Band**

Credits: 1. Offered autumn. See MUSI 112A for repeatability limitations. A musical organization of brass, woodwinds, percussion, and auxiliary units open to all University students with no audition required. **Course Attributes:** Expressive Arts Course

- **MUSI 160A - Beginning Guitar**

Credits: 2. Offered autumn. A beginning course in the fundamentals of playing folk guitar. Includes introduction to the rudiments of music. **Course Attributes:** Expressive Arts Course

- **MUSI 162A - Chamber Ensembles I**

Credits: 1. (R-20) Offered autumn and spring. See MUS 107A for repeatability limitations. Prereq., consent of instr. String, woodwind, brass, percussion, piano and vocal ensembles as appropriate to meet student needs. **Course Attributes:** Expressive Arts Course

- **MUSI 180 - Composition I**

Credits: 1 TO 2. (R-4) Offered autumn and spring. Prereq., consent of instr. An introduction to the basic art of music composition. May be substituted for upper division electives for students not majoring in theory or composition.

- **MUSI 191 - Special / Experimental Courses**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MUSI 191L - Special Topics**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. **Course Attributes:** Internships/Practicums Literary & Artistic Stds Crse

- **MUSI 192 - Independent Study**

Credits: 1 TO 3. (R-9) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

- **MUSI 195 - Applied Study I**

Credits: 1 TO 4. (R-12) Offered autumn and spring. Prereq., audition and consent of instr. Instruction in voice, piano, organ, string, wind and percussion instruments. Students entering MUSI 195 must show talent for solo performance and evidence of the equivalent of a minimum of four years prior study. All private instruction requires concurrent ensemble participation. **Course Attributes:** Internships/Practicums Performance Music Course

- **MUSI 202L - Intro to Music Literature**

Credits: 3. Offered spring. Prereq., for non-majors consent of instr. A survey of representative examples of the standard music literature of the Western European tradition. Particular attention to musical styles and forms and their relationship to musical understanding and effective listening. A basic knowledge of music fundamentals is expected. Credit not allowed for both MUSI 101L and

- **MUSI 205 - Music Theory III**

Credits: 2. Offered autumn. Prereq., MUSI 106 and 141; coreq., MUSI 240. Continuation of MUSI 106.

- **MUSI 206 - Music Theory IV**

Credits: 2. Offered spring. Prereq., MUSI 205; coreq., MUSI 241. This course is a continuation of MUSI 205, concentrating on, but not limited to, music as defined by and expressed in the Western European historical traditions from the Renaissance through the common practice period to the contemporary musical world in which we live.

- **MUSI 207H - World Music (equiv to 307)**

Credits: 3. Offered autumn and spring. Introduction to the diversity of music among the world's peoples. Selected music systems throughout the world examined in their broad cultural contexts: religious, historical, and social. Introduction to ethnomusicology—a combination of musicology, anthropology and other related disciplines. **Course Attributes:** Historical & Cultural Course Non-Western Course Indigenous and Global

- **MUSI 218 - Int Piano Cls (Honors)**

Credits: 1. Offered intermittently. Prereq., placement examination. Accelerated offering of the material covered in MUSI 235 and 236. **Course Attributes:** Performance Music Course

- **MUSI 225 - Jazz Theory & Improvisation I**

Credits: 2. Offered autumn. A performance oriented course to provide a basic understanding of jazz harmony. Application of scales and melodic patterns in improvising over various harmonic progressions.

- **MUSI 226 - Jazz Theory & Improvisation II**

Credits: 2. Offered spring. Prereq., MUSI 225. Continuation of MUSI 225.

- **MUSI 235 - Keyboard Skills III**

Credits: 1. Offered autumn. Prereq., MUSI 136A or equiv. Continuation of MUSI 136A. **Course Attributes:** Performance Music Course

- **MUSI 236 - Keyboard Skills IV**

Credits: 1. Offered spring. Prereq., MUSI 235. Continuation of MUSI 235, culminates in piano functional examination. **Course Attributes:** Performance Music Course

- **MUSI 240 - Aural Perception III**

Credits: 2. Offered autumn. Prereq., MUSI 106 and 141; coreq., MUSI 205. A lab course in singing and dictation to supplement Theory III.

- **MUSI 241 - Aural Perception IV**

Credits: 2. Offered spring. Prereq., MUSI 240; coreq., MUSI 206. See MUSI 240.

- **MUSI 267A - Composer's Workshop**

Credits: 1. This is a composition workshop and new music ensemble, in which student composers and performers collaborate, guided by a faculty composer, to develop new pieces. **Course Attributes:** Expressive Arts Course

- **MUSI 280 - Composition II**

Credits: 1 TO 2. (R-4) Offered autumn and spring. Prereq., 4 credits of MUSI 180. Original work in composition may be substituted for upper-division electives for students not majoring in theory or composition.

- **MUSI 281 - Diction: English, Italian**

Credits: 2. Offered autumn even-numbered years. Introduced course participants to the International Phonetic Alphabet (IPA) with application to American English Diction and Italian Diction.

- **MUSI 282 - Dict: Gmn & French (equiv 382)**

Credits: 2. Offered spring odd-numbered years. Applies IPA to French and German Diction and addresses other guidelines that apply to the lyric pronunciation of these languages. Students will transcribe, translate, recite, and sing German and French texts. This is a required course for BM vocal performance majors; MUS 281 is the prerequisite course. Students who would like to be considered for mid-year registration in this diction series may do so only with the consent of the instructor.

- **MUSI 291 - Special / Experimental Courses**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings by visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MUSI 295 - Applied Study II**

Credits: 1 TO 4. (R-12) Offered autumn and spring. Prereq., audition and consent of instr. Continuation of 151. All private instruction requires concurrent ensemble participation. **Course Attributes:** Internships/Practicums Performance Music Course

- **MUSI 296 - Piano Prof Assessment**

Credits: 0. Repeat 8 times. All majors pursuing a B.M. or B.M.E. degree must successfully complete all sections of the Piano Proficiency Assessment in order to attain upper-division standing in music. The eight-part exam is administered at the end of each semester. Successfully completed assessments will receive a grade of CR. **Course Attributes:** Service Learning/Volunteer

- **MUSI 301H - Music History I**

Credits: 3. Offered autumn. Prereq., MUSI 202L. The history of music in Western civilization from its origins to 1750 and its relationship to general cultural development. Introduction to basic research skills in music. Emphasis on listening for style characteristics through representative recorded repertoire. **Course Attributes:** Historical & Cultural Course American and European

- **MUSI 302H - Music History II**

Credits: 3. Offered spring. Prereq., MUSI 202L. The history of music in Western civilization from 1750 to modern times. See MUSI 301H. **Course Attributes:** Historical & Cultural Course Writing Course-Upper-Division American and European Writing Course-Advanced

- **MUSI 304A - Sound in the Natural World**

Credits: 3. Offered even-numbered years. This is a music composition and performance course that explores sound/music in relation to wilderness. Students will learn from cultures that have stayed in contact with their natural environment and will create compositions from materials collected in the field and will perform and critique them. As a result, students will become familiar with their own creative process. **Course Attributes:** Expressive Arts Course

- **MUSI 308 - Orchestras II: UM**

Credits: 1. Offered autumn and spring. Prereq., upper-division standing in instrument of participation. See MUSI 108A for description.

- **MUSI 310 - Opera Theatre II**

Credits: 1. (R-8) Offered autumn and spring. Prereq., consent of instr. See MUSI 131A for description. **Course Attributes:** Expressive Arts Course

- **MUSI 312 - Choir III: Chamber Chorale**

Credits: 1 TO 8. Offered autumn and spring. Prereq., upper-division standing in voice. See MUSI 112A for description.

- **MUSI 314 - Band III: UM Concert Band**

Credits: 1. Offered autumn and spring. Prereq., upper-division standing in instrument of participation. See MUSI 114A for description.

- **MUSI 322 - UM Percussion Ensemble**

Credits: 1. Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

- **MUSI 323 - World Percussion Ensemble**

Credits: 1. Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

- **MUSI 331 - Jzz Ens II: UM**

Credits: 1. (R-8) Offered autumn and spring. Prereq., consent of instr. See MUSI 131A for description.

- **MUSI 332 - Advanced Functional Piano**

Credits: 1. Offered intermittently. Prereq., upper-division standing in music. Offered alternate years. Techniques of harmonization, transposition, sight-reading, modulation, and improvisation.

- **MUSI 333 - Practicum in Piano Pedagogy**

Credits: 1 TO 2. (R-4) Offered intermittently. Prereq. or coreq., MUSI 435, 436. Student teaching of young pianists.

- **MUSI 335 - Instrumental Conducting**

Credits: 2. (R-4) Offered spring. Prereq., upper-division standing in music. Conducting methods and practice. Teaching methods and materials.

- **MUSI 336 - Choral Conducting**

Credits: 2. (R-4) Offered autumn. Prereq., upper-division standing in music. A study of the techniques of choral conducting. Emphasis on issues encountered in various ensemble settings.

- **MUSI 342 - Vocal Repertoire I**

Credits: 2. Offered autumn odd-numbered years. Prereq., upper-division standing in music. Comprehensive acquaintance with styles and interpretation in British, German, and possible additional repertoire genres.

- **MUSI 343 - Vocal Repertoire II**

Credits: 2. Offered spring even-numbered years. Prereq., upper-division standing in music. Comprehensive acquaintance with styles and interpretation in American, French and possible additional genres.

- **MUSI 355 - Marching Band II: Grizzly**

Credits: 1. (R-4) Offered autumn. Prereq., MUSI 155A or consent of instr. A musical organization of brass, woodwinds, percussion, and auxiliary units open to all University students.

- **MUSI 356 - Form & Analysis I**

Credits: 2. Offered autumn. Prereq., upper-division standing in music. Detailed harmonic and formal analysis of representative works from the Baroque period to the present.

- **MUSI 357 - Form & Analysis II**

Credits: 2. Offered spring. Prereq., upper-division standing in music and MUSI 356. Continuation of MUSI 356.

- **MUSI 362 - Chmbr Ens III: UM**

Credits: 1. Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

- **MUSI 380 - Composition III**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., upper-division standing in music and 4 credits in MUSI 280. Creative writing of music.

- **MUSI 388 - Concert Attendance UM**

Credits: 0. All music majors pursuing a B.M., B.M.E., or B.A. degree must attend in a minimum of 100 approved recitals/concerts prior to graduation. Students will receive recital credits each semester they are enrolled and should register for 388 the semester they apply for graduation. Successful completion of attendance requirements will be graded CR.

- **MUSI 391 - Special / Experimental Courses**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **MUSI 392 - Independent Study**

Credits: 1 TO 3. (R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **MUSI 395 - Applied Study III**

Credits: 1 TO 4. (R-12) Offered autumn and spring. Prereq., upper-division standing in music and consent of instr. Continuation of MUSI 295. All private instruction requires concurrent ensemble participation. **Course Attributes:** Internships/Practicums Performance Music Course

- **MUSI 399 - Junior Recital**

Credits: 1 TO 2. Coreq., MUSI 395. Offered autumn and spring. Public performance guided by applied music faculty during the junior year of applied study. This recital, consisting of a minimum of 20 minutes of music, may be scheduled in conjunction with another student's junior recital. Co-Requisite: MUSI 395.

- **MUSI 407 - Counterpoint I**

Credits: 3. Offered intermittently. Prereq., upper-division standing in music. Writing and analysis of contrapuntal styles through the 18th century.

- **MUSI 409 - String Pedagogy & Literature**

Credits: 1 TO 2. (R-4) Offered intermittently. Prereq., upper-division standing in music and consent of instr. Procedures and materials in class string instruction.

- **MUSI 411 - Woodwind Pedagogy**

Credits: 2. Offered intermittently. Prereq., upper-division standing in music and consent of instr. Procedures and materials in individual and class instruction are discussed. Philosophies, repertoire, individual and group techniques used in teaching woodwinds.

- **MUSI 412 - Brass Pedagogy**

Credits: 2. Offered intermittently. Prereq., upper-division standing in music and consent of instr. Procedures and materials in individual and class instruction are discussed. Philosophies, repertoire, individual and group techniques used in teaching brass instruments.

- **MUSI 413 - Percussion Pedagogy**

Credits: 2. Offered intermittently. Prereq., upper-division standing in music and consent of instr. Procedures and materials in individual and class instruction are discussed. Philosophies, repertoire, individual and group techniques used in teaching percussion instruments.

- **MUSI 415 - Music 20th Century to Present**

Credits: 3. Offered intermittently. Prereq., MUSI 302H and upper-division standing in music. Detailed analysis and comparison of selected instrumental, vocal and keyboard compositions of the 20th Century. **Course Attributes:** Writing Course-Upper-Division
Writing Course-Advanced

- **MUSI 416 - Topics in Music History**

Credits: 3. (R-3) Offered intermittently. Prereq. MUSI 302H and upper division standing in music or consent of instructor. Course materials will examine the development of musical styles, genres, forms and aesthetics important to Western music, introducing students to research methods in

musicology. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **MUSI 417 - Cultural Studies in Music**

Credits: 3. (R-3) Offered intermittently. Prereq. MUSI 302H and upper division standing in music, or consent of instructor. Course materials will examine music's contemporary role within cultures and societies around the world, introducing students to research methods in cultural studies and ethnomusicology. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced

- **MUSI 420 - Jazz Pedagogy**

Credits: 3. Offered spring even-numbered years. Prereq., upper division or graduate standing in music or consent of instructor. Development of skills needed to rehearse and direct jazz ensembles at the middle school through high school level.

- **MUSI 432 - Keyboard Literature**

Credits: 3. Offered autumn even-numbered years. Prereq., upper-division standing in music. Keyboard literature from the developments of the Baroque era to the contemporary period including the suite, sonata, character pieces, etc.

- **MUSI 433 - Keyboard Literature II**

Credits: 3. Offered spring odd-numbered years. Continuation of MUSI 435.

- **MUSI 435 - Piano Methods & Materials I**

Credits: 3. Offered autumn odd-numbered years. Prereq., upper-division standing in music or consent of instr. Methods and materials for teaching piano classes in public schools and private studios. Procedures in teaching beginning, intermediate and advanced students in private studios. Practical demonstrations and supervised laboratory experience with children's classes.

- **MUSI 436 - Piano Methods & Materials II**

Credits: 3. Offered spring even-numbered years. Prereq., MUSI 435. Continuation of MUSI 435.

- **MUSI 440 - Orchestration**

Credits: 2. Offered autumn. Prereq., upper-division standing in music. Orchestrating and transcribing for orchestra and band instruments.

- **MUSI 442 - Vocal Studio Pedagogy and Lit**

Credits: 2. Offered autumn odd-numbered years or spring even-numbered years. Prereq., upper-division standing in music. Procedures, philosophies and terminology used in the teaching of singing. Individual and group techniques.

- **MUSI 444 - Advanced Vocal Pedagogy**

Credits: 3. Offered spring even-numbered years or as needed. Prereq., MUSI 442 or consent of instructor. A detailed examination of foundational vocal technique and science topics including respiration, phonation, resonance, and articulation. Offers students the opportunity to explore current topics in the field and how to approach them as a singer or voice teacher.

- **MUSI 467 - Composers' Workshop II**

Credits: 1. Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

- **MUSI 470 - Jazz Arranging & Composition**

Credits: 3. Offered spring odd-numbered years. Prereq., upper division or graduate standing in music or consent of instructor. Composing and arranging for small to medium sized jazz ensembles. Rhythmic rewriting of melodies, re-harmonization techniques, arranging of pre-existing jazz compositions, and original compositions.

- **MUSI 480 - Composition IV**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., 3 credits in MUSI 380. A continuation of composition with writing in the larger forms.

- **MUSI 491 - Special / Experimental Courses**
Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **MUSI 492 - Independent Study**
Credits: 1 TO 3. (R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **MUSI 495 - Applied Study IV**
Credits: 1 TO 4. (R-12) Offered autumn and spring. Prereq., upper-division standing in music and consent of instr. Continuation of MUSI 395. All private instruction requires concurrent ensemble participation. **Course Attributes:** Internships/Practicums Performance Music Course
- **MUSI 499 - Senior Recital/Capstone Pjt**
Credits: 1 TO 4. (R-4) Offered autumn and spring.
- **MUSI 500 - Secondary Perform Area**
Credits: 1 TO 2. (R-6) Offered every term. Prereq., audition and consent of instr. Continuation of MUSI 102A. Level: Graduate
- **MUSI 511 - Advanced Conducting**
Credits: 2. (R-6) Offered intermittently. Prereq., MUSI 335/336 and consent of instr. Class and/or individual study of the art of conducting with emphasis on performance with university performing groups. Level: Graduate
- **MUSI 520 - Research in Music**
Credits: 1 TO 2. Offered autumn and summer. Prereq., graduate standing in music. Research problems: their statement, organization, techniques, tabulation of materials, and concepts necessary for interpretation of data. Development of a research proposal. Level: Graduate
- **MUSI 525 - Sem Vocal Literature**
Credits: 2. (R-6) Offered intermittently. Prereq., graduate standing in music. Concentrated study of opera literature, song literature or choral literature. Level: Graduate
- **MUSI 526 - Sem Instrumental Lit**
Credits: 2. (R-4) Offered intermittently. Prereq., graduate standing in music. Concentrated study of symphonic literature or instrumental chamber music literature. Level: Graduate
- **MUSI 551 - Major Performance Area**
Credits: 1 TO 4. (R-12) Offered every term. Prereq., audition and consent of instr. Continuation of MUSI 495. Level: Graduate
- **MUSI 554 - Analytical Techniques I**
Credits: 3. Offered autumn odd-numbered years. Prereq., graduate standing in music. A survey of the theoretical approach of leading composers from the polyphonic period to the present. Level: Graduate
- **MUSI 555 - Analytical Techniques II**
Credits: 3. Offered spring even-numbered years. Prereq., MUSI 554. Continuation of MUSI 554. Level: Graduate
- **MUSI 559 - Composition**
Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Continuation of MUSI 480. Level: Graduate
- **MUSI 593 - Professional Projects**
Credits: 1 TO 4. (R-4) Offered intermittently. Prereq., graduate standing in music. Level: Graduate

Course Attributes: Faculty-Led Study Abroad

- **MUSI 595 - Special Topics**

Credits: 1 TO 8. (R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums

- **MUSI 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Students must have projects approved by a music faculty member before enrolling. Level: Graduate
Course Attributes: Service Learning/Volunteer

- **MUSI 598 - Internship**

Credits: 1 TO 6. (R-6) Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate

- **MUSI 599 - Thesis**

Credits: 1 TO 10. (R-10) Offered intermittently. Prereq., graduate standing in music. Level: Graduate

- **MUSI 699 - Dissertation**

Credits: 1 TO 12. Offered intermittently. Prereq., graduate standing in music. Level: Graduate

Music-Technology

- **MUST 110 - Digital Audio & Multitracking**

Credits: 2. Offered autumn and spring. Composition of computer music through recording, editing, and processing sound with digital audio software. Study of the theory and application of digital audio recording, multitracking, and digital signal processing, and electroacoustic music history. Survey of historical and current electronic and computer music composers, pieces, and practices.

- **MUST 210 - Sequencing, Synthesis, Sampling**

Credits: 2. Offered autumn. Prereq., MUST 110. Composition of computer music using MIDI sequencing, sampling, and synthesis software, and score preparation using music notation software. Study of the theory and application of MIDI, synthesis algorithms, and effects processing, and the practice of music engraving.

- **MUST 227A - Mtn Electroacoustic Lptp Ens I**

Credits: 1. This is a new music workshop, in which student composers, guided by a faculty composer, collaborate on new pieces for electroacoustic ensemble. Each student will compose structured improvisations, scored with a combination of traditional and graphic notation, that the Mountain Electroacoustic Laptop Ensemble (MELee) will perform, with their electric or amplified instruments, MIDI controllers, and laptop computers. Successful completion of MUST 310 is a prerequisite for taking this class, unless otherwise exempted by the instructor. Course Attributes: Expressive Arts Course

- **MUST 310 - Interactivity Digitl Sgnl Proc**

Credits: 2. Offered spring. Prereq., MUST 210 and upper-division standing in music. Composition of interactive computer music using a graphical programming environment for MIDI, synthesis, and digital signal processing. Study of graphical programming, interactive composition and performance, generating and processing MIDI data, synthesizing computer-generated sound, and processing digital audio in real-time.

- **MUST 410 - Computer Music Programming**

Credits: 2. Offered autumn. Upper-division standing in music. Composition of computer music through programming. Study of object oriented programming, synthesis and digital signal processing techniques, music-generating algorithms, sound spatialization, graphical user interface

design, and external control.

- **MUST 427 - Mtn Electroacoustic Lptp Ens II**

Credits: 1. Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

- **MUST 492 - Independent Study**

Credits: 1 TO 3. (R-9) Offered autumn and spring. Prereq., consent of instr.

- **MUST 595 - Special Topics**

Credits: 1 TO 8. (R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

- **MUST 596 - Independent Study**

Credits: 1 TO 6. (R-6) Offered intermittently. Prereq., consent of instr. Students must have projects approved by a music faculty member before enrolling. Level: Graduate

Music Minor

Minor - Music

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 27

Required Cumulative GPA: 2.75

Note: Electives are to allow for emphasis in a particular area of Music study and must include course work at the upper-division level.

Upper-division course work normally requires a pre-requisite. Please see the University general catalog for details.

Consent of instructor will be required if all prerequisites have not been met.

To receive an academic minor in Music the student Must earn at least 27 credits to include the following:

- MUSI 202L (Introduction to Music Literature) 3 credits
- MUSI 195 (Major Performance I) 2 credits
- 2 credits chosen from MUSI 112A (Choral Ensembles), 108A (Orchestras), 155A (Marching Band), 112A (Concert Bands), 110A (Opera Theater), 131A (UM Jazz Bands), 162A (Chamber Ensembles), taken concurrently with 195.
- MUSI 105-106 (Music Theory I, II) 4 credits
- MUSI 140-141 (Aural Perception I, II) 4 credits
- 12 credits of Music electives which Must be approved in advance by the School of Music, Director.

Required for a Minor in Music

Rule: All courses required

Note: *MUSI 108A-114A,, +162A, #191 Ensembles for one credit each semester for a total of 2 credits each year. +Guitar principals, only #piano principals only. Ensembles must be taken concurrently with MUSI 195. MUSI 195 Applied Studies 1 credit each semester for a total of 2 credits for the year. Music electives approved by Director of the School 12 credits. See elective options.

Course	Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 140 - Aural Perception I	2 Credits
MUSI 141 - Aural Perception II	2 Credits
MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-	15 Total Credits Required

Minor in Music Elective Options - Performance

Rule: All courses required

Note: MUSI 295 and MUSI 395 Applied Studies 1 credit each semester for a year total of 2 credits . Two year total of 4 credits in these Applied Studies. *MUSI 308A-314A, 362A, 391 Ensembles for four credits must be taken concurrently with MUSI 295, 395. Music Electives may be selected from MUSI 301H (Music History I), MUSI 205-206 (Theory III,IV) or from 300-400 level performance or academic classes for four credits.

Minimum Required Grade: C-

12 Total Credits Required

Minor in Music Elective Options - Theory

Rule: All courses required

Note: *MUSI 356-357 Form and Analysis I, II for 4 credits *or MUSI 379 (Counterpoint I), 3 crs + 1 cr. elective

Course	Credits
MUSI 205 - Music Theory III	2 Credits
MUSI 206 - Music Theory IV	2 Credits
MUSI 240 - Aural Perception III	2 Credits
MUSI 241 - Aural Perception IV	2 Credits
Minimum Required Grade: C-	12 Total Credits Required

Minor in Music Elective Options - Music History

Rule: All courses required

Note: MUSI 415-417 History/Literature Period Courses for 6 credits and *Theory or Literature electives for 3 credits. *Although worth 4 crs., MUSI 205-206 (Theory III, IV) is strongly recommended to fulfill the Theory/Literature electives.

—	Course	Credits
	MUSI 301H - Music History I	3 Credits
Minimum Required Grade: C-		12 Total Credits Required

Minor in Music Elective Options - Composition

Rule: All courses required

Note: MUSI 180 Composition I 1 credit each semester for a total of 2 credits each year for total of 4 credits, MUSI 280 Composition II 1 credit each semester for a total of 2 credits each year for total of 4 credits. MUSI 207X Music in World Cultures 3 credits

—	Course	Credits
	MUSI 135A - Keyboard Skills I	1 Credits
Minimum Required Grade: C-		12 Total Credits Required

Minor in Music Elective Options - Technology

Rule: All courses required

Note: Music Technology

MUST 110 Digital Audio and Multitracking 2
 MUST 210 Sequencing, Synthesis, Sampling 2
 MUST 310 Interactivity Digital Sgnl Proc. 2
 MUST 227A Mtn Electroacoustic Lap Top Ensemble 1
 MUSI 207X Music in World Cultures 3

—	Course	Credits
	MUST 410 - Computer Music Programming	2 Credits
Minimum Required Grade: C-		12 Total Credits Required

Music History

Bachelor of Arts - Music; Track: Specialization in Music History

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 51

Required Cumulative GPA: 2.75

Note: **51 Credits of non-Music major courses (36 credits Must be in the College of Arts and Sciences)

**51 Credits in Music

All degrees require 39 upper division credits.

First year

Rule: All courses required

Note: 1st year requirements: MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year. Spring semester MUSI 207X Music of the World's Peoples is required for 3 credits.

—	Course	Credits
	MUSI 105 - Music Theory I	2 Credits
	MUSI 106 - Music Theory II	2 Credits
	MUSI 135A - Keyboard Skills I	1 Credits
	MUSI 136A - Keyboard Skills II	1 Credits
	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
	MUSI 207H - World Music (equiv to 307)	3 Credits
	Minimum Required Grade: C-	20-24 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year Required: MUSI 296-01 Upper-Division Required Performance is required by the end for 2nd year of study to advance to upper division classes.

—	Course	Credits
	MUSI 205 - Music Theory III	2 Credits

	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		14 Total Credits Required

3rd year

Rule: All courses required

Note: 3rd year required: MUSI 416 or 417 Topics in History or Culture for 3 credits is required.

—	Course	Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		10-13 Total Credits Required

4th year

Rule: All courses required

Note: 4th year required: MUSI 499 Senior Research Project 2 credits required Spring Semester. MUSI 416 or 417 Topics in History or Culture required for 3 credits. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
	MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits

Minimum Required Grade: C-

7 Total Credits Required

Upper Division Writing Expectation

Rule: One course for 3 credits

Course	Credits
MUSI 415 - Music 20th Century to Present	3 Credits
MUSI 416 - Topics in Music History	3 Credits
MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-	3-9 Total Credits Required

1ST YEAR Ensemble Requirements

Rule: One course each semester

Note: MUSI 108A-114A, +162, #191 one credit each semester for a total of two credits 1st year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A (MUS 110A), section 1, Symphonic Wind Ensemble (or MUSI 114A (MUS 110A), section 2, University Concert Band, or MUSI 108A (MUS 108A), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A section 1, University Orchestra, every semester.

B.M., Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112 (MUS 107A), section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

Music courses +guitar principals only #piano principals only

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 110A - Opera Theatre I	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	2-8 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

Note: Lower- Division Writing Expectation MUSI 302H

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		

Music Requirements for Writing

Rule: All courses required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages for 10 credits
Exemption from Modern and Classical Language Requirement - Symbolic Systems MUSI 105,106,140,141

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: LS 151L and 152L Intro to Humanities for 8 credits
Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

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Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Group VI and Group IX: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and MUSI 302

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) MUSI 207X

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Musical Studies

Bachelor of Arts - Music; Track: Specialization in Musical Studies

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 51

Required Cumulative GPA: 2.75

Note: **51 Credits of non-Music major courses (36 credits must be in the College of Arts and Sciences)
**51 Credits in Music

All degrees require 39 upper division credits.

1st year

Rule: All courses required

Note: MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year.

—	Course	Credits
	MUSI 105 - Music Theory I	2 Credits
	MUSI 106 - Music Theory II	2 Credits
	MUSI 135A - Keyboard Skills I	1 Credits
	MUSI 136A - Keyboard Skills II	1 Credits
	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
	Minimum Required Grade: C-	17-21 Total Credits Required

2nd

Rule: All courses required

Note: MUSI 295 applied studies 1 credit each semester for a total of 2 credits first year. MUSI 296-01 Upper-Division Required Performance must be completed to advance on to upper division classes.

—	Course	Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits

	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		18-22 Total Credits Required

3rd year

Rule: All courses required

Note: Upper-Division MUSIC Electives should include MUSI 415, 416, or 417 for 6 credits. MUSI 395 applied studies 1 credit Fall semester for the third year.

—	Course	Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		10-17 Total Credits Required

4th year

Rule: All courses required

Note: *Upper-Division Music electives required 4 credits. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 388 - Concert Attendance UM	
Minimum Required Grade: C-		4 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: One course each semester

Note: Ensembles Required MUSI 108A -114a, +162A, #191 one credit each semester for a total of two credits each year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A (MUS 110A), section 1, Symphonic Wind Ensemble (or MUSI 114A (MUS 110A), section 2, University Concert Band, or MUSI 108A (MUS 108A), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A (MUS 108A), section 1, University Orchestra, every semester.

Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112 (MUS 107A), section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

+guitar principals only #piano principals only

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 110A - Opera Theatre I	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-14 Total Credits Required

Music Requirements

Rule: All courses required

Note: LS 151L and 152L Intro to Humanities

Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Emsembles 3rd year

Rule: One course each semester

Note: Ensembles required MUSI 308-314, 310, +362, #491 one credit each semester for a year total of two credits. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 314 (MUS 310), section 1, Symphonic Wind Ensemble (or MUSI 314 (MUS 310), section 2, University Concert Band, or MUSI 308 (MUS 308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 308 (MUS 308), section 1, University Orchestra, every semester.

Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 312 (MUS 307A), section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

Guitar principles +362, Piano principles #491

—	Course	Credits
	MUSI 308 - Orchestras II: UM	1 Credits
	MUSI 310 - Opera Theatre II	1 Credits
	MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
	MUSI 314 - Band III: UM Concert Band	1 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
	MUSI 491 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-		2-21 Total Credits Required

Music Requirements for Writing

Rule: All courses required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Expection

Rule: All courses required

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits

MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-	3-9 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages 10 credits

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301, 302

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Recommend MUSI 207H

Course	Credits
MUSI 207H - World Music (equiv to 307)	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Composition

Bachelor of Arts - Music; Track: Specialization in Composition

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 58

Required Cumulative GPA: 2.75

Note: **51 Credits of non-Music major courses (36 credits must be in the College of Arts and Sciences)

**51 Credits in Music

1st year

Rule: All courses required

Note: All required for first year of study for a BA in Composition: MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year. MUSI 180 Composition I studies 1 credit each semester for a total of 2 credits first year.

Course	Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 135A - Keyboard Skills I	1 Credits
MUSI 136A - Keyboard Skills II	1 Credits

	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 180 - Composition I	1 To 2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
	MUST 110 - Digital Audio & Multitracking	2 Credits
Minimum Required Grade: C-		21-26 Total Credits Required

2nd year

Rule: See commentary

Note: All required for second year of study for a BA in Composition: MUSI 280 Composition II studies 1 credit each semester for a total of 2 credits first year. MUSE 123, 120-121, 126-127, 272-5 Voice/Instruments in Class 1 credit each semester for a total of two credits second year. MUSI 296-01 Upper-Division Required Performance required by the end of the 2nd year of study. UDRP to consist of scholarly writing example to be approved by faculty

—	Course	Credits
	MUSE 120 - Techs: String Inst in Class I	1 Credits
	MUSE 121 - Techs: String Inst in Class II	1 Credits
	MUSE 123 - Techniques: Voice	1 Credits
	MUSE 126 - Techs: Percussn Instruments I	1 Credits
	MUSE 127 - Techs: Percussn Instruments II	1 Credits
	MUSE 272 - Techniques: Flute & Single Reed	1 Credits
	MUSE 273 - Techniques: Double Reed	1 Credits
	MUSE 274 - Techniques: Upper Brass	1 Credits
	MUSE 275 - Techniques: Lower Brass	1 Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits

MUSI 280 - Composition II	1 To 2 Credits
MUSI 301H - Music History I	3 Credits
MUSI 302H - Music History II	3 Credits
MUST 210 - Sequencng, Synthesis, Sampling	2 Credits
Minimum Required Grade: C-	23-27 Total Credits Required

3rd year

Rule: See commentary

Note: All required for third year of study for a BA in Composition: MUSE 123, 120-121, 126-127, 272-5 Voice/Instruments in Class for 1 credit each semester for a total of two credits the third year. MUSI 380 Composition III studies 1 credit Fall semester.

Course	Credits
MUSE 120 - Techs: String Inst in Class I	1 Credits
MUSE 121 - Techs: String Inst in Class II	1 Credits
MUSE 123 - Techniques: Voice	1 Credits
MUSE 126 - Techs: Percussn Instruments I	1 Credits
MUSE 127 - Techs: Percussn Instruments II	1 Credits
MUSE 272 - Techniqu: Flute & Single Reed	1 Credits
MUSE 273 - Techniques: Double Reed	1 Credits
MUSE 274 - Techniques: Upper Brass	1 Credits
MUSE 275 - Techniques: Lower Brass	1 Credits
MUSI 356 - Form & Analysis I	2 Credits
MUSI 357 - Form & Analysis II	2 Credits
MUSI 380 - Composition III	1 To 3 Credits
Minimum Required Grade: C-	9-16 Total Credits Required

4th year

Rule: All courses required

Note: 4th year required: All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 440 - Orchestration	2 Credits
	MUSI 480 - Composition IV	1 To 3 Credits
Minimum Required Grade: C-		5 Total Credits Required

Ensemble requirements 1st and 2nd year

Rule: One course for each semester

Note: Ensembles - MUSI 108A -114A, +162A, #191, + guitar principals only #piano principals only required one credit each semester for a two year total.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A/314 (MUS 110A/310), section 1, Symphonic Wind Ensemble (or MUSI 114A/314 (MUS 110A/310), section 2, University Concert Band, or MUSI 108A/308 (MUS 108A/308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A/308 (MUS 108A/308), section 1, University Orchestra, every semester.

B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112 (MUS 107A), section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

—	Course	Credits
	MUSI 108A - Orchestra: UMSO	1 Credits
	MUSI 110A - Opera Theatre I	1 Credits
	MUSI 112A - Choir: Chamber Chorale	1 Credits
	MUSI 114A - Band: UM Concert Band	1 Credits
	MUSI 162A - Chamber Ensembles I	1 Credits
	MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-		4-14 Total Credits Required

Ensembles 3rd and 4th year

Rule: One course each semester

Note: Must participate in Music Ensembles MUSI 308A-314A, or MUSI +362A, #391 - (+guitar principals only #piano principals only) 1 credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 314 (MUS 310), section 1, Symphonic Wind Ensemble (or MUSI 314 (MUS 310), section 2, University Concert Band, or MUSI 308 (MUS 308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 308 (MUSI 308), section 1, University Orchestra, every semester.

Upon completion of the upper-division recital performance, B.A., voice, majors may enroll in:

- MUSI 312 (MUS 307), section 1 (University Choir),
- MUSI 312 (MUS 307), section 2 (Chamber Chorale),
- MUSI 312 (MUS 307), section 3 (Women's Chorus),
- MUSI 310 (MUS 313) (Opera Theater), or

Ensemble requirements for piano and organ are listed separately for each curriculum

Course	Credits
MUSI 308 - Orchestras II: UM	1 Credits
MUSI 310 - Opera Theatre II	1 Credits
MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
MUSI 314 - Band III: UM Concert Band	1 Credits
MUSI 362 - Chmbr Ens III: UM	1 Credits
MUSI 391 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-14 Total Credits Required

Music Requirements

Rule: All courses required

Note: LS 151L and 152L Intro to Humanities 8 credits

Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Music Writing Expectation

Rule: All courses required

Note: Lower- Division Writing Expectation MUSI 302

Upper- Division Writing Expectation (MUSI 415, 416, 417)

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Course	Credits
MUSI 302H - Music History II	3 Credits
MUSI 415 - Music 20th Century to Present	3 Credits
MUSI 416 - Topics in Music History	3 Credits
MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-	6-12 Total Credits Required

Music Requirements for Writing

Rule: All courses required

Course	Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages 10 credits required
Exemption from Modern and Classical Language Requirement - Symbolic Systems MUSI 105,106,140, 141

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-
3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits)
MUSI 301 and MUSI 302

Minimum Required Grade: C-
3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Recommend MUSI 207H

Minimum Required Grade: C-
3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-
6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Applied Studies

Bachelor of Arts - Music; Track: Specialization in Applied Studies

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 51

Required Cumulative GPA: 2.75

Note: **51 Credits of non-Music major courses (36 credits Must be in the College of Arts and Sciences)
**51 Credits in Music

All degrees require 39 upper division credits.

1st year

Rule: All courses required

Note: First year required: MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year.

—	Course	Credits
	MUSI 105 - Music Theory I	2 Credits
	MUSI 106 - Music Theory II	2 Credits
	MUSI 135A - Keyboard Skills I	1 Credits
	MUSI 136A - Keyboard Skills II	1 Credits
	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-		17-21 Total Credits Required

2nd year

Rule: All courses required

Note: Second year required: first year. MUSI 295 applied studies 1 credit each semester for a total of 2 credits first year. MUSI 296-01 Upper-Division Required Performance required to advance to upper division study.

—	Course	Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		18-21 Total Credits Required

3rd year

Rule: All courses required

Note: Third year required MUSI 395 one credit each semester for a total of two credits for the third year.

—	Course	Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
Minimum Required Grade: C-		6-9 Total Credits Required

4th year

Rule: All courses required

Note: Fourth year required: MUSI 495 one credit each semester for a total of two credits for the fourth year. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 495 - Applied Study IV	1 To 4 Credits
Minimum Required Grade: C-		2-4 Total Credits Required

Upper Division Writing Expection

Rule: 3 credits required chose course below

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
		3-6 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: one course each semester

Note: Ensembles - MUSI 108A -114A, +162A, #191, + guitar principals only #piano principals only ; required one credit each semester for two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A/314 (MUS 110A/310), section 1, Symphonic Wind Ensemble (or MUSI 114A/314 (MUS 110A/310), section 2, University Concert Band, or MUSI 108A/308 (MUS 108A/308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A/308 (MUS 108A/308), section 1, University Orchestra, every semester.

B.M., Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112 (MUS 107A), section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 110A - Opera Theatre I	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-18 Total Credits Required

Ensembles 3rd and 4th year

Rule: one course each semester

Note: Must participate in Music Ensembles MUSI 308A-314A, 310, MUSI +362A, MUSI #491 - + guitar principals only #piano principals only required one credit each semester for two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 314 (MUS 310), section 1, Symphonic Wind Ensemble (or MUSI 314 (MUS 310), section 2, University Concert Band, or MUSI 308 (MUS 308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 308 (MUS 308), section 1, University Orchestra, every semester.

B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 312 (MUS 307A), section 1 (University Choir).

Upon completion of the upper-division recital performance, B.M., Vocal Performance, and B.A., voice, majors may enroll in:

- MUSI 312 (MUS 307), section 1 (University Choir),
- MUSI 312 (MUS 307), section 2 (Chamber Chorale),
- MUSI 312 (MUS 307), section 3 (Women's Chorus),
- MUSI 310 (MUS 313) (Opera Theater), or

Ensemble requirements for piano and organ are listed separately for each curriculum.

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Course	Credits
MUSI 308 - Orchestras II: UM	1 Credits
MUSI 310 - Opera Theatre II	1 Credits
MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
MUSI 314 - Band III: UM Concert Band	1 Credits
MUSI 362 - Chmbr Ens III: UM	1 Credits
MUSI 491 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-21 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

Course	Credits
MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-	7-12 Total Credits Required

Music Requirement for Liberal Studies

Rule: All courses required

Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Music Requirements for Writing

Rule: All courses required

Course	Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Math - M Course 100 or above

Minimum Required Grade: C-

3-5 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages 10 credits required

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

1-4 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 130L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and MUSI 302

Course	Credits
MUSI 301H - Music History I	3 Credits
MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-	3-6 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Recommended MUSI 207H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

3 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Voice

Bachelor of Music - Music; Track: Specialization In Voice

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 84

Required Cumulative GPA: 2.75

Note: All degrees require 39 upper division credits.

1st year

Rule: All courses required

Note: Required 1st year: MUSI 195 applied studies 2 credit each semester for a total of 4 credits first year. MUSI 112 section 01-02 Ensembles 1 credit each semester for a total of 2 credits this year.

Course	Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 135A - Keyboard Skills I	1 Credits
MUSI 136A - Keyboard Skills II	1 Credits
MUSI 140 - Aural Perception I	2 Credits
MUSI 141 - Aural Perception II	2 Credits

	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
	MUSI 281 - Diction: English, Italian	2 Credits
	MUSI 282 - Dict: Gmn & French (equiv 382)	2 Credits
Minimum Required Grade: C-		23-26 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year Ensembles any of the MUSI 112A section 01, 02. - 1 credit each semester for a total of two credits this year. MUSI 295 applied studies 2 credit each semester for a total of 4 credits 2nd year. MUSI 296-01 Upper-Division Required Performance required to move on to upper division classes.

—	Course	Credits
	MUSI 112A - Choir: Chamber Chorale	1 Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 235 - Keyboard Skills III	1 Credits
	MUSI 236 - Keyboard Skills IV	1 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits
	MUSI 296 - Piano Prof Assessment	
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		22-26 Total Credits Required

3rd year

Rule: All courses required

Note: Required 3rd year: MUSI 395 applied studies 2 credit each semester for a total of 4 credits, MUSI 310A Opera theatre 1 credit each semester for a total of 2 credits the 3rd year. Upper Division Music Electives should include MUSI 415, 416, 417 two credits Fall semester and one credit Spring semester.

—	Course	Credits
	MUSI 310 - Opera Theatre II	1 Credits
	MUSI 336 - Choral Conducting	2 Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		17-25 Total Credits Required

4th year

Rule: All courses required

Note: Required 4th year: MUSI 495 applied studies 2 credit each semester for a total of 4 credits the fourth year. MUSI 499 Senior Recital 2 credits Spring semester. Upper Division Music Electives should include MUSI 415, 416, 417 for 3 credits and 2 credits upper division electives. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 342 - Vocal Repertoire I	2 Credits
	MUSI 343 - Vocal Repertoire II	2 Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
	MUSI 442 - Vocal Studio Pedagogy and Lit	2 Credits
	MUSI 495 - Applied Study IV	1 To 4 Credits

	MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits
Minimum Required Grade: C-		19-23 Total Credits Required

Upper Division Writing Expection

Rule: 3 credits required of one of the courses below

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		3-9 Total Credits Required

Music Requirements

Rule: All courses required

—	Course	Credits
	THTR 120A - Introduction to Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Ensembles 3rd and 4th year

Rule: 1 credit each semester from courses below

Note: Ensembles MUSI 312A, 310A, 362A 1 credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.) Upon completion of the upper-division recital performance, B.M., Vocal Performance majors may enroll in:

- MUSI 312 (MUS 307), section 1 (University Choir),
- MUSI 312 (MUS 307), section 2 (Chamber Chorale),
- MUSI 312 (MUS 307), section 3 (Women's Chorus),
- MUSI 310 (MUS 313) (Opera Theater)

—	Course	Credits
	MUSI 310 - Opera Theatre II	1 Credits
	MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
Minimum Required Grade: C-		4-38 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Writing

Rule: All courses required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Mathmatics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Foreign Language French, Italian or German, I & II for 5 credits each semester for a total of 10 credits

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits)
MUSI 301 and MUSI 302

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Piano Performance and Pedagogy

Bachelor of Music - Music; Track: Specialization in Piano Performance & Pedagogy

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 85

Required Cumulative GPA: 2.75

Note: All Degrees Require 39 Upper-Division Credits.

1st year

Rule: All courses required

Note: Required 1st year: MUSI 195 applied studies 2 credit each semester for a total of 4 credits first year.

	Course	Credits
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	MUSI 105 - Music Theory I	2 Credits
	MUSI 106 - Music Theory II	2 Credits
	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-		15-19 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year required: MUSI 102A one credit each semester for a total of two credits. MUSI 295 applied studies 2 credit each semester for a total of 4 credits second year. MUSI 102A, 1 credit each semester for a total of two credits this year. Electives and General Education ((should include PSYX 100S) for a total of 8 credits. MUSI 296-01 Upper-Division Required Performance required to move on to upper division classes.

	Course	Credits
	MUSI 102A - Performance Study	1 To 2 Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits
	MUSI 296 - Piano Prof Assessment	
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		22-30 Total Credits Required

3rd year

Rule: All courses required

Note: Required 3rd year: MUSI 395 applied studies 3 credit each semester for a total of 6 credits third year. MUSI 333, Piano Practicum 1 credit each semester for a total of two credits third year MUSI 335 or 336 Instrumental or Choral Conducting for 2 credits.

—	Course	Credits
	MUSI 332 - Advanced Functional Piano	1 Credits
	MUSI 333 - Practicum in Piano Pedagogy	1 To 2 Credits
	MUSI 335 - Instrumental Conducting	2 Credits
	MUSI 336 - Choral Conducting	2 Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 435 - Piano Methods & Materials I	3 Credits
	MUSI 436 - Piano Methods & Materials II	3 Credits
Minimum Required Grade: C-		21-25 Total Credits Required

4th year

Rule: All courses required

Note: Required 4th year: MUSI 333 Piano Practicum 1 credit each semester for a total of 2 credits. MUSI 495 applied studies 3 credit each semester for a total of 6 credits the fourth year. MUSI 492 Readings In Piano Ped. (Ind. Study) for a total of 2 credits. MUSI 499 - 2 credits Spring semester, Senior recital may be two half-recitals. One half recital may include pedagogical lecture/demonstration and/or collaborative repertoire. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 333 - Practicum in Piano Pedagogy	1 To 2 Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 432 - Keyboard Literature	3 Credits
	MUSI 433 - Keyboard Literature II	3 Credits
	MUSI 492 - Independent Study	1 To 3 Credits
	MUSI 495 - Applied Study IV	1 To 4 Credits

MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits
Minimum Required Grade: C-	21-32 Total Credits Required

Upper Division Writing Expectation

Rule: One course for 3 credits

Course	Credits
MUSI 415 - Music 20th Century to Present	3 Credits
MUSI 416 - Topics in Music History	3 Credits
MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-	3-9 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

Course	Credits
MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: One course each semester

Note: Ensembles required for first and second year study: MUSI 108A -114A, 162A, 191, 1 credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-14 Total Credits Required

3rd and fourth Ensemble Requirements

Rule: One course each semester

Note: Ensembles required for third and fourth years of study: MUSI 308A -314A, 362A, #391, 1 credit each semester for a total of two credits each year.

Course	Credits
MUSI 308 - Orchestras II: UM	1 Credits
MUSI 314 - Band III: UM Concert Band	1 Credits
MUSI 362 - Chmbr Ens III: UM	1 Credits
Minimum Required Grade: C-	4- Total Credits Required

Music Electives Required

Rule: All courses required

Course	Credits
DANC 497 - Methods: Tchng Movmnt in Schls	3 Credits
PSYX 100S - Intro to Psychology	4 Credits
PSYX 230 - Developmental Psychology	3 Credits
Minimum Required Grade: C-	10 Total Credits Required

Music Requirements for Writing

Rule: All courses required

Course	Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above for 3 credits

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

—	Course	Credits
	MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: One course for 3 credits

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and MUSI 302

—	Course	Credits
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

—	Course	Credits
	MUSI 207H - World Music (equiv to 307)	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Instrumental Jazz Studies

Bachelor of Arts - Music; Track: Specialization Instrumental Jazz Studies

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 50

Required Cumulative GPA: 2.75

Note: **51 Credits of non-Music major courses (36 credits Must be in the College of Arts and Sciences)

**51 Credits in Music

1st year

Rule: All courses required

Note: 1st year requirements MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year.

Course	Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 130L - History of Jazz	3 Credits
MUSI 135A - Keyboard Skills I	1 Credits
MUSI 136A - Keyboard Skills II	1 Credits
MUSI 140 - Aural Perception I	2 Credits
MUSI 141 - Aural Perception II	2 Credits
MUSI 195 - Applied Study I	1 To 4 Credits
Minimum Required Grade: C-	14-21 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year requirements: MUSI 295 applied studies 1 credit each semester for a total of 2 credits first year. MUSI 296-01 Upper-Division Required Performance must be completed before moving on to upper division classes.

—	Course	Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		18-22 Total Credits Required

3rd year

Rule: All courses required

Note: 3rd year requirements MUSI 395 applied studies 1 credit Fall semester. . MUSI 420 or 470 Jazz Pedagogy/Jazz Arranging for a total of 3 credits.

—	Course	Credits
	MUSI 225 - Jazz Theory & Improvisation I	2 Credits
	MUSI 226 - Jazz Theory & Improvisation II	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 420 - Jazz Pedagogy	3 Credits
	MUSI 470 - Jazz Arranging & Composition	3 Credits
Minimum Required Grade: C-		12-16 Total Credits Required

4th year

Rule: All courses required

Note: 4th year requirements: MUSI 420 or 470 Jazz Pedagogy/Jazz Arranging for a total of 3 credits. MUSI 499 Senior Research Project 2 credits.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement,

students should register for MUSI 388, 0 cr.

Course	Credits
MUSI 388 - Concert Attendance UM	
MUSI 420 - Jazz Pedagogy	3 Credits
MUSI 470 - Jazz Arranging & Composition	3 Credits
MUSI 491 - Special / Experimental Courses	1 To 9 Credits
MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits
Minimum Required Grade: C-	5-9 Total Credits Required

BA Requirement Liberal Studies

Rule: All courses required

Course	Credits
LSH 151L - IntrHumanities:Greek,Bible,Rom	0 To 4 Credits
LSH 152L - Humanities Medieval to Modern	0 To 4 Credits
Minimum Required Grade: C-	8 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

Course	Credits
MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

1st and 2nd year Ensembles Requirements

Rule: one course each semester

Note: All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.) Required - MUSI 108A -114a, + 162A, #191 ensembles, 1 credit each semester for a total of two credits. +guitar principals only #piano principals only.

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A (MUS 110A), section 1, Symphonic Wind Ensemble (or MUSI 114A (MUS 110A), section 2, University Concert Band, or MUSI 108A (MUS 108A), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A (MUS 108A) section 1, University Orchestra, every semester.

Ensemble requirements for piano and organ are listed separately for each curriculum.

—	Course	Credits
	MUSI 108A - Orchestra: UMSO	1 Credits
	MUSI 114A - Band: UM Concert Band	1 Credits
	MUSI 162A - Chamber Ensembles I	1 Credits
	MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-		2-26 Total Credits Required

3rd and fourth Ensemble Requirements

Rule: one course each semester

Note: Ensembles required 1 credit each semester for a year total of 2 credits. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 314A (MUS 310), section 1, Symphonic Wind Ensemble (or MUSI 314 (MUS 310), section 2, University Concert Band, or MUSI 308 (MUS 308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 308 (MUS 308), section 1, University Orchestra, every semester

Ensemble requirements for piano and organ are listed separately for each curriculum.

—	Course	Credits
	MUSI 308 - Orchestras II: UM	1 Credits
	MUSI 314 - Band III: UM Concert Band	1 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
Minimum Required Grade: C-		

Music General Requirement for Writing

Rule: All courses required

Note: Group I: English Writing Skills - WRIT 101

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Expectation

Rule: All courses required

Note: Upper- Division Writing Expectation (MUSI 416,417-Jazz Topics Course)

—	Course	Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Group II: Mathematics - M Course 100 or above for 3 credits

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: Must complete 2 years of a foreign language

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Group IV: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Group V: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 130L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Group VI and Group IX: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and MUSI 302

—	Course	Credits
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	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Social Sciences

Rule: All courses required

Note: Group VII: Social Sciences (min. of 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Ethical and Human Values

Rule: All courses required

Note: Group VIII: Ethical and Human Values (min. of 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Group X: Indigenous and Global Perspectives - (min. 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Organ Performance

Bachelor of Music - Music; Track: Specialization in Organ Performance

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 83

Required Cumulative GPA: 2.75

Note: All Degrees Require 39 Upper-Division Credits.

1st year

Rule: All courses required

Note: 1st year requirements: MUSI 195 applied studies 3 credit each semester for a total of 6 credits first year.

Course	Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 140 - Aural Perception I	2 Credits
MUSI 141 - Aural Perception II	2 Credits
MUSI 195 - Applied Study I	1 To 4 Credits
MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-	17-21 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year requirements: MUSI 295 applied studies 3 credit each semester for a total of 6 credits second year. MUSI 102A applied studies 1 credit each semester for a total of 2 credits second year. MUSI 296-01 Upper-Division Required Performance required for advancement to upper division classes.

Course	Credits
MUSI 102A - Performance Study	1 To 2 Credits
MUSI 205 - Music Theory III	2 Credits
MUSI 206 - Music Theory IV	2 Credits
MUSI 240 - Aural Perception III	2 Credits
MUSI 241 - Aural Perception IV	2 Credits
MUSI 295 - Applied Study II	1 To 4 Credits
MUSI 296 - Piano Prof Assessment	

	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		22-26 Total Credits Required

3rd year

Rule: All courses required

Note: 3rd year required: MUSI 395 applied studies 4 credit each semester for a total of 8 credits third year.

—	Course	Credits
	MUSI 332 - Advanced Functional Piano	1 Credits
	MUSI 336 - Choral Conducting	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 435 - Piano Methods & Materials I	3 Credits
	MUSI 436 - Piano Methods & Materials II	3 Credits
Minimum Required Grade: C-		17 Total Credits Required

4th year

Rule: All courses required

Note: 4th year required: MUSI 495 applied studies 4 credit each semester for a total of 8 credits 4th year. MUSI 492 Independent study Organ Construction, Design & Ped. MUSI 499 Senior Recital/Capstone Project for two credits. Senior recital may be two half-recitals. One half recital may include pedagogical lecture/demonstration and/or collaborative repertoire. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 492 - Independent Study	1 To 3 Credits
	MUSI 495 - Applied Study IV	1 To 4 Credits
	MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits

Minimum Required Grade: C-

19-20 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: One course each semester

Note: Ensembles one credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 110A - Opera Theatre I	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	2-14 Total Credits Required

Ensembles 3rd year

Rule: One course each semester

Note: 2nd year ensembles one credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Course	Credits
MUSI 308 - Orchestras II: UM	1 Credits
MUSI 310 - Opera Theatre II	1 Credits
MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
MUSI 314 - Band III: UM Concert Band	1 Credits
MUSI 362 - Chmbr Ens III: UM	1 Credits
Minimum Required Grade: C-	2-8 Total Credits Required

4th year Ensemble Requirements

Rule: One course each semester

Note: 4th year ensembles one credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

—	Course	Credits
	MUSI 308 - Orchestras II: UM	1 Credits
	MUSI 310 - Opera Theatre II	1 Credits
	MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
	MUSI 314 - Band III: UM Concert Band	1 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
Minimum Required Grade: C-		2-12 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Expection

Rule: One course for 3 credits

Note: Must take one of the courses above for 3 credits.

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		3-9 Total Credits Required

Music Requirements for Writing

Rule: All courses required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits

Minimum Required Grade: C-	3 Total Credits Required
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Music Requirements for Mathematics

Rule: One course for 3 credits

Note: Mathematics - Math 105 or Math 115

Course	Credits
M 105 - Contemporary Mathematics	3 Credits
M 115 - Probability and Linear Math	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Foreign Language - French or German for 10 credits.

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Course	Credits
MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and/or MUSI 302

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—	Course	Credits
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3-6 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

—	Course	Credits
	MUSI 207H - World Music (equiv to 307)	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Piano Performance

Bachelor of Music - Music; Track: Specialization in Piano Performance

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 87

Required Cumulative GPA: 2.75

Note: All degrees require 39 upper division credits.

1st year

Rule: All courses required

Note: 1st year required: MUSI 195 applied studies 2 credit each semester for a total of 4 credits first year.

—	Course	Credits
	MUSI 105 - Music Theory I	2 Credits
	MUSI 106 - Music Theory II	2 Credits
	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-		17-21 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year required: MUSI 295 applied studies 3 credit each semester for a total of 6 credits first year. MUSI 102A is required for 1 credit each semester of the second year for a total of 2 credits. MUSI 296-01 Upper-Division Required Performance required to be completed to advance to upper division classes.

—	Course	Credits
	MUSI 102A - Performance Study	1 To 2 Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits
	MUSI 296 - Piano Prof Assessment	
	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits

Minimum Required Grade: C-

24-30 Total Credits Required

3rd year

Rule: All courses required

Note: 3rd year required: MUSI 395 applied studies 4 credit each semester for a total of 8 credits third year. MUSI 335 or 336 Instrumental or Choral Conducting for 2 credits. * Piano principles must take MUSI 332 A Advanced Functional Piano or MUSI 218 with PPA (at the discretion of Piano Faculty)

—	Course	Credits
	MUSI 332 - Advanced Functional Piano	1 Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 435 - Piano Methods & Materials I	3 Credits
	MUSI 436 - Piano Methods & Materials II	3 Credits
	Minimum Required Grade: C-	21-23 Total Credits Required

4th year

Rule: All courses required

Note: 4th year required: MUSI 495 applied studies 4 credit each semester for a total of 8 credits fourth year. MUSI 499 Senior Recital for two credits. MUSI 415, 416 or 417 Upper Div. Writing Course for 3 credits, additional 2 credits upper division. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
	MUSI 432 - Keyboard Literature	3 Credits
	MUSI 433 - Keyboard Literature II	3 Credits
	MUSI 495 - Applied Study IV	1 To 4 Credits

MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits
Minimum Required Grade: C-	23- 31 Total Credits Required

Upper Division Writing Expection

Rule: One course for 3 credits

Course	Credits
MUSI 415 - Music 20th Century to Present	3 Credits
MUSI 416 - Topics in Music History	3 Credits
MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-	3-9 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: One course each semester

Note: Ensembles MUSI 108A, 112A, 114A, 162A, #191, (#piano principals only) 1 credit each semester for a total of two credits each year.* All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-14 Total Credits Required

3rd and fourth Ensemble Requirements

Rule: One course each semester

Note: Ensembles MUSI 308A, 312A, 314A, 362A, #391, (#piano principals only)1 credit each semester for a total of two credits first year.* All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of

the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

—	Course	Credits
	MUSI 308 - Orchestras II: UM	1 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
	MUSI 391 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-		4-14 Total Credits Required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Mathematics

Rule: Three credits required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Expressive Arts

Rule: See Commentary

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: See Commentary

Note: Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: See Commentary

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits)
MUSI 301 and MUSI 302

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

Course	Credits
MUSI 207H - World Music (equiv to 307)	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Instrumental Performance

Bachelor of Music - Music; Track: Specialization Instrumental Performance

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 85

Required Cumulative GPA: 2.75

Note: All Degrees Require 39 Upper-Division Credits

1st year

Rule: All courses required

Note: 1st year required: MUSI 195 applied studies 3 credit each semester for a total of 6 credits first year.

—	Course	Credits
	MUSI 105 - Music Theory I	2 Credits
	MUSI 106 - Music Theory II	2 Credits
	MUSI 135A - Keyboard Skills I	1 Credits
	MUSI 136A - Keyboard Skills II	1 Credits
	MUSI 140 - Aural Perception I	2 Credits
	MUSI 141 - Aural Perception II	2 Credits
	MUSI 195 - Applied Study I	1 To 4 Credits
	MUSI 202L - Intro to Music Literature	3 Credits
	Minimum Required Grade: C-	19-21 Total Credits Required

2nd year

Rule: All courses required

Note: 2nd year required: MUSI 295 applied studies 3 credit each semester for a total of 6 credits second year. MUSI 296 Upper-Division Required Performance to be completed before advancing to upper division classes.

—	Course	Credits
	MUSI 205 - Music Theory III	2 Credits
	MUSI 206 - Music Theory IV	2 Credits
	MUSI 235 - Keyboard Skills III	1 Credits
	MUSI 236 - Keyboard Skills IV	1 Credits
	MUSI 240 - Aural Perception III	2 Credits
	MUSI 241 - Aural Perception IV	2 Credits
	MUSI 295 - Applied Study II	1 To 4 Credits
	MUSI 296 - Piano Prof Assessment	

	MUSI 301H - Music History I	3 Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		22-24 Total Credits Required

3rd year

Rule: All courses required

Note: 3rd year required: MUSI 362A Chamber Ensembles 1 credit each semester for a total of two credits this year. MUSI 395 applied studies 4 credit each semester for a total of 8 credits third year.

—	Course	Credits
	MUSI 335 - Instrumental Conducting	2 Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
Minimum Required Grade: C-		22 Total Credits Required

4th year

Rule: All courses required

Note: 4th year required: MUSI 495 applied studies 4 credit each semester for a total of 8 credits third year. MUSI 499 Senior Recital required for 2 credits Spring semester. MUSI 362A Chamber Ensembles 1 credit each semester for a total of two credits this year.

—	Course	Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 495 - Applied Study IV	1 To 4 Credits
	MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits
Minimum Required Grade: C-		10 Total Credits Required

Instrumental Pedagogy

Rule: One course for 2 credits

Note: Four credits of Upper division Music Electives. At least 4 of these credits Must be in academic Music courses such as String principals Must take MUSI 409 (Pedagogy of Strings) Woodwind principals Must take MUSI 411 (woodwind pedagogy), Brass principals Must take MUSI 412 (brass pedagogy), Percussion principals Must take MUSI 413 (Percussion pedagogy).

Course	Credits
MUSI 409 - String Pedagogy & Literature	1 To 2 Credits
MUSI 411 - Woodwind Pedagogy	2 Credits
MUSI 412 - Brass Pedagogy	2 Credits
MUSI 413 - Percussion Pedagogy	2 Credits
Minimum Required Grade: C-	4-8 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: One course each semester

Note: Ensembles - MUSI 108A -114A, +162A, + guitar principals only required one credit each semester for two credits each year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A (MUS 110A), section 1, Symphonic Wind Ensemble (or MUSI 114A (MUS 110A), section 2, University Concert Band, or MUSI 108A (MUS 108A), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A (MUS 108A), section 1, University Orchestra, every semester.

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
Minimum Required Grade: C-	2-6 Total Credits Required

3rd and fourth Ensemble Requirements

Rule: One course each semester

Note: Ensembles required MUSI 308A -314A, 362A, 1 credit each semester for a total of two credits first year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.) Majors whose principal performance area is wind/percussion must register for:

- MUSI 314 (MUS 310), section 1, Symphonic Wind Ensemble (MUSI 314), section 2, University Concert Band, or MUSI 308A (MUS 308A), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 308 (MUS 308), section 1, University Orchestra, every semester.

—	Course	Credits
	MUSI 308 - Orchestras II: UM	1 Credits
	MUSI 314 - Band III: UM Concert Band	1 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
Minimum Required Grade: C-		4-12 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Upper Division Writing Expection

Rule: One course for 3 credits

Note: Must take one course from the above listed courses for 3 credits

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		3-9 Total Credits Required

Music Requirements for Writing

Rule: All courses required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Mathematics

Rule: One course for 3 credits

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

—	Course	Credits
	MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and MUSI 302

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

—	Course	Credits
	MUSI 207H - World Music (equiv to 307)	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Music Composition

Bachelor of Music - Music; Track: Specialization in Music Composition

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 86

Required Cumulative GPA: 2.75

Note: All degrees require 39 upper division credits.

1st year

Rule: All courses required

Note: 1st year requirements: MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year. Composition I - 2 credits each semester for a total of four credits first year.

Course	Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 135A - Keyboard Skills I	1 Credits
MUSI 136A - Keyboard Skills II	1 Credits
MUSI 140 - Aural Perception I	2 Credits
MUSI 141 - Aural Perception II	2 Credits
MUSI 180 - Composition I	1 To 2 Credits
MUSI 195 - Applied Study I	1 To 4 Credits
MUSI 202L - Intro to Music Literature	3 Credits
MUST 110 - Digital Audio & Multitracking	2 Credits

Minimum Required Grade: C-	21-23 Total Credits Required
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2nd year

Rule: All courses required

Note: 2nd year requirements: MUSI 295 applied studies 1 credit each semester for a total of 2 credits second year. Composition II - 2 credits each semester for a total of four credits the second year. MUSI 296 -01 Upper-Division Required Performance to be completed 2nd year to advance to upper division classes

Course	Credits
MUSI 205 - Music Theory III	2 Credits
MUSI 206 - Music Theory IV	2 Credits
MUSI 235 - Keyboard Skills III	1 Credits
MUSI 236 - Keyboard Skills IV	1 Credits
MUSI 240 - Aural Perception III	2 Credits
MUSI 241 - Aural Perception IV	2 Credits
MUSI 280 - Composition II	1 To 2 Credits
MUSI 295 - Applied Study II	1 To 4 Credits
MUSI 296 - Piano Prof Assessment	
MUSI 301H - Music History I	3 Credits
MUSI 302H - Music History II	3 Credits
MUST 210 - Sequencing, Synthesis, Sampling	2 Credits
Minimum Required Grade: C-	24-26 Total Credits Required

3rd year

Rule: See commentary

Note: 3rd year requirements: MUSI 395 applied studies 1 credit Fall semester. Composition III - 3 credits each semester for a total of six credits the third year. MUSI 335 or 336 Instrumental OR Choral Conducting for 2 credits Spring Semester

Course	Credits
MUSI 335 - Instrumental Conducting	2 Credits

	MUSI 336 - Choral Conducting	2 Credits
	MUSI 356 - Form & Analysis I	2 Credits
	MUSI 357 - Form & Analysis II	2 Credits
	MUSI 380 - Composition III	1 To 3 Credits
	MUSI 395 - Applied Study III	1 To 4 Credits
	MUSI 407 - Counterpoint I	3 Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 440 - Orchestration	2 Credits
Minimum Required Grade: C-		21-23 Total Credits Required

4th year

Rule: All courses required

Note: 4th year requirements: MUSI 499 Professional project 2 credits Spring semester. MUSI 480 Composition IV, 3 credits Fall semester. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

—	Course	Credits
	MUSI 388 - Concert Attendance UM	
	MUSI 480 - Composition IV	1 To 3 Credits
	MUSI 499 - Senior Recital/Capstone Pjt	1 To 4 Credits
	MUST 310 - Interactivity Digitl Sgnl Proc	2 Credits
	MUST 410 - Computer Music Programming	2 Credits
Minimum Required Grade: C-		9-11 Total Credits Required

Upper Division Writing Expection

Rule: All courses required

Note: Music 415, Music of the 20th Century to the Present, will satisfy the upper-division writing expectation.

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

1st and 2nd year Ensemble requirements

Rule: One course each semester

Note: Ensembles - MUSI 108A -114A, +162A, #191, (+ guitar principals only #piano principals only)required one credit each semester for two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A (MUS 110A), section 1, Symphonic Wind Ensemble (or MUSI 114A (MUS 110A, section 2, University Concert Band, or MUSI 108A(MUS 108A, section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A (MUS 108A), section 1, University Orchestra, every semester.

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 110A - Opera Theatre I	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
Minimum Required Grade: C-	4 Total Credits Required

3rd and fourth Ensemble Requirements

Rule: One course each semester

Note: MUSI 308-314,310,331,OR +362, #391 (+ guitar principals only #piano principals only) required one credit each semester for two credits third year, fourth year 1 credit Fall Semester.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 314 (MUS 310), section 1, Symphonic Wind Ensemble (or MUSI 314 (MUS 310), section 2, University Concert Band, or MUSI 308 (MUS 308), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 308 (MUS 108A/308), section 1, University Orchestra, every semester.

Ensemble requirements for piano and organ are listed separately for each curriculum.

Course	Credits
MUSI 308 - Orchestras II: UM	1 Credits
MUSI 310 - Opera Theatre II	1 Credits
MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
MUSI 314 - Band III: UM Concert Band	1 Credits

	MUSI 331 - Jzz Ens II: UM	1 Credits
	MUSI 362 - Chmbr Ens III: UM	1 Credits
	MUSI 391 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-		3-22 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music General Requirement for Writing

Rule: All courses required

—	Course	Credits
	WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: Math - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Exemption from Modern and Classical Language Requirement - Symbolic Systems MUSI 105,106,140,141

Minimum Required Grade: C-

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301 and MUSI 302

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) MUSI 207X is required

Course	Credits
MUSI 207H - World Music (equiv to 307)	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Music Education B.A.

Bachelor of Music Education - Music Education

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 72

Required Cumulative GPA: 2.75

Note: All Music Degrees require 39 upper division credits

*Keyboard principals do not take MUSI 135-136 but Must take MUSI 332 and 435 in addition to upper-division electives, +offered even - numbered years in autumn

**Keyboard/Voice - 3 credits, Orchestra principals - 2 credits

Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information.

1st year

Rule: See commentary

Note: 1st year requirements: MUSI 195 applied studies 1 credit each semester for a total of 2 credits first year. First year must include MUSE 120-121 or MUSI 274-275 -Strings or Brass in class. *ALL BME KEYBOARD, VOICE & STRING must take 1 semester only of 155A-MARCHING BAND*

Course	Credits
MUSE 120 - Techs: String Inst in Class I	1 Credits
MUSE 121 - Techs: String Inst in Class II	1 Credits
MUSE 123 - Techniques: Voice	1 Credits
MUSE 274 - Techniques: Upper Brass	1 Credits
MUSE 275 - Techniques: Lower Brass	1 Credits
MUSI 105 - Music Theory I	2 Credits
MUSI 106 - Music Theory II	2 Credits
MUSI 135A - Keyboard Skills I	1 Credits
MUSI 136A - Keyboard Skills II	1 Credits
MUSI 140 - Aural Perception I	2 Credits
MUSI 141 - Aural Perception II	2 Credits
MUSI 155A - Marching: Grizzly Marchng Band	1 Credits
MUSI 195 - Applied Study I	1 To 4 Credits
MUSI 202L - Intro to Music Literature	3 Credits
Minimum Required Grade: C-	19-24 Total Credits Required

2nd year

Rule: See commentary

Note: 2nd year BME classes required: MUSI 295 applied studies 1 credit each semester for a total of 2 credits 2nd year. Also required for 2nd year MUSE 120-121 or MUSE 274, 275 Woodwinds in class and Strings or Brass in class for a total of 2 credits.

in the second year of classes MUSI 296-01 Upper Division Required Performance must be completed to move on to upper division classes.

Apply for admission to Teacher Education Program during second year.

String Voice, and Piano principals required to take only 1 credit of Marching Band MUSI 155.

Course	Credits
MUSE 120 - Techs: String Inst in Class I	1 Credits
MUSE 121 - Techs: String Inst in Class II	1 Credits
MUSE 272 - Techniques: Flute & Single Reed	1 Credits
MUSE 273 - Techniques: Double Reed	1 Credits
MUSE 274 - Techniques: Upper Brass	1 Credits
MUSE 275 - Techniques: Lower Brass	1 Credits
MUSI 155A - Marching: Grizzly Marchng Band	1 Credits
MUSI 195 - Applied Study I	1 To 4 Credits
MUSI 205 - Music Theory III	2 Credits
MUSI 206 - Music Theory IV	2 Credits
MUSI 235 - Keyboard Skills III	1 Credits
MUSI 236 - Keyboard Skills IV	1 Credits
MUSI 240 - Aural Perception III	2 Credits
MUSI 241 - Aural Perception IV	2 Credits
MUSI 296 - Piano Prof Assessment	
MUSI 301H - Music History I	3 Credits
MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-	21-27 Total Credits Required

3rd year

Rule: All courses required

Note: Required for 3rd year BME study: MUSI 395 applied studies 1 credit for Fall semester the third year. MUSI 102A for 1 credit Spring semester the third year.

Course	Credits
MUSE 126 - Techs: Percussn Instruments I	1 Credits
MUSE 127 - Techs: Percussn Instruments II	1 Credits
MUSE 333 - Gen Music Methods & Materls I	2 Credits
MUSE 334 - Gen Music Methods & Materls II	2 Credits
MUSE 497 - Methods: Choral & Literature	2 Credits
MUSI 102A - Performance Study	1 To 2 Credits
MUSI 335 - Instrumental Conducting	2 Credits
MUSI 336 - Choral Conducting	2 Credits
MUSI 395 - Applied Study III	1 To 4 Credits
MUSI 440 - Orchestration	2 Credits
Minimum Required Grade: C-	18-20 Total Credits Required

4th year

Rule: All courses required

Note: Required for 4th year BME study: MUSI 102A one credit Fall semester for the fourth year study. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

Course	Credits
MUSE 425 - Technology and Materials	2 Credits
MUSI 102A - Performance Study	1 To 2 Credits
MUSI 388 - Concert Attendance UM	
Minimum Required Grade: C-	3-5 Total Credits Required

3rd and 4th Year Education Department Requirements

Rule: All courses required

Note: Students must be formally admitted to the Teacher Education Program to take Education courses. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information. EDU 494 is taken for 1 cred and EDU 495 is taken for 14 credits. These two education classes are taken the last semester of study.

Course	Credits
EDU 202 - Early Field Experience	1 Credits
EDU 221 - Ed Psych & Measuremnt	3 Credits
EDU 345 - Excptnlty & Clsrn Mgmt	3 Credits
EDU 395 - Clinical Experience	1 Credits
EDU 407E - Ethics & Policy Issues	3 Credits
EDU 494 - Seminar:Refl Pract & App Rsrch	1 To 9 Credits
EDU 495 - Student Teaching	1 To 14 Credits
Minimum Required Grade: C-	26-34 Total Credits Required

1st and 2nd year Education Requirements

Rule: Course required

Note: Apply for Admission to Teacher Education Program during second year

Course	Credits
HEE 233 - Health Issues Child/Adol	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

1st and 2nd year Ensembles

Rule: All courses required

Note: Ensembles - MUSI 108A -114A, +162A, #191, + guitar principals only #piano principals only required one credit each semester for two credits each year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

- MUSI 114A (MUS 110A), section 1, Symphonic Wind Ensemble (or MUSI 114A (MUS 110A), section 2, University Concert Band, or MUSI 108A (MUS 108A), section 1, University Orchestra, if designated by the Director, every semester.

String majors must register for:

- MUSI 108A (MUS 108A), section 1, University Orchestra, every semester.

B.M.E. voice majors must take a minimum of:

- 6 credits in MUSI 112 (MUS 107A), section 1 (University Choir)

Ensemble requirements for piano and organ are listed separately for each curriculum.

Course	Credits
MUSI 108A - Orchestra: UMSO	1 Credits
MUSI 110A - Opera Theatre I	1 Credits
MUSI 112A - Choir: Chamber Chorale	1 Credits
MUSI 114A - Band: UM Concert Band	1 Credits
MUSI 162A - Chamber Ensembles I	1 Credits
MUSI 191 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	4-14 Total Credits Required

3rd and 4th year Ensembles

Rule: All courses required

Note: MUSI 308A -314A, + 362A, #491, (+ guitar principals only #piano principals only) 1 credit each semester for a total of two credits the third year. 4th year 1credit fall semester.

Course	Credits
MUSI 308 - Orchestras II: UM	1 Credits
MUSI 310 - Opera Theatre II	1 Credits
MUSI 312 - Choir III: Chamber Chorale	1 To 8 Credits
MUSI 314 - Band III: UM Concert Band	1 Credits
MUSI 362 - Chmbr Ens III: UM	1 Credits
MUSI 491 - Special / Experimental Courses	1 To 9 Credits
Minimum Required Grade: C-	3-21 Total Credits Required

Musicrequired English Writing Skills

Rule: All courses required

Course	Credits
WRIT 101 - College Writing I	3 Credits
Minimum Required Grade: C-	

Upper Division Writing Expectation

Rule: One course for 3 credits required

Note: You should take a 400 level (415, 416 or 417) Music History writing class to satisfy the upper-division writing expectation for 3 credits.

—	Course	Credits
	MUSI 415 - Music 20th Century to Present	3 Credits
	MUSI 416 - Topics in Music History	3 Credits
	MUSI 417 - Cultural Studies in Music	3 Credits
Minimum Required Grade: C-		3-9 Total Credits Required

Lower division Writing Expectation

Rule: All courses required

—	Course	Credits
	MUSI 302H - Music History II	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Music Requirements for Mathematics

Rule: All courses required

Note: M course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Exception to Modern and Classical Language Requirement-Symbolic Systems - MUSI 105, 106, 140,141

Minimum Required Grade: C-

Music Requirements for Symbolic Systems

Rule: All courses required

Note: The competency for Symbolic Systems is also satisfied within the music major curriculum. Music History 302H satisfies your lower-division writing requirement.

Minimum Required Grade: C-

Music Requirements for Expressive Arts

Rule: All courses required

Note: A Courses - (min. of 3 credits) Ensembles taken each semester satisfy this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses - (min. of 3 credits) MUSI 202L taken in the 1st year satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Course - (min. of 3 credits) MUSI 301H - 302H taken in the 2nd year satisfy this requirement.

Minimum Required Grade: C-

Music Requirements for Social Sciences

Rule: All courses required

Note: Social Sciences - S Courses - (min. of 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Ethical and Human Values

Rule: All courses required

Note: Ethical and Human Values - E Courses - (min. of 3 credits) EDU 407E taken the 3rd or 4th year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - X Courses - (min. of 3 credits) A Native American Studies Course with an X is required for Education Degree. NASX 105 is recommended.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science - N Courses - 6 credits, choice made from course catalog credits required and at least one course must include a lab experience

Minimum Required Grade: C-

6 Total Credits Required

Theatre & Dance

Michael Monsos, Director

The School of Theatre & Dance is accredited by the National Association of Schools of Theatre (NAST) and is a member of the Association for Theatre in Higher Education (ATHE) and the United States Institute for Theatre Technology (USITT). The school is housed in the Performing Arts and Radio/Television Center, which includes three theatre/dance performance spaces and television/radio studios. The program is production-oriented with approximately ten major productions presented each year including contemporary, historical, period, musical, and experimental plays, as well as dance showcases and concerts. Montana Repertory Theatre, a professional touring company based at UM, often involves students both on and off stage. The faculty is strong, possessing a diversity of educational and professional theatre and dance backgrounds.

The Bachelor of Arts with a major in Dance allows the student who plans to enter a dance career to select another major to complement that objective. The Bachelor of Arts with a major in Theatre provides the student with a broad liberal arts education and a general focus in theatre. The degree allows the student to complete an additional major and may form the basis for further training on the graduate level. The Bachelor of Arts with a major in Theatre and an area of specialization in Education Endorsement Preparation is designed for the student seeking teaching endorsement in the field of theatre. The Bachelor of Fine Arts with a major in Dance or Theatre is a professionally oriented degree designed for the student who plans to pursue a career in theatre, dance, or a related field. Areas of specialization are: Acting, Design/Technology, Choreography and Performance, and Teaching. Graduate programs lead to the Master of Arts in Theatre or Integrated Arts and Education and the Master of Fine Arts in Theatre with areas of specialization in Acting, Design/Technology, or Directing.

For more information on the academic programs and to learn about Theatre & Dance productions, please visit <http://www.umt.edu/theatredance>.

Advisement

Each Theatre & Dance major must have a faculty advisor who is assigned by the School and who is usually from the student's area. The School, through its advisement program, often recommends non-theatre and non-dance electives and specific General Education courses to the student depending on the student's area. Majors may not take core or area-required courses on a credit/no credit basis.

Auditions and Portfolio Reviews

Actors, dancers, designers and technicians undergo periodic review in the form of auditions or portfolio presentations. These ongoing evaluations provide each student with the opportunity and challenge of individualized critiques from faculty and professional staff.

Senior Project

A senior project is required of all students. The senior project is usually production-related and has both practical and written components. Requirements for the project vary and are outlined in the School of Theatre & Dance Handbook.

Department Faculty

Professors

Michele Antonioli, Professor of Dance
Randy Bolton, Professor of Theatre
Nicole Bradley Browning, Professor of Dance / Head of Dance
Jillian Campana, Professor of Theatre / Head of Performance & Practice
Alessia Carpoca, Professor of Theatre / Head of Design & Technology
Mark Dean, Professor of Theatre
Gregory Johnson, Artistic Director, Montana Repertory Theatre / Professor of Theatre
Karen Kaufmann, Professor of Dance
Michael Monsos, School Director / Professor of Theatre

Associate Professors

John Kenneth DeBoer, Associate Professor of Theatre
Heidi Eggert, Associate Professor of Dance
Jere Hodgins, Associate Professor of Theatre
Bernadette Sweeney, Associate Professor of Theatre

Adjunct Faculty

Cohen Ambrose, Instructor of Theatre
Jordan Dehline, Instructor of Dance
Sarah Donnelly, Instructor of Dance
Joy French, Adjunct Assistant Professor of Dance
Sarah Fulford, Visiting Assistant Professor of Theatre
Linda Parker, Instructor of Dance
Tarn Ream, Instructor of Dance

Course Descriptions

Dance

- **DANC 100A - Introduction to Modern Dance**
Credits: 2. (R-4) Offered autumn and spring. Introduction to basic modern dance vocabulary through exercises for alignment, strength and flexibility and combinations across the floor. **Course Attributes:** Expressive Arts Course
- **DANC 108 - Dance Forms**
Credits: 1 TO 8. (R-8) Offered autumn and spring. Introduction to basic dance vocabulary and technique in a particular style.
- **DANC 110A - Introduction to Ballet**
Credits: 2. (R-4) Offered autumn and spring. Introduction to basic ballet positions and steps. **Course Attributes:** Expressive Arts Course
- **DANC 115A - Introduction to Jazz Dance**
Credits: 2. (R-4) Offered autumn and spring. Introduction to basic strengthening and stretching exercises and stylistic characteristics of jazz. **Course Attributes:** Expressive Arts Course
- **DANC 118A - Dance Forms: Tap**
Credits: 2. (R-8) Offered autumn and spring. Introduction to basic tap dance vocabulary and technique. **Course Attributes:** Expressive Arts Course
- **DANC 129A - Dance Performance Lab I**
Credits: 1. (R-7) Offered autumn and spring. Credit for rehearsing and performing in approved Theatre & Dance productions. **Course Attributes:** Expressive Arts Course
- **DANC 130A - Introduction to Dance**
Credits: 3. Offered autumn and spring. The various elements of dance and basic artistic principles underlying dance and all of the arts. Introduces the student to beginning-level dance vocabulary and dance skills as well as the creative process through direct experience. **Course Attributes:** Expressive Arts Course
- **DANC 160A - Dance Forms: Irish**
Credits: 2. (R-8) Offered autumn and spring. Introduction to basic Irish dance vocabulary and technique. **Course Attributes:** Expressive Arts Course

- **DANC 165A - Dance Forms: African**
 Credits: 2. (R-8) Offered autumn. Introduction to basic African dance vocabulary and technique.
Course Attributes: Expressive Arts Course
- **DANC 170A - Dance Forms: Tribal Belly**
 Credits: 2. (R-8) Offered spring. Introduction to basic tribal-style belly dance vocabulary and technique. **Course Attributes:** Expressive Arts Course
- **DANC 191 - Special Topics**
 Credits: 1 TO 6. (R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **DANC 194 - Seminar/Workshop**
 Credits: 1. Offered autumn and spring. Introduces incoming freshmen to the world of university dance and contemporary dance as a profession.
- **DANC 200A - Contemporary Modern II**
 Credits: 2. (R-12) Offered autumn and spring. Prereq., DANC 100A. Continuation of the modern dance vocabulary at an advanced-beginner level. **Course Attributes:** Expressive Arts Course
- **DANC 205 - Improvisation**
 Credits: 2. (R-6) Offered spring. Exploration of stimulus, structure and performance of improvised movement. Elements such as space, shape, motion, time, quality, form and awareness emphasized. Instructor-designed structures, transitioning to student-designed scores, culminating in improvised performance.
- **DANC 210A - Ballet II**
 Credits: 2. (R-12) Offered autumn and spring. Prereq., DANC 110A. Continuation of the ballet vocabulary at an advanced-beginner level. **Course Attributes:** Expressive Arts Course
- **DANC 215A - Jazz Dance II**
 Credits: 2. (R-12) Offered autumn. Prereq., DANC 115A. Continuation of the jazz vocabulary at an advanced-beginner level. **Course Attributes:** Expressive Arts Course
- **DANC 220A - Creative Practice I**
 Credits: 3. (R-6) Offered spring. Prereq., DANC 200A. Exploration of stimulus, structure, and performance of both composed and improvised movement. Elements such as space, shape, energy, motion, time, quality, form and awareness emphasized. Instructor-designed structures, transitioning to student-designed scores, culminating in originally created/improvised performance. **Course Attributes:** Expressive Arts Course
- **DANC 225 - Rehearsal & Performance**
 Credits: 1 TO 4. (R-24) Offered autumn and spring. Prereq., consent of instr. Open to students who are choreographing a dance for a concert or to those who have been selected through audition to perform. **Course Attributes:** Expressive Arts Course
- **DANC 229A - Dance Performance Lab II**
 Credits: 1. (R-7) Offered autumn and spring. Credit for rehearsing and performing in approved Theatre & Dance productions. **Course Attributes:** Expressive Arts Course
- **DANC 234L - Dance in Popular Movies**
 Credits: 3. Offered spring odd-numbered years. Survey of the history of dance and movement on film, with specific focus on the use of and reasons for choreography in popular movies of specific decades. **Course Attributes:** Literary & Artistic Stds Crse
- **DANC 280 - Dance Conditioning: Pilates**
 Credits: 1. (R-8) Offered autumn and spring. Pilates mat (floor) exercises to build core control,

strength and flexibility.

- **DANC 294 - Seminar/Workshop**

Credits: 1. Offered autumn and spring. One-time offerings of current topics.

- **DANC 298 - Internship: Children's Dance**

Credits: 1. (R-4) Offered autumn and spring. Students participate and gain beginning-level teaching experience in two of four dance classes for children ranging in ages from 3 ½ to 12 years old.

Course Attributes: Internships/Practicums

- **DANC 300 - Contemporary Modern III**

Credits: 3. (R-12) Offered autumn and spring. Prereq., DANC 200A. Extension of the modern dance vocabulary through lengthier combinations of movement.

- **DANC 305 - Contact Improvisation**

Credits: 2. (R-6) Offered autumn odd-numbered years. The art of moving with one or more partners while using a shifting point of contact and supporting each other's weight. Skills such as rolling, suspending, falling and recovering together explored through physical sensations that use weight, counter-balance and yielding.

- **DANC 310 - Ballet III**

Credits: 2. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of ability to combine steps; carriage of head and arms.

- **DANC 315 - Jazz III**

Credits: 2. (R-12) Offered autumn. Prereq., DANC 215A or consent of instr. Continuation of DANC 215A.

- **DANC 320 - Creative Practice II**

Credits: 2. (R-6) Prereq., DANC 220A. Explores ways to manipulate several dancers in space, through repetition of shapes, through related rhythms. May include choreography for videotape.

- **DANC 322 - Dance Touring**

Credits: 1 TO 4. (R-24) Offered autumn and spring. Prereq., audition. Rehearsal and touring to the community.

- **DANC 325 - Spirit Squad**

Credits: 2. (R-4) Offered autumn and spring. UM cheer and dance team selected during audition process each spring; students perform routines at the intermediate jazz level. Development of current dance performance, leadership, communication and organizational skills. (Only four credits of DANC 325, HHP 100-179, MS 203 and MS 315 may count toward a degree.) **Course Attributes:**

PE Activity Skills Course

- **DANC 334 - Dance History**

Credits: 3. Offered autumn odd-numbered years. Discussion of primary movements and major figures in American modern dance, including global influences and its relationship to cultural trends of the twentieth and twenty-first centuries. **Course Attributes:**

Writing Course-Upper-Division

- **DANC 345 - Teaching for the Disabled**

Credits: 1. (R-4) Offered autumn and spring. Students interact with adults with developmental disabilities in an adaptive dance class where movement is used as a therapeutic modality for people with cognitive and physical impairments. Students interact with the participants, engage as role models and gain beginning teaching experience.

- **DANC 346 - Methods: Dance in K-8**

Credits: 2. (R-4) Offered autumn and spring. Open to majors in elementary education. Techniques and applications for using movement in the public school setting. Focus on movement elements,

lesson design and planning, standards for dance, multiple intelligence theory, assessment, classroom management techniques and multiculturalism. **Course Attributes:**

Expressive Arts Course

- **DANC 360L - World Dance**

Credits: 3. (R-6) Offered autumn odd-numbered years. Investigation of dances of diverse cultures. Study of dance as: an emblem of cultural identity, social order, power and gender-specific behavior; an expression of religion and/or ritual; a classical art form; and as a medium for personal expression in Western and non-Western world cultures. **Course Attributes:**

Literary & Artistic Stds Crse Indigenous and Global

- **DANC 380 - Science of Dance Movement**

Credits: 3. Offered spring even-numbered years. Study of the skeletal system and how it relates to dance movement. Basic kinesthetic principles, conditioning for dancers, and injury recognition and prevention.

- **DANC 391 - Special Topics**

Credits: 1 TO 24. (R-24) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **DANC 392 - Independent Study**

Credits: 1 TO 3. (R-24) Offered autumn and spring. Prereq., consent of instr.

- **DANC 394 - Seminar/Workshop**

Credits: 1. (R-2) Offered autumn and spring. One-time offerings of current topics.

- **DANC 395 - Studio/Practicum**

Credits: 1 TO 6. (R-12) Studio-based course, emphasizing one-on-one faculty instruction. Students meet during regularly scheduled times with faculty or in small groups throughout the semester to discuss the development of their individual work.

- **DANC 399 - Jr Creat/Research Proj**

Credits: 1. (R-6) Offered autumn and spring. Prereq., dance major. Independent study in choreography or a research paper which could be on such subjects as teaching styles, multiple intelligence theory, dance historical topics, dance injuries, etc. An initial proposal, a journal, and a paper are required.

- **DANC 400 - Contemporary Modern IV**

Credits: 3. (R-12) Offered autumn and spring. Prereq., DANC 300. Performance of exercises and combinations that are technically demanding in strength, balance, weight, agility and line.

- **DANC 404 - Advanced Contemporary Modern**

Credits: 3. (R-12) Offered autumn and spring. Prereq., DANC 400, 6 cr., or equiv. skill, and consent of instr. Continuation of DANC 400.

- **DANC 405 - Advanced Improvisation**

Credits: 2. (R-6) Prereq., DANC 205, 305. Exploration of improvisation and contact improvisation as performance art forms. Instructor and students collaboratively design, rehearse, and publicly perform improvisational scores.

- **DANC 406 - Dance as a Healing Art**

Credits: 2. (R-6) Offered spring. Study of body movement as a reflection of inner emotional states. How changes in movement lead to changes in the psyche, promoting health and growth. Exploration of techniques for experiencing the inter-connection between movement and emotional expression.

- **DANC 410 - Ballet IV**

Credits: 2. (R-12) Offered autumn and spring. Prereq., 4 cr. of DANC 310 or equiv. skill, consent of

instr. Continues to build on skills developed in Ballet III; emphasis on developing advanced petite allegro, grand allegro, turns, and artistry.

- **DANC 440 - Dance Pedagogy**
Credits: 3. (R-9) Offered autumn even-numbered years. Prereq., DANC 298. Methods and experiences in teaching modern dance, ballet and jazz.
- **DANC 446 - Teaching Projects**
Credits: 1 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instr. Independent study that may involve either assisting in the teaching of a dance technique class or actually planning and teaching it.
- **DANC 491 - Special Topics**
Credits: 1 TO 24. (R-24) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.
- **DANC 492 - Independent Study**
Credits: 1 TO 6. (R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.
- **DANC 494 - Seminar/Workshop**
Credits: 3. (R-6) Offered autumn even-numbered years. Seminar to discuss both practical and philosophical issues confronting dance students about to enter the "real" world. **Course Attributes:** Writing Course-Upper-Division Writing Course-Advanced
- **DANC 495 - Practicum/Field Work**
Credits: 1 TO 6. (R-6) Studio-based course, emphasizing one-on-one faculty instruction. Students meet during regularly scheduled times with faculty or in small groups throughout the semester to discuss the development of their individual work.
- **DANC 497 - Methods: Tchng Movmnt in Schls**
Credits: 3. Offered autumn odd-numbered years. Prereq., consent of instr. Experience in planning, observing and directing creative movement as a teaching tool in K-5.
- **DANC 498 - Senior Thesis/Creative Project**
Credits: 2 TO 3. (R-6) Offered autumn and spring. Prereq., dance major. Independent study in choreography or teaching. If the student is a BFA candidate, the project must take place off-campus in the Missoula community. The student is responsible for setting up the project. An initial proposal, a journal, and a paper are required. **Course Attributes:** Internships/Practicums

Theatre

- **THTR 101L - Introduction to Theatre**
Credits: 3. Offered autumn and spring. The various elements of play production and dance. The basic artistic principles underlying dance, theatre and all of the arts. **Course Attributes:** Literary & Artistic Stds Crse American and European
- **THTR 102A - Introduction to Theatre Design**
Credits: 3. Offered autumn. Basic understanding of the principles of design for the theatre and television, including the production elements of scenery, costumes and lighting. **Course Attributes:** Expressive Arts Course
- **THTR 103 - Introd to House Management**
Credits: 1. (R-3) Offered autumn and spring. Introduction to the skills and experience of the front-of-house staff for a theatrical production.
- **THTR 106A - Theat Prod I: Run Crew**

Credits: 1. (R-6) Offered autumn and spring. Operation and running a show backstage on a scenery, costume, or prop crew for a major school production. **Course Attributes:**
Expressive Arts Course

- **THTR 107A - Theat Prod I: Constr Crew**

Credits: 3. (R-9) Offered autumn and spring. The construction and completion of scenery/props, costumes, and/or lighting under supervision. Most assignments involve very basic construction techniques and/or maintenance duties found in professional shop. Involves minimum of two 4-hour labs a week. **Course Attributes:** Expressive Arts Course

- **THTR 113A - Intro to Vocal Acting**

Credits: 3. An introduction to the skills and techniques required of the actor's voice to be effective in communication with others online, onstage, and in the world. **Course Attributes:**
Expressive Arts Course

- **THTR 120A - Introduction to Acting I**

Credits: 3. Offered every term. An introduction to the skills and techniques required of the actor to be effective in communication with others on stage and off stage. **Course Attributes:**
Expressive Arts Course

- **THTR 121A - Introduction to Acting II**

Credits: 3. Offered autumn and spring. Prereq., THTR 120A. Continuation of 120A. **Course Attributes:** Expressive Arts Course

- **THTR 155 - Drawing Fundamntls for Theatre**

Credits: 3. Offered spring. Students will begin to develop skills in drawing the human form, perspective, and architecture.

- **THTR 191 - Special Topics/Exprmtl Courses**

Credits: 1 TO 6. (R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **THTR 202 - Stagecraft I**

Credits: 3. Offered spring. Fundamental theories and hands-on application in the areas of costuming, lighting, scenery, and properties.

- **THTR 203 - Stagecraft II: Scenery & Props**

Credits: 3. Offered spring. Fundamental theories and hands-on application in the areas of scenery, properties, and rigging.

- **THTR 206 - Theat Prod II: Run Crew**

Credits: 1. (R-6) Offered autumn and spring. Prereq., THTR 106A. Operation and running a show backstage, as in scenery, costumes, or props for a major school production.

- **THTR 207 - Theat Prod II: Constr Crew**

Credits: 3. (R-6) Offered autumn and spring. The construction and completion of scenery/props, costumes, and/or lighting. Advanced construction assignments and/or maintenance duties found in professional shop; possible supervision of a small construction crew. Involves minimum of two 4-hour labs a week.

- **THTR 210 - Voice & Speech I**

Credits: 3. Offered autumn. Prereq., THTR 221 or consent of instr. Voice production, phonetics and speech for the stage.

- **THTR 211 - Voice & Speech II**

Credits: 3. Offered spring. Prereq., THTR 210. Continuation of 210.

- **THTR 220A - Acting I**

Credits: 3. Offered autumn and spring. Studio class intended to cultivate skill sets necessary for those with a background or interest in the craft of acting, especially those considering a career in the performing arts (theatre, music, dance, film, broadcasting): observation, imagination, concentration, improvisation, and character. **Course Attributes:** Expressive Arts Course

- **THTR 221 - Acting II**

Credits: 3. Offered spring. Prereq., THTR 220A. Continuation of 220A. Scene study and characterization. Works selected from realism and poetic realism, utilizing modern and contemporary scripts of the American masters.

- **THTR 229A - Production Acting I**

Credits: 1. (R-6) Offered autumn and spring. Credit for acting in approved Theatre & Dance productions. **Course Attributes:** Expressive Arts Course

- **THTR 235L - Dramatic Literature**

Credits: 3. Offered autumn and spring. The study of representative texts in dramatic literature as a foundation for play analysis. **Course Attributes:** Literary & Artistic Stds Crse

- **THTR 239A - Creative Drama/Dance: K-8**

Credits: 2. Offered autumn and spring. Major restriction: CER1, EDUC or PRED. Focus on the use of creative drama and dance as types of educational tools. Students will explore, experience, and implement creative teaching methods in order to promote scholarship through kinesthetic teaching in elementary education. **Course Attributes:** Expressive Arts Course

- **THTR 245 - Int Costume Construction**

Credits: 3. Offered spring. Intermediate costume construction focusing on the development of skills needed to function as a stitcher.

- **THTR 249 - Stage Makeup**

Credits: 2. Offered spring. Principles of and practice in theatrical makeup. Students will work on makeup for major productions.

- **THTR 255 - Drafting for Theatre I**

Credits: 3. Offered spring. Drawing techniques for the theatre with an emphasis on drafting as utilized by technicians, designers, stage managers and directors.

- **THTR 264 - Master Electrician**

Credits: 2. Offered intermittently. Prereq., THTR 107A, THTR 202, or consent of instr. Training for the position of master electrician and assistant lighting designer. Practical application of production planning, lighting paperwork, overseeing lighting crews, advanced electrical theory, power distribution, and creative problem solving. Students will work on major school productions.

- **THTR 292 - Independent Study**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Independent study in all the arts of the theatre.

- **THTR 305 - Theatre Workshop III**

Credits: 1 TO 20. (R-20) Offered autumn and spring. Prereq., consent of instructor. Advanced laboratory production in all the arts of the theatre.

- **THTR 306 - Summer Theatre**

Credits: 1 TO 12. (R-12) Offered summer. Prereq., consent of instr. Practicum in school-approved summer theatre companies in the capacity of actor, designer, director, stage manager and/or technician.

- **THTR 307 - Production Construction I**

Credits: 3. (R-12) Offered autumn and spring. Prereq., THTR 107A and consent of instr. Students serve as the construction/maintenance crew in a shop (sound, light, costume, or scenery) for School productions.

- **THTR 308 - Production Team I**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Students function as part of the production team in a role of responsibility (i.e., master electrician, cutter, first hand, master carpenter, etc.) for a school production. These assignments and duties may serve also as part of the required junior project.
- **THTR 309 - Production Design I**
Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Students function as a member of the production team in a role of responsibility (i.e., scenic designer, costume designer, light designer, etc.) for a school production. These assignments and duties may serve also as part of the required junior project.
- **THTR 310 - Voice and Speech III**
Credits: 3. Offered autumn. Prereq., THTR 211 and audition, or consent of instr. Dialects, accents, and continued development of good voice and speech skills.
- **THTR 311 - Voice and Speech IV**
Credits: 3. Offered spring. Prereq., THTR 310. Integration of voice and speech skills, vocal character.
- **THTR 315 - Physical Performance Skills I**
Credits: 3. Offered spring. Prereq., THTR 221 or consent of instr. Basics of physical performance: collaboration, concentration, centering, balance, agility, and body awareness through a variety of stage movement techniques.
- **THTR 316 - Physical Performance Skills II**
Credits: 3. Offered autumn. Prereq., THTR 315. Physical characterization: exploring weight, rhythm, tempo, and kinesthetic relationships through Laban, animal studies, and Michael Chekhov.
- **THTR 320 - Acting III**
Credits: 3. Offered autumn. Prereq., THTR 221. Selected scenes and projects from European and American realistic texts such as Chekhov, Ibsen, Strindberg, and Shaw.
- **THTR 321 - Acting IV**
Credits: 3. Offered spring. Prereq., THTR 320. Study and practice of working with a camera and film/television scripts.
- **THTR 329 - Production Acting II**
Credits: 1. (R-4) Offered autumn and spring. Prereq., THTR 229A. Credit for acting in approved Theatre & Dance productions. **Course Attributes:** Expressive Arts Course
- **THTR 330H - Theatre History I**
Credits: 3. Offered autumn. Prereq., WRIT 101 (or higher) or equivalent, or consent of instr. A survey of the major developments of the theatre from primitive beginnings to the 19th century, including various cultures and their representative plays and performances throughout the world. **Course Attributes:** Historical & Cultural Course Writing Course-Approved Writing Course-Intermediate
- **THTR 331Y - Theatre History II**
Credits: 3. Offered spring. Prereq., THTR 330H or theatre minor. Continuation of 330H. The many and varied periods since the 19th century as reflected in the theatre of the times in America and Europe. **Course Attributes:** Writing Course-Upper-Division American and European Writing Course-Advanced
- **THTR 332 - Dramaturgy**
Credits: 3. Prereq., THTR 330H or consent of instr. An introduction to literary, historical, and contextual analysis of play scripts and performance pieces intended for production.
- **THTR 336 - Costume History**

Credits: 3. Offered intermittently. History of Western costume from ancient Egypt to the present day.

- **THTR 339 - Theatre in Elem Education**

Credits: 2. (R-4) Offered autumn and spring. Exploration, implementation and experience in teaching strategies for using theatre in elementary education. Focus on techniques and applications for teaching theatre and for utilizing theatre as a tool for teaching other subject matter. **Course Attributes:** Expressive Arts Course

- **THTR 340 - Costume Design I**

Credits: 3. Offered autumn. Prereq., THTR 102A, 202, 203. Introduction to principles and practices of stage costume design.

- **THTR 345 - Flat Pattern Des & Drafting**

Credits: 3. Offered autumn. Prereq., THTR 202. Pattern design using the flat pattern method, pattern drafting of various garment parts, advanced principles of fitting.

- **THTR 346 - Textile Selection & Manipulatn**

Credits: 3. Offered spring alternate years. Analysis of fibers, yarns, structures and finishes, as related to selection and use for the theatre. Basic dyeing, distressing and painting.

- **THTR 350 - Scenic Design I**

Credits: 3. Offered autumn. Prereq., THTR 102A, 202, 203. Introduction to the problems encountered in designing scenery, analyzing of script, research and practical demands of theatre conventions. Projects include those for theatre, musicals, opera, dance and television.

- **THTR 353 - Technical Direction**

Credits: 1 TO 3. Offered intermittently. Prereq., THTR 255 or consent of instr. Training for position of technical director. The role and scope of technical direction, production scheduling, design analysis, budgets and bookkeeping, and methods of construction.

- **THTR 355 - Computer Aid Draft & Appl**

Credits: 3. (R-6) Offered autumn. Prereq., THTR 255. Computer drafting for scenery, costumes, lighting, and sound design drawings, including 2-D and 3-D plans, layouts and renderings. Work with CAD, photo manipulation, spreadsheet, database, and word processing programs.

- **THTR 356 - Scenic Painting**

Credits: 1 TO 3. (R-6) Offered spring. Introduction to the basic skills needed as a scenic artist. Emphasis on the varied materials and techniques used in the scenic studio, color mixing, and interpretation of the designer's work.

- **THTR 360 - Theatre Lighting I**

Credits: 3. Offered autumn. Prereq., THTR 102A, 202, 203. Introduction to principles and practices of theatre lighting design. Training for position of lighting designer for theatre. Design requirements and decisions, color, development of stage picture; concentration on proscenium theatre design concepts.

- **THTR 365 - Theatre Sound I**

Credits: 3. Offered autumn. Prereq., THTR 102A, 202, 203 or consent of instr. Introduction to principles and practices of theatre sound design. Training for position of sound designer for theatre. Principles, practices, and equipment used to create finished sound designs for theatre, dance and related areas.

- **THTR 370 - Stage Management I**

Credits: 2. Offered autumn. Prereq., THTR 102A, 202, 203. Beginning study of the duties of the stage manager concentrating on the rehearsal process in the non-professional theatre situation.

- **THTR 371 - Stage Mgmt Pract I**

Credits: 1 TO 3. (R-6) Offered autumn and spring. Prereq., THTR 370 or consent of instr. Stage management practicum involving stage managing a showcase production or assistant stage managing a major show. Involves evening work.

- **THTR 375 - Directing I**

Credits: 3. Offered autumn and spring. Prereq., THTR 120A or THTR 220A; THTR 235L. Open to juniors and seniors. Introduction to the analytical skills, staging, and conceptual techniques of the director; includes some practical application in scene work.

- **THTR 380 - Playwriting**

Credits: 3. (R-6) Offered intermittently. Prereq., consent of instr. Techniques and practice in writing short and full-length plays.

- **THTR 391 - Special Topics/Exprmtl Courses**

Credits: 1 TO 9. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **THTR 392 - Independent Study**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

- **THTR 395 - Practicum**

Credits: 1 TO 3. (R-12) Offered intermittently. Service learning experience in theatre in a setting compatible with the student's major and interests.

- **THTR 398 - Cooperative Eductn/Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (398, 498) may count toward graduation. **Course Attributes:**
Internships/Practicums Internship graduation limit 6

- **THTR 405 - Professional Theatre**

Credits: 9. (R-18) Offered spring. Prereq., consent of instr. Laboratory experience in total play production through participation in state, regional, national and international touring production programs.

- **THTR 406 - Professional Tech Prod**

Credits: 1 TO 9. (R-18) Offered spring. Prereq., consent of instr. Students experience the rigors and develop the skills required of technicians in touring theatre, maintaining integrity of all production elements through three months of intensive travel and varying venues.

- **THTR 407 - Prod Construct II**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Students serve as construction crew in one of the shops for productions.

- **THTR 408 - Production Team II**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Students serve as a member of the production team in a role of responsibility (i.e., master electrician, sound board operator, cutter, first hand, etc.) for major productions. These assignments and duties may serve also as part of the required senior project.

- **THTR 409 - Production Design II**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Students serve as a member of the production team in a role of designer (i.e., set designer, costume designer, light designer, etc.) for major productions. These assignments and duties may serve also as part of the required senior project.

- **THTR 410 - Singing For Actors**

Credits: 2. (R-4) Offered spring. Prereq., audition, acting specialization, or consent of instr. Development and presentation of musical numbers in a dramatic context. A broad-based acquaintance with music theatre literature is acquired, and techniques for approaching songs are explored with an eye toward developing competency in music theatre forms. **Course Attributes:**
Co-Convended Course

- **THTR 415 - Physical Performance Skills III**

Credits: 3. Offered spring. Prereq., THTR 316 or consent of instructor, which includes audition for acting specialization. Extremes of performance: stage combat, martial arts, and biomechanics/theatre of the grotesque.

- **THTR 416 - Physical Performance Skills IV**

Credits: 3. Offered spring. Prereq., THTR 415. Advanced specialized physical skills such as period styles, advanced combat/choreography, and commedia.

- **THTR 420 - Acting V**

Credits: 3. Offered autumn. Prereq., THTR 321 and BFA acting specialization, or consent of instr. Selected scenes and projects from specific historical and stylistic periods, from Molière to Restoration comedy. **Course Attributes:** Co-Convended Course

- **THTR 421 - Acting VI**

Credits: 3. Offered spring. Prereq., THTR 420. Selected speeches, scenes and projects from verse drama, especially Shakespeare. **Course Attributes:** Co-Convended Course

- **THTR 423 - Professional Performance**

Credits: 1 TO 9. (R-18) Offered spring. Prereq., consent of instr. Students experience the rigors and develop the skills required for actors in touring theatre; creating characters and maintaining consistent performances through three months of intensive travel and varying venues.

- **THTR 425 - Acting VII**

Credits: 3. Offered autumn. Prereq., THTR 421. Performance and scene work in contemporary practice and theory. **Course Attributes:** Co-Convended Course

- **THTR 426 - Acting VIII**

Credits: 3. Offered spring. Prereq., THTR 425. Developing professional skills, material for the actor, professional portfolio, resume audition material, commercial acting, performance market research. **Course Attributes:** Co-Convended Course

- **THTR 429 - Production Acting III**

Credits: 1. (R-9) Offered autumn and spring. Prereq., THTR 329. Credit for acting in approved Theatre & Dance productions.

- **THTR 439 - Methods of Teaching Theatre**

Credits: 3. (R-6) Offered autumn. Prereq., consent of instr. Building and addressing specific curriculum in theatre arts. **Course Attributes:** Co-Convended Course

- **THTR 440 - Costume Design II**

Credits: 3. (R-9) Offered spring. Prereq., THTR 340. Advanced techniques in costume design; possible topics include design for dance, opera, large scale drama and musicals. **Course Attributes:** Co-Convended Course

- **THTR 445 - Draping**

Credits: 3. Offered spring. Prereq., THTR 345. Garment design based on manipulation of fabric on a body form; emphasis on creative solutions to design problems and the interrelationships between fabric, design, and form.

- **THTR 447 - Tailoring**
Credits: 3. Offered spring alternate years. Prereq., consent of instr. Principles used in the construction of tailored garments.
- **THTR 450 - Scene Design II**
Credits: 3. Offered spring. Prereq., THTR 350. A continuation of the techniques and projects in 350.
Course Attributes: Co-Convened Course
- **THTR 456 - Advanced Scene Painting**
Credits: 3. (R-9) Offered spring. Prereq., THTR 356 and/or consent of instr. Students will explore advanced scene painting techniques.
- **THTR 460 - Theatre Lighting II**
Credits: 3. Offered spring. Prereq., THTR 360 or consent of instr. Advanced study of principles and practices of theatre lighting design. Training for position of light designer for theatre. Design requirements and decisions, color, development of stage picture; thrust and arena theatre. Course Attributes: Co-Convened Course
- **THTR 465 - Theatre Sound II**
Credits: 3. Offered spring. Prereq., THTR 365 or consent of instr. Advanced study of principles and practices of theatre sound design. Training for position of theatre sound designer. Principles, practices and equipment used to create sound and music designs for the theatre, dance and related areas. Course Attributes: Co-Convened Course
- **THTR 470 - Stage Management II**
Credits: 2. Offered intermittently. Prereq., THTR 370 or consent of instr. Additional study of stage management concentrating on pre-rehearsal duties, aspects of maintaining a show's integrity as established by the director, inter-production relationships, supervision of crews and union contracts. Understanding a stage manager's need for paperwork and writing skills. Students encouraged to enroll in THTR 472 to use skills in a living situation.
- **THTR 472 - Stage Mgmt Pract II**
Credits: 3. (R-9) Offered autumn and spring. Prereq., THTR 470 or consent of instr. Stage managing a major show in the drama season in the Montana or Masquer Theatres or assistant stage managing for an Equity stage manager on a Montana Repertory Theatre production.
- **THTR 475 - Directing II**
Credits: 3. Offered autumn. Prereq., THTR 375 or consent of instr. Directing skills for the advanced student; extensive scene work.
- **THTR 476 - Directing III**
Credits: 3. Offered spring. Prereq., THTR 475. Continuation of 475. Course material coordinated with laboratory projects
- **THTR 481 - Adv Acting: Persnl Performance**
Credits: 3. Offered autumn. Prereq., THTR 321 or consent of instr. Developing personal performance skills.
- **THTR 482 - Adv Acting: Solo Performance**
Credits: 3. Offered spring, Prereq., THTR 481 or consent of instr. Creating solo performance material from original material or existing texts.
- **THTR 484 - Adv Acting: Professionl Skills**
Credits: 3. Offered spring. Prereq., THTR 420 or consent of instr. Developing professional skills, material for the actor, professional portfolio, resume audition material, commercial acting, performance market research.
- **THTR 490 - Undergraduate Research**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. **Course Attributes:** Research & Creative Schlrshp

- **THTR 491 - Special Topics/Exprmtl Courses**

Credits: 1 TO 9. (R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

- **THTR 492 - Independent Study**

Credits: 1 TO 12. (R-24) Offered intermittently. Prereq., consent of school director. Independent work under the University omnibus option. See index.

- **THTR 494 - Seminar/Workshop**

Credits: 2. (R-6) Offered intermittently. Prereq., 10 credits in Theatre or in English dramatic literature and consent of instr. Intensive study of dramatic theory relating to acting, directing, design and dramaturgy.

- **THTR 495 - Practicum**

Credits: 1 TO 3. (R-12) Offered intermittently. Service learning experience in theatre in a setting compatible with the student's major and interests.

- **THTR 498 - Cooperative Eductn/Internship**

Credits: 1 TO 6. Offered intermittently. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (398, 498) may count toward graduation. **Course Attributes:** Internships/Practicums Internship graduation limit 6

- **THTR 499 - Senior Project**

Credits: 1. Offered autumn and spring. Prereq., senior-level theatre major. The student, with approval from his/her advisor, will begin a project during the semester prior to the semester of his/her graduation. An in-depth paper and brief defense of the project are required.

- **THTR 501 - Intro to Grad Studies**

Credits: 1. Offered autumn. Introduction to basic research and writing skills. Level: Graduate

- **THTR 502 - Intro to Grad Design**

Credits: 2. Offered autumn. Introduction to the design/technology program, research, history and expectations of program. Level: Graduate

- **THTR 505 - Professional Theatre**

Credits: 9. (R-18) Offered spring. Prereq., consent of instr. Laboratory experience in total play production through participation in state, regional, national, and international touring production programs. Level: Graduate

- **THTR 506 - Graduate Summer Theatre**

Credits: 1 TO 3. (R-6) Offered summer. Prereq., consent of instr. Practicum in school-approved summer theatre companies in the capacity of actor, designer, director, stage manager and/or technician. The student and instructor will meet prior to the student's registration for the course in order to determine the proper credit load and work expectations for the course. Student will earn credit for said work in consultation with Director of the School and outside producing company, with credit correlating to significance of above-listed duties. Level: Graduate

- **THTR 507 - Tech Prod Assignment**

Credits: 2 TO 4. (R-12) Offered autumn and spring. Prereq., consent of instr. Production assignment made by the faculty. Student assigned a responsible technical position such as technical director, master electrician, sound engineer, cutter/draper or scenic artist. Credit variable and will be assigned by faculty. Level: Graduate

- **THTR 508 - Design Prod Assignment**
Credits: 2 TO 4. (R-24) Offered autumn and spring. Prereq., consent of instr. Production design assignment made by the faculty. Student designs an element of a Theatre & Dance production with the supervision of a faculty designer. Level: Graduate
- **THTR 509 - Tech Direct Pract**
Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Technical direction of a major show in the drama season in the Montana or Masquer Theatres. Level: Graduate
- **THTR 510 - Graduate Singing for Actors**
Credits: 2. (R-4) Offered spring. Prereq., audition, acting specialization, or consent of instr. Development and presentation of musical numbers in a dramatic context. A broad-based acquaintance with music theatre literature is acquired, and techniques for approaching songs are explored with an eye toward developing competency in music theatre forms. Co-convenes with THTR 410. Level: Graduate **Course Attributes:** Co-Convened Course
- **THTR 512 - Prob in Voice/Speech**
Credits: 1 TO 3. (R-12) Offered intermittently. Prereq., consent of instr. Development of specific advanced skills in vocal work. Level: Graduate
- **THTR 513 - Grad Voice & Speech I**
Credits: 3. Offered autumn. Prereq., consent of instr. Studio training with extensive focus on exercises designed to foster awareness of how the body, breath, voice, resonance, and enunciation are the artist's tactics when acting. Level: Graduate
- **THTR 514 - Graduate Voice & Speech II**
Credits: 3. Offered spring. Prereq., THTR 513. Continuation of 513; advanced studio encompassing standard speech, character voice, accent and dialect-acquisition studies. Level: Graduate
- **THTR 515 - Grad Phys Performance Skills**
Credits: 3. Offered autumn. Prereq., consent of instructor. Investigation of the history and methodology of major physical-performance models. Studio work resulting in exercises and scene work to accompany each discipline explored. Level: Graduate
- **THTR 517 - Prob in Movement/Dance**
Credits: 1 TO 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific advanced skills in physical performance. Level: Graduate
- **THTR 520 - Graduate Acting I**
Credits: 3. (R-12) Offered autumn. Prereq., consent of instr. Intensive rehearsal and project work with emphasis on integration of advanced skills. Level: Graduate
- **THTR 521 - Grad Acting II**
Credits: 3. Offered spring. Prereq., THTR 520 or consent of instr. Continuation of 521; intimate exploration of monologues, scene work, and contemporary techniques. Level: Graduate
- **THTR 525 - Problems in Acting**
Credits: 1 TO 3. (R-18) Offered autumn and spring. Prereq., consent of instr. Development of specific advanced skills in acting. Level: Graduate
- **THTR 526 - Studio Training I**
Credits: 3. Offered autumn. Prereq., consent of instr. Scenes and projects from specific historical and stylistic periods, from Molière to Restoration comedy to drawing-room comedy. Co-convenes with THTR 421. Level: Graduate **Course Attributes:** Co-Convened Course
- **THTR 527 - Studio Training II**
Credits: 3. Offered spring. Prereq., THTR 526. Work in speeches, scenes, and projects from Shakespeare and other classical verse drama. Co-convenes with THTR 421. Level: Graduate **Course**

Attributes: Co-Convened Course

- **THTR 528 - Studio Training III**

Credits: 3. Offered autumn. Prereq., THTR 527. Performance and scene work in contemporary practice and theory. Course will additionally familiarize students with contemporary performance theory and criticism. Co-convenes with THTR 425. Level: Graduate **Course Attributes:**
Co-Convened Course

- **THTR 529 - Studio Training IV**

Credits: 3. Offered spring. Prereq., THTR 528. Developing professional skills, material for the actor, professional portfolio, resume audition material, commercial acting, performance market research, and knowledge about unions. Co-convenes with THTR 426. Level: Graduate **Course Attributes:**
Co-Convened Course

- **THTR 530 - Grad Sem Dramatic Lit**

Credits: 3. (R-9) Offered intermittently. Prereq., consent of instr. Selected topics with individual research projects presented in seminar concerning various genres, periods, and themes in dramatic literature. Level: Graduate

- **THTR 531 - Grad Sem Theatre Hist**

Credits: 3. (R-9) Offered intermittently. Prereq., consent of instr. Selected topics and issues with individual research projects presented in seminar concerning various genres, periods, themes, and cultural contexts in theatre history. Level: Graduate

- **THTR 532 - Grad Sem Dramaturgy**

Credits: 3. A graduate-level introduction to literary, historical, and contextual analysis of play scripts and performance pieces intended for production. Level: Graduate

- **THTR 533 - Grad CADD**

Credits: 3. (R-6) Offered autumn. Students will further their understanding for how CADD software is used to create complete, accurate draftings for design and technology in theatre and theatre-related activities. Level: Graduate

- **THTR 535 - Perform Theory & Criticism**

Credits: 3. Offered spring. Survey of the theories, elements and ingredients of multi-cultural live performance forms, including theatre, popular entertainment, ceremonies, and other public events. Includes instruction in and application of various approaches to the criticism of live performance. Level: Graduate

- **THTR 539 - Grad Methods Tchg Theatre**

Credits: 3. In-depth study of teaching methods for presenting the craft of acting and theatre production to introductory-level students. Co-convenes with THTR 439. Level: Graduate **Course Attributes:**
Co-Convened Course

- **THTR 540 - Graduate Costume Design**

Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Further advancement of techniques in costume design using script/character analysis, color/texture/form usage, and presentation. Possible designs for dance, opera, large-scale drama and musicals. Co-convenes with THTR 440. Level: Graduate **Course Attributes:**
Co-Convened Course

- **THTR 542 - Prob in Costume Design**

Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific technical skills in costume design. Level: Graduate

- **THTR 545 - Grad Design Seminar I**

Credits: 2. Offered autumn. This course is designed to teach graduate students effective research, collaboration, and script-analysis methodologies and exploration practices. Level: Graduate

- **THTR 546 - Grad Design Seminar II**
 Credits: 2. Offered spring. This course is designed to continue the design process skills developed in Seminar I of effective research, collaboration and script-analysis methodologies and exploration practices. Level: Graduate
- **THTR 550 - Graduate Scene Design**
 Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific design skills in scenery through unrealized design opportunities as well as design concept and process development. Co-convenes with THTR 450. Level: Graduate **Course Attributes:**
 Co-Convened Course
- **THTR 552 - Prob in Scene Design**
 Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific technical skills in scene design. Level: Graduate
- **THTR 553 - Technical Direction**
 Credits: 3. Offered autumn and spring. Prereq., consent of instr. Role and scope of technical direction, production scheduling, design analysis, budgets and bookkeeping and methods of construction. Level: Graduate
- **THTR 555 - Grad CADD**
 Credits: 3. (R-6) Offered autumn. Students will further their understanding for how CADD software is used to create complete, accurate draftings for design and technology in theatre and theatre-related activities. Level: Graduate
- **THTR 556 - Grad Rendering Techniques**
 Credits: 2. Offered spring. Students will begin to develop personal design styles using both traditional and digital drawing and rendering techniques. Level: Graduate
- **THTR 560 - Graduate Light Design**
 Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Advanced study of principles and practices of theatre lighting design, especially collaboration and communication. Training for position of light designer for theatre or lighting instructor. Design requirements and decisions, color, development of stage picture; thrust and arena theatre. Co-convenes with THTR 460. Level: Graduate **Course Attributes:** Co-Convened Course
- **THTR 562 - Prob in Light Design**
 Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific technical skills in light design. Level: Graduate
- **THTR 565 - Graduate Sound Design**
 Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Further advanced study of principles and practices of theatre sound design, especially script analysis and collaboration. Training for position of theatre sound designer or instructor. Principles, practices and equipment used to create sound and music designs for the theatre, dance and related areas. Co-convenes with THTR 465. Level: Graduate **Course Attributes:** Co-Convened Course
- **THTR 567 - Problems in Sound Design**
 Credits: 3. (R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific technical skills in sound design. Level: Graduate
- **THTR 570 - Grad Stage Mgmt**
 Credits: 2. Offered autumn. Prereq., consent of instr. Study of duties of stage manager in rehearsal and performance process. Includes stage managing a production for a faculty or guest-artist director. Level: Graduate
- **THTR 572 - Stage Mgmt Pract**
 Credits: 1 TO 6. (R-18) Offered autumn and spring. Prereq., consent of instr. Practical work in stage

management projects. Level: Graduate

- **THTR 574 - Prob Theatre Mgmt**

Credits: 1 TO 6. (R-18) Offered intermittently. Prereq., consent of instr. Level: Graduate

- **THTR 577 - Directing IV**

Credits: 3. Offered autumn. Prereq., THTR 476 or consent of instr. Formalist styles of dramatic material. Through a variety of tools, textual and linguistic analysis, metrical and rhetorical analysis, archetypes, and musical structures, students analyze, interpret and stage projects drawn from opera and pre-modern drama, especially Shakespeare. Level: Graduate

- **THTR 578 - Directing V**

Credits: 3. Offered spring. Prereq., THTR 577. Exploration of image, time manipulation, and nonlinear storytelling. Level: Graduate

- **THTR 580 - Problems in Playwriting**

Credits: 1 TO 3. (R-12) Offered intermittently. Development of specific advanced writing projects based on dramatic structure, conflict, tension, and character complexities/psychology. Level: Graduate

- **THTR 594 - Seminar**

Credits: 1 TO 3. (R-12) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

- **THTR 595 - Special Topics**

Credits: 1 TO 18. (R-18) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate
Course Attributes: Internships/Practicums

- **THTR 596 - Independent Study**

Credits: 1 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate
Course Attributes: Service Learning/Volunteer

- **THTR 597 - Research**

Credits: 1 TO 6. (R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

- **THTR 598 - Internship**

Credits: 2 TO 6. (R-24) Offered intermittently. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Level: Graduate
Course Attributes: Internships/Practicums

- **THTR 599 - Professional Paper**

Credits: 1 TO 4. (R-4) Offered autumn and spring. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

- **THTR 609 - Grad Design Project**

Credits: 2. Students serve in one or more design roles of the production team for major theatre and dance events, working from conceptual stage to realized production. Level: Graduate

- **THTR 645 - Grad Design Seminar III**

Credits: 2. Offered autumn. This course is designed to continue the design process skills developed in Seminar II of effective research, collaboration and script analysis methodologies and exploration practices. Level: Graduate

- **THTR 646 - Grad Design Seminar IV**

Credits: 2. Offered spring. This course is the capstone to the seminar sequence which completes the design process skills developed in Seminar I, II, and III of effective research, collaboration and

script analysis methodologies and exploration practices. Level: Graduate

- **THTR 675 - Directing VI**

Credits: 3. Offered autumn. Prereq., THTR 578. The history and literature of directing. Level: Graduate

- **THTR 677 - Problems in Directing**

Credits: 1 TO 3. (R-18) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

- **THTR 690 - Grad Final Creative Project**

Credits: 1 TO 6. Offered autumn and spring. Prereq., consent of instr. An in-house project that takes the form of a capstone directing assignment or acting role in a School production. A paper detailing and reflecting upon the process accompanies the creative work. Level: Graduate

- **THTR 699 - Thesis**

Credits: 1 TO 12. (R-12) Offered autumn and spring. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Dance Minor

Minor - Dance (Minor)

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 31

Required Cumulative GPA: 2.0

Dance Minor LD Core

Rule: Must complete the following subcategories

22 Total Credits Required

Composition

Rule: Course required.

	Course	Credits
	DANC 220A - Beginning Composition	2 Credits
	Minimum Required Grade: C-	2 Total Credits Required

Modern Experience I

Rule: 4 credits required at or above the listed level.

—	Course	Credits
	DANC 100A - Modern Dance I	2 Credits
Minimum Required Grade: C-		4 Total Credits Required

Modern Experience II

Rule: Repeat once.

Note: Section 01 for first registration; Section 40 for second.

—	Course	Credits
	DANC 200A - Modern II	2 Credits
Minimum Required Grade: C-		4 Total Credits Required

Ballet Experience I

Rule: 4 credits required at or above the listed level.

—	Course	Credits
	DANC 110A - Ballet I	2 Credits
Minimum Required Grade: C-		4 Total Credits Required

Ballet Experience II

Rule: 2 credits required at or above the listed level.

—	Course	Credits
	DANC 210A - Ballet II	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

Jazz Experience

Rule: 2 credits required at or above the listed level.

—	Course	Credits
	DANC 115A - Jazz Dance I	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

Production Course

Rule: Registration and credit load based on casting for Theatre & Dance productions.

Note: Performing in one piece equals one credit.

—	Course	Credits
	DANC 225 - Rehearsal & Performance	1 To 4 Credits
Minimum Required Grade: C-		2 Total Credits Required

Lab Courses

Rule: Repeat once.

Dance Minor UD Core

Rule: All courses required.

—	Course	Credits
	DANC 300 - Modern III	3 Credits
	DANC 334 - Dance History	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Dance Minor Electives

Rule: Select 1 of 3 options as listed below: Improv, Kinesiology, or Teaching.

Minimum Required Grade: C-

3-4 Total Credits Required

Improv

Rule: All courses are required.

—	Course	Credits
	DANC 205 - Improvisation	2 Credits

	DANC 305 - Contact Improvisation	2 Credits
Minimum Required Grade: C-		4 Total Credits Required

Kinesiology

Rule: All courses are required.

	Course	Credits
	DANC 280 - Dance Conditioning: Pilates	1 Credits
	DANC 380 - Science of Dance Movement	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

Teaching

Rule: All courses are required.

	Course	Credits
	DANC 298 - Internship: Children's Dance	1 Credits
	DANC 406 - Dance as a Healing Art	2 Credits
Minimum Required Grade: C-		3 Total Credits Required

Dance - Choreography and Performance

Bachelor of Fine Arts - Dance; Track: Choreography and Performance

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Note: There is an Admission Audition which a prospective major must pass at the end of the first year to continue in the program. All students must take DANC 194: Freshman Seminar prior to auditioning for the major.

BFA Dance Major LD Core

Rule: Must complete the following subcategories

9 Total Credits Required

Required Courses

Rule: All courses are required.

—	Course	Credits
	DANC 205 - Improvisation	2 Credits
	DANC 220A - Beginning Composition	2 Credits
	DANC 298 - Internship: Children's Dance	1 Credits
	THTR 106A - Theat Prod I:Run Crew	1 Credits
Minimum Required Grade: C-		6 Total Credits Required

Costuming Experience

Rule: Select 1 of the 2 options.

Note: For THTR 107A: choose either Section 02: Costume Shop on MW or Section 05: Costume Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
	THTR 245 - Int Costume Construction	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Dance Major UD Core

Rule: Must complete the following subcategories

38 Total Credits Required

Required Courses

Rule: All courses are required.

—	Course	Credits
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	DANC 305 - Contact Improvisation	2 Credits
	DANC 334 - Dance History	3 Credits
	DANC 360L - World Dance	3 Credits
	DANC 380 - Science of Dance Movement	3 Credits
	DANC 406 - Dance as a Healing Art	2 Credits
	DANC 440 - Dance Pedagogy	3 Credits
	DANC 494 - Seminar/Workshop	3 Credits
Minimum Required Grade: C-		19 Total Credits Required

Ballet Courses

Rule: 12 credits required at or above the listed level.

—	Course	Credits
	DANC 310 - Ballet III	2 Credits
Minimum Required Grade: C-		12 Total Credits Required

Stage Management Course

Rule: Registration based on production assignment as determined by Dance faculty.

Note: Section 02

—	Course	Credits
	THTR 371 - Stage Mgmt Pract I	1 To 3 Credits
Minimum Required Grade: C-		1 Total Credits Required

Junior Project

Rule: Students must complete project for graduation.

Note: Junior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor. All choreography and performance BFA candidates are required to choreograph for their junior projects.

—	Course	Credits
	DANC 399 - Jr Creat/Research Proj	1 To 6 Credits

Minimum Required Grade: C-	3 Total Credits Required
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Senior Project

Rule: Students must complete project for graduation.

Note: Senior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor. The senior project must be a piece of choreography produced off-campus in the Missoula community.

Course	Credits
DANC 498 - Senior Thesis/Creative Project	1 To 6 Credits
Minimum Required Grade: C-	3 Total Credits Required

BFA Choreography & Performance Degree Electives

Rule: Complete the follow subcategories

1-4 Total Credits Required

Cross-Training

Rule: One credit from HHP by advisement.

Acting Elective

Rule: Optional, select 1 of the 2 by advisement.

Course	Credits
THTR 120A - Introduction to Acting I	3 Credits
THTR 220 - Acting I	3 Credits
Minimum Required Grade: Pass	3 Total Credits Required

BFA Choreography & Performance Requirements

Rule: Must complete the following subcategories

25 Total Credits Required

Required Courses

Rule: All courses are required.

—	Course	Credits
	DANC 280 - Dance Conditioning: Pilates	1 Credits
	DANC 320 - Intermediate Composition	2 Credits
	DANC 405 - Advanced Improvisation	2 Credits
Minimum Required Grade: C-		5 Total Credits Required

Production Courses

Rule: Registration and credit load based on casting for Theatre & Dance productions.

Note: Performing in one piece equals one credit.

—	Course	Credits
	DANC 225 - Rehearsal & Performance	1 To 4 Credits
Minimum Required Grade: C-		2 Total Credits Required

Modern Experience I

Rule: 6 credits required at or above the listed level.

—	Course	Credits
	DANC 300 - Modern III	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Modern Experience II

Rule: Repeat once.

—	Course	Credits
	DANC 400 - Modern IV	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Modern Experience III

Rule: Repeat once.

Course	Credits
DANC 404 - Adv Tech Modern Dance	3 Credits
Minimum Required Grade: C-	6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Dance - Studio Teaching

Bachelor of Fine Arts - Dance; Track: Studio Teaching

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 77

Required Cumulative GPA: 2.0

Note: There is an Admission Audition which a prospective major must pass at the end of the first year to continue in the program. All students must take DANC 194: Freshman Seminar prior to auditioning for the major.

BFA Dance Major LD Core

Rule: Must complete the following subcategories

9 Total Credits Required

Required Courses.

Rule: All courses are required

Course	Credits
DANC 205 - Improvisation	2 Credits
DANC 220A - Beginning Composition	2 Credits
DANC 298 - Internship: Children's Dance	1 Credits

	THTR 106A - Theat Prod I:Run Crew	1 Credits
Minimum Required Grade: C-		6 Total Credits Required

Costuming Experience

Rule: Select 1 of the 2 options.

Note: For THTR 107A: choose either Section 02: Costume Shop on MW or Section 05: Costume Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
	THTR 245 - Int Costume Construction	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Dance Major UD Core

Rule: Must complete the following subcategories

38 Total Credits Required

Required Courses

Rule: All courses are required.

—	Course	Credits
	DANC 305 - Contact Improvisation	2 Credits
	DANC 334 - Dance History	3 Credits
	DANC 360L - World Dance	3 Credits
	DANC 380 - Science of Dance Movement	3 Credits
	DANC 406 - Dance as a Healing Art	2 Credits
	DANC 440 - Dance Pedagogy	3 Credits
	DANC 494 - Seminar/Workshop	3 Credits
Minimum Required Grade: C-		19 Total Credits Required

Ballet Courses

Rule: 12 credits required at or above the listed level

—	Course	Credits
	DANC 310 - Ballet III	2 Credits
Minimum Required Grade: C-		12 Total Credits Required

Stage Management Course

Rule: Registration based on production assignment as determined by Dance faculty

Note: Section 02

—	Course	Credits
	THTR 371 - Stage Mgmt Pract I	1 To 3 Credits
Minimum Required Grade: C-		1 Total Credits Required

Junior Project

Rule: Students must complete project for graduation.

Note: Junior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor. All teaching BFA candidates are required to take choreograph for their junior project.

—	Course	Credits
	DANC 399 - Jr Creat/Research Proj	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Senior Project

Rule: Students must complete project for graduation.

Note: Senior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor. Teaching BFA candidates must complete a teaching project in the Missoula community for the senior project.

—	Course	Credits
	DANC 498 - Senior Thesis/Creative Project	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Rule: Must complete the following subcategories

30 Total Credits Required

Required Courses

Rule: All courses are required.

Note: For DANC 440: Section 40

—	Course	Credits
	DANC 345 - Teaching for the Disabled	1 Credits
	DANC 440 - Dance Pedagogy	3 Credits
Minimum Required Grade: C-		4 Total Credits Required

Teaching Assistant Experience

Rule: Course required.

Note: Completion of two credits must include serving as teaching assistant for at least one 100-level technique course offered in DANC rubric on campus. It is optional to earn credits through the Flagship Program.

—	Course	Credits
	DANC 446 - Teaching Projects	1 To 6 Credits
Minimum Required Grade: C-		2 Total Credits Required

In-Schools Experience

Rule: Repeat once.

Note: Section 01 for first registration; Section 40 for second.

—	Course	Credits
	DANC 497 - Methods: Tchng Movmnt in Schls	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Modern Experience

Rule: 18 credits required at or above the listed level

—	Course	Credits
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DANC 300 - Modern III	3 Credits
Minimum Required Grade: C-	18 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Dance B.A.

Bachelor of Arts - Dance

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 66

Required Cumulative GPA: 2.0

Note: There is an Admission Audition which a prospective major must pass at the end of the first year to continue in the program. All students must take DANC 194: Freshman Seminar prior to auditioning for the major.

BA Dance Major LD Core

Rule: Must complete the following subcategories

14 Total Credits Required

Required Courses

Rule: All courses are required.

Course	Credits
DANC 129A - Dance Performance Lab I	1 Credits
DANC 165A - Dance Forms: African	2 Credits
DANC 205 - Improvisation	2 Credits
DANC 220A - Beginning Composition	2 Credits
DANC 298 - Internship: Children's Dance	1 Credits

	THTR 106A - Theat Prod I:Run Crew	1 Credits
Minimum Required Grade: C-		9 Total Credits Required

Costuming Experience

Rule: Select 1 of the 2 options.

Note: For THTR 107A: choose either Section 02: Costume Shop on MW or Section 05: Costume Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
	THTR 245 - Int Costume Construction	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

Production Courses

Rule: Registration and credit load based on casting for Theatre & Dance productions.

Note: Performing in one piece equals one credit.

—	Course	Credits
	DANC 225 - Rehearsal & Performance	1 To 4 Credits
Minimum Required Grade: C-		2 Total Credits Required

BA Dance Major UD Core

Rule: Must complete the following subcategories.

52 Total Credits Required

Required Courses

Rule: All courses are required

—	Course	Credits
	DANC 305 - Contact Improvisation	2 Credits
	DANC 320 - Intermediate Composition	2 Credits
	DANC 334 - Dance History	3 Credits

	DANC 360L - World Dance	3 Credits
	DANC 380 - Science of Dance Movement	3 Credits
	DANC 440 - Dance Pedagogy	3 Credits
	DANC 494 - Seminar/Workshop	3 Credits
	DANC 497 - Methods: Tchng Movmnt in Schls	3 Credits
Minimum Required Grade: C-		22 Total Credits Required

Modern Courses

Rule: 15 credits required at or above the listed level.

—	Course	Credits
	DANC 300 - Modern III	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Ballet Courses

Rule: 8 credits required at or above the listed level.

—	Course	Credits
	DANC 310 - Ballet III	2 Credits
Minimum Required Grade: C-		8 Total Credits Required

Stage Management Course

Rule: Registration based on production assignment as determined by Dance faculty.

Note: Section 02

—	Course	Credits
	THTR 371 - Stage Mgmt Pract I	1 To 3 Credits
Minimum Required Grade: C-		1 Total Credits Required

Junior Project

Rule: Students must complete project for graduation.

—	Course	Credits
	DANC 399 - Jr Creat/Research Proj	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Senior Project

Rule: Students must complete project for graduation.

—	Course	Credits
	DANC 498 - Senior Thesis/Creative Project	1 To 6 Credits
Minimum Required Grade: C-		3 Total Credits Required

Dance Education Minor

Minor - Dance Specialization Education (Minor)

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Note: Leads to an Area of Permissive Special Competency in dance education for those attaining or holding a Montana teaching license (see the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information). A minor GPA of 2.75 is required to be eligible for student teaching.

Dance Education Minor LD Core

Rule: Must complete the following subcategories

4 Total Credits Required

Composition

Rule: Course required.

—	Course	Credits
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	DANC 220A - Beginning Composition	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

Internship Experience

Rule: Repeat once.

—	Course	Credits
	DANC 298 - Internship: Children's Dance	1 Credits
Minimum Required Grade: C-		2 Total Credits Required

Dance Education Minor UD Core

Rule: Must complete the following subcategories

14-15 Total Credits Required

Required Courses

Rule: All courses listed are required

—	Course	Credits
	DANC 360L - World Dance	3 Credits
	DANC 440 - Dance Pedagogy	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

In-Schools Experience

Rule: Repeat once.

Note: Section 01 for first registration; Section 40 for second.

—	Course	Credits
	DANC 497 - Methods: Tchng Movmnt in Schls	3 Credits
Minimum Required Grade: C-		6 Total Credits Required

Technique Experience I

Rule: Choose 1 of the 2 options.

—	Course	Credits
	DANC 300 - Modern III	3 Credits
	DANC 310 - Ballet III	2 Credits
Minimum Required Grade: C-		2-3 Total Credits Required

Dance Education Minor Electives

Rule: Optional; by advisement.

—	Course	Credits
	DANC 334 - Dance History	3 Credits
	DANC 380 - Science of Dance Movement	3 Credits
Minimum Required Grade: Pass		6 Total Credits Required

Technique Experience II

Rule: Select at least 1 of the 5 options as listed below.

2-3 Total Credits Required

Tap

Rule: Course required.

—	Course	Credits
	DANC 118A - Dance Forms: Tap	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

Irish

Rule: All courses are required.

—	Course	Credits
	DANC 160A - Dance Forms: Irish	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

African

Rule: All courses are required.

—	Course	Credits
	DANC 129A - Dance Performance Lab I	1 Credits
	DANC 165A - Dance Forms: African	2 Credits
Minimum Required Grade: C-		3 Total Credits Required

Jazz

Rule: Course required.

—	Course	Credits
	DANC 315 - Jazz III	2 Credits
Minimum Required Grade: C-		2 Total Credits Required

Elective

Rule: By advisement.

Note: Social, Cultural/World, or Traditional/Indigenous technique course.

Theatre Minor

Minor - Theatre (Minor)

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 29

Required Cumulative GPA: 2.0

Theatre Minor LD Core

Rule: Must complete the following subcategories

*Required Courses***Rule:** All courses are required

—	Course	Credits
	THTR 102A - Introduction to Theatre Design	3 Credits
	THTR 106A - Theat Prod I:Run Crew	1 Credits
	THTR 206 - Theat Prod II: Run Crew	1 Credits
	THTR 235L - Dramatic Literature	3 Credits
Minimum Required Grade: C-		8 Total Credits Required

*Shop Experience***Rule:** Select 1 of the 6 different sections**Note:** Section 01: Scene Shop on MW; Section 02: Costume Shop on MW; Section 03: Light Shop on MW; Section 04: Scene Shop on TR; Section 05: Costume Shop on TR; Section 06: Light Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
Minimum Required Grade: C		3 Total Credits Required

*Acting Experience***Rule:** Select 1 of the 2 options

—	Course	Credits
	THTR 120A - Introduction to Acting I	3 Credits
	THTR 220 - Acting I	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

*Stagecraft Experience***Rule:** Select 1 of the 2 options

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Course	Credits
THTR 202 - Stagecraft I: Lightng/Costumes	3 Credits
THTR 203 - Stagecraft II: Scenery & Props	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Theatre Minor UD Core

Rule: Course required

Course	Credits
THTR 330H - Theatre History I	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Theatre Minor Focused Area (acting, costumes, literature/history, scenery, etc.)

Note: An advisor in Theatre & Dance must be consulted for guidelines regarding one's specific focus.

Minimum Required Grade: C-

9 Total Credits Required

Theatre B.A.

Theatre - Education Endorsement Preparation

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- [Secondary Education Licensure Program](#)
- [Licensure Degree Requirements](#)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Theatre; Track: Education Endorsement Preparation

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 46

Required Cumulative GPA: 2.0

Note: The Education Endorsement Preparation specialization is designed for the student seeking an endorsement in the major teaching field of Theatre. For endorsement to teach Theatre, a student also must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area. The demand in Montana high schools for teaching of courses in this field is limited. The required second endorsement (either a teaching major or teaching minor) should be in a field in high demand.

BA Theatre Education Major LD Core

Rule: Must complete the following subcategories

28 Total Credits Required

Required Courses

Rule: All courses are required.

Course	Credits
THTR 102A - Introduction to Theatre Design	3 Credits
THTR 103 - Intro to House Management	1 Credits
THTR 106A - Theat Prod I:Run Crew	1 Credits
THTR 202 - Stagecraft I: Lightng/Costumes	3 Credits
THTR 203 - Stagecraft II: Scenery & Props	3 Credits
THTR 206 - Theat Prod II: Run Crew	1 Credits
THTR 210 - Voice & Speech I	2 Credits
THTR 220 - Acting I	3 Credits
THTR 221 - Acting II	3 Credits
THTR 235L - Dramatic Literature	3 Credits

	THTR 249 - Stage Makeup	2 Credits
Minimum Required Grade: C-		25 Total Credits Required

Shop Experience

Rule: Select 1 of 6 different sections.

Note: Section 01: Scene Shop on MW; Section 02: Costume Shop on MW; Section 03: Light Shop on MW;
Section 04: Scene Shop on TR; Section 05: Costume Shop on TR; Section 06: Light Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

BA Theatre Education Major UD Core

Rule: Must complete the following subcategories

18 Total Credits Required

Required Courses

Rule: All courses are required.

—	Course	Credits
	THTR 320 - Acting III	3 Credits
	THTR 330H - Theatre History I	3 Credits
	THTR 331Y - Theatre History II	3 Credits
	THTR 370 - Stage Management I	2 Credits
	THTR 375 - Directing I	3 Credits
	THTR 439 - Methods of Teaching Theatre	2 Credits
Minimum Required Grade: C-		16 Total Credits Required

Senior Project

Rule: Must be taken during student's final semester on campus (not student-teaching semester).

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Course	Credits
THTR 499 - Senior Project	1 Credits
Minimum Required Grade: Pass	1 Total Credits Required

Stage Management Experience

Rule: Registration based on production assignment as determined by Design/Technology faculty/staff

Note: Section 01

Course	Credits
THTR 371 - Stage Mgmt Pract I	1 To 3 Credits
Minimum Required Grade: C-	1-3 Total Credits Required

Theatre - Acting

Bachelor of Fine Arts - Theatre; Track: Acting

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 71

Required Cumulative GPA: 2.0

Note: Students who intend to pursue the acting specialization will normally enter the University as Bachelor of Arts students in Theatre. They should then declare intent to pursue the B.F.A. degree no later than the beginning of the second year of a four-year program. A student may elect a special concentration in directing, music theatre, or another discipline in addition to the B.F.A. core and area-specialization requirements. The program is designed in consultation with the student's advisor and must be approved by the faculty. The special concentration may require five years to complete.

BFA Theatre Major LD Core

Rule: Must complete the following subcategories

18 Total Credits Required

Required Courses

Rule: All courses are required

—	Course	Credits
	THTR 103 - Introd to House Management	1 Credits
	THTR 106A - Theat Prod I:Run Crew	1 Credits
	THTR 202 - Stagecraft I: Lightng/Costumes	3 Credits
	THTR 203 - Stagecraft II: Scenery & Props	3 Credits
	THTR 206 - Theat Prod II: Run Crew	1 Credits
	THTR 220 - Acting I	3 Credits
	THTR 235L - Dramatic Literature	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Shop Experience I

Rule: Select 1 of 6 different sections

Note: Section 01: Scene Shop on MW; Section 02: Costume Shop on MW; Section 03: Light Shop on MW;

Section 04: Scene Shop on TR; Section 05: Costume Shop on TR; Section 06: Light Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Theatre Major UD Core

Rule: All courses are required

—	Course	Credits
	THTR 330H - Theatre History I	3 Credits
	THTR 331Y - Theatre History II	3 Credits
	THTR 375 - Directing I	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Senior Project

Rule: Must be taken during students final semester

—	Course	Credits
	THTR 499 - Senior Project	1 Credits
Minimum Required Grade: Pass		1 Total Credits Required

BFA Acting Requirements

Rule: All courses are required

—	Course	Credits
	THTR 210 - Voice & Speech I	2 Credits
	THTR 211 - Voice & Speech II	2 Credits
	THTR 221 - Acting II	3 Credits
	THTR 249 - Stage Makeup	2 Credits
	THTR 310 - Voice and Speech III	3 Credits
	THTR 315 - Physical Performance Skills I	2 Credits
	THTR 316 - Physical Performance Skills II	2 Credits
	THTR 320 - Acting III	3 Credits
	THTR 321 - Acting IV	3 Credits
	THTR 415 - Physical Performnce Skills III	3 Credits
	THTR 420 - Acting V	3 Credits
	THTR 421 - Acting VI	3 Credits
	THTR 425 - Acting VII	3 Credits
	THTR 481 - Adv Acting: Persnl Performance	3 Credits
	THTR 484 - Adv Acting: Professionl Skills	3 Credits
Minimum Required Grade: C-		40 Total Credits Required

BFA Acting Production Courses

Rule: All courses are required; registration based on casting for Theatre & Dance productions

—	Course	Credits
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	THTR 229A - Production Acting I	1 Credits
	THTR 329 - Production Acting II	1 Credits
	THTR 429 - Production Acting III	1 Credits
Minimum Required Grade: C-		3 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Theatre - Design/Technology

Bachelor of Fine Arts - Theatre; Track: Design/Technology

College of Visual & Perf Arts

Catalog Year: 2014-2015

Degree Specific Credits: 73

Required Cumulative GPA: 2.5

Note: Students who intend to pursue the design/technology specialization will normally enter the University as Bachelor of Arts students in Theatre. They should then declare intent to pursue the B.F.A. degree no later than the beginning of the second year of a four-year program. Students wishing to pursue a B.F.A. with a specialization in design/technology must:

1. Complete a one-year residency at the UM-Missoula campus which includes a minimum of 12 credits in design/technology.
2. Attain a cumulative 2.5 overall GPA and a 3.0 GPA in design/technology coursework.
3. Present a theatre resume and portfolio consisting of class and production work.
4. Prepare a written statement explaining their educational and professional goals.

BFA Theatre Major LD Core

Rule: Must complete the following subcategories

18 Total Credits Required

Required Courses

Rule: All courses are required

	Course	Credits
	THTR 103 - Introd to House Management	1 Credits

	THTR 106A - Theat Prod I:Run Crew	1 Credits
	THTR 202 - Stagecraft I: Lightng/Costumes	3 Credits
	THTR 203 - Stagecraft II: Scenery & Props	3 Credits
	THTR 206 - Theat Prod II: Run Crew	1 Credits
	THTR 220 - Acting I	3 Credits
	THTR 235L - Dramatic Literature	3 Credits
Minimum Required Grade: C-		15 Total Credits Required

Shop Experience I

Rule: Select 1 of the 6 different sections

Note: Section 01: Scene Shop on MW; Section 02: Costume Shop on MW; Section 03: Light Shop on MW;

Section 04: Scene Shop on TR; Section 05: Costume Shop on TR; Section 06: Light Shop on TR.

—	Course	Credits
	THTR 107A - Theat Prod I:Constr Crew	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Theatre Major UD Core

Rule: All courses are required

—	Course	Credits
	THTR 330H - Theatre History I	3 Credits
	THTR 331Y - Theatre History II	3 Credits
	THTR 375 - Directing I	3 Credits
Minimum Required Grade: C-		9 Total Credits Required

Senior Project

Rule: Must be taken during students final semester

—	Course	Credits
	THTR 499 - Senior Project	1 Credits

Minimum Required Grade: Pass	1 Total Credits Required
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BFA Design/Technology Requirements

Rule: All courses are required.

Course	Credits
THTR 102A - Introduction to Theatre Design	3 Credits
THTR 155 - Drawing Fundamntls for Theatre	3 Credits
THTR 255 - Drafting for Theatre I	3 Credits
THTR 370 - Stage Management I	2 Credits
Minimum Required Grade: C-	11 Total Credits Required

BFA Design/Technology Shop Experiences

Rule: Must complete the following subcategories

9 Total Credits Required

Shop Experience II

Rule: Select 1 of the 6 different sections from shop not already taken

Note: Section 01: Scene Shop on MW; Section 02: Costume Shop on MW; Section 03: Light Shop on MW; Section 04: Scene Shop on TR; Section 05: Costume Shop on TR; Section 06: Light Shop on TR.

Course	Credits
THTR 107A - Theat Prod I:Constr Crew	3 Credits
Minimum Required Grade: C-	3 Total Credits Required

Shop Experience III

Rule: Select 1 of 6 different sections from shops not already taken

Note: Section 01: Scene Shop on MW; Section 02: Costume Shop on MW; Section 03: Light Shop on MW; Section 04: Scene Shop on TR; Section 05: Costume Shop on TR; Section 06: Light Shop on TR.

Course	Credits
THTR 107A - Theat Prod I:Constr Crew	3 Credits

Minimum Required Grade: C-

3 Total Credits Required

Shop Experience IV

Rule: Select shop in primary area of emphasis after completing Shop Experiences I-III

—	Course	Credits
	THTR 307 - Production Construction I	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Design/Technology UD Drafting Requirement

Rule: Select 1 of the 2 options based on primary area of emphasis

—	Course	Credits
	THTR 345 - Flat Pattnr Des &Draftg	3 Credits
	THTR 355 - Computer Aid Draft & Appl	3 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Design/Technology Junior Project

Rule: Select 1 of the 2 options based on production assignment as determined by Design/Technology faculty/staff

—	Course	Credits
	THTR 308 - Production Team I	1 To 12 Credits
	THTR 309 - Production Design I	1 To 12 Credits
Minimum Required Grade: C-		2 Total Credits Required

BFA Design/Technology Senior Project

Rule: Select 1 of the 2 options based on production assignment as determined by Design/Technology faculty/staff

—	Course	Credits
	THTR 408 - Production Team II	1 To 12 Credits
	THTR 409 - Production Design II	1 To 12 Credits
Minimum Required Grade: C-		3 Total Credits Required

BFA Design/Technology Electives

Rule: Select courses based on primary and secondary areas of interest; minimum of 12 credits must be UD

Minimum Required Grade: C-

18 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

The University of Montana Western

The unique mission of the University of Montana Western emphasizes experiential learning combining theory and practice through projects and field experiences. Montana Western students learn by doing, collaborating directly with their professors and fellow students in a mentorship environment.

In order to better facilitate this type of learning, UMW adopted a course scheduling system, named Experience One (X1). Under X1, students take a single course at a time for 18 days for three hours per day. Montana Western is the first and only public four-year university in the country to fully adopt this system.

Montana Western embraces the privilege and obligations associated with its mission as a higher education institution within the beautiful landscape of southwest Montana. This mission infuses the University's curriculum: in its century-long tradition for excellence in professional programs in teacher education, business and technology; in its strong interdisciplinary arts and science programs; and in its two-year associate degree programs responding to regional needs.

Montana Western offers the Bachelor of Science degree in: Elementary Education, Secondary Education with options in traditional subject areas, Biology, Business Administration, Early Childhood Education, Environmental Interpretation, Environmental Science, Health & Human Performance, Mathematics, and Natural Horsemanship. In addition, Montana Western offers Bachelor of Arts (BA) and Bachelor of Applied Science (BAS) degrees. Bachelor of Arts options include English, Interdisciplinary Social Science, and Visual Arts. Bachelor of Applied Science students may use an Associate of Applied Science (AAS) degree as a base for the BAS degree with most of the credits from the two-year degree transferring into the BAS at Montana Western. Montana Western also offers Associate of Arts and Associate of Science degrees for those who want to obtain their general education before transferring to another campus; Associate of Applied Science degrees for those needing entry-level job skills in Business, Early Childhood Education, Education Studies, Equine Studies, Natural Horsemanship, and Tourism & Recreation; and certificate programs in Early Childhood Technology, and Information Technology & Network Administration.

Individualized education has been a campus hallmark for over 100 years. Approximately 1,400 students enroll at Montana Western each fall. Class sizes are kept small (average class size is 18 students). The faculty is nationally recognized for its excellence, creativity, and genuine concern for maintaining the Montana Western tradition of high quality academic and personal experience.

In addition to fulfilling academic life, Montana Western offers National Association of Intercollegiate Athletics Frontier Conference sports in football, volleyball, men's and women's basketball, men's and women's National Intercollegiate Rodeo Association teams, and Equestrian team competition. A varied sports program is also available for students seeking intramural activities.

With close proximity to Yellowstone, Grand Teton, and Glacier national parks, Montana Western's geographic location makes an ideal setting for individuals who enjoy the rugged outdoors. With a friendly, small town atmosphere, Dillon offers many of the amenities of a much larger community. Ranching, mining and tourism are the chief industries of the area. Montana Western's picturesque 34-acre campus and friendly atmosphere enhance the community and area. For more information about the University of Montana Western, call (877) 683-7331.

Helena College University of Montana

*As part of a Montana Board of Regents renaming and re-branding effort for Montana's two-year institutions, effective beginning with the 2013-2014 Academic Year, The University of Montana - Helena College of Technology name became *Helena College University of Montana*.

Helena College offers two-year programs in business, trades, technical and health occupations designed to meet the state's business and industry needs for technologically- skilled workers. All of the curricula are industry-approved and emphasize learning in a hands-on environment. In addition, the college offers an Associate of Science degree and Associate of Arts degree designed to transfer to four-year institutions. The college, founded in 1939, is fully accredited by the Northwest Commission on Colleges and Universities (NWCCU), approved by the Montana State Board of Nursing, certified and licensed by the Federal Aviation Administration, and certified by the National Institute for Automotive Service Excellence.

Helena College students take a full complement of courses in mathematics, communications, computer literacy, and career development. Located in Helena, Montana's beautiful capitol city, the College offers its programs in modern classrooms, shops, and labs, both near the Capitol building and at the Helena airport. For more information, call 1-800-241-4882.

Montana Tech of The University of Montana

Founded in Butte in 1889 as the Montana School of Mines, Montana Tech has a century-old reputation as one of the finest science and engineering colleges in America. Montana Tech is repeatedly recognized year after year among the top 10% of all colleges in America. While still focusing on its original programs in minerals and energy engineering, Montana Tech has expanded its offerings to include new science, engineering, computer science, technical communication, business, and innovative health care programs all designed to meet the needs of today's rapidly changing world.

Montana Tech provides outstanding educational programs to its 2,600 students in a truly personalized setting. Students are treated as individuals and enjoy their close relationships with faculty. Current Montana Tech students come from every Montana county, 38 states and 17 foreign countries. Montana Tech is a friendly campus where students get involved in a wide array of campus events and activities as well as abundant outdoor recreational opportunities. Student satisfaction surveys consistently give the College high marks for its quality of student life.

Upon graduation, Montana Tech graduates enjoy over a 94% overall placement rate with an overall salary of \$52,172. Many of the College's alumni have attained senior leadership positions in the minerals, energy, and natural resource industry and business. Over 19% of Montana Tech alumni give back to the campus each and every year.

Located in the heart of the mountains of Southwest Montana, the 98-acre main campus can be seen for miles. With over \$20 million in recently completed building and renovation projects, the campus blends its historical buildings with new, state-of-the-art laboratory and instructional facilities. The College's two-year campus, Montana Tech College of Technology, is located seven miles south of the main campus and provides occupational and technical program opportunities at the associate degree level. (As part of a Montana Board of Regents renaming and re-branding effort for Montana's two-year institutions, effective the 2013-2014 Academic Year, Montana Tech College of Technology will be known as *Highlands College of Montana Tech*)

Montana's geologic and hydrogeologic research arm, the Bureau of Mines and Geology, is a department of the College. Montana Tech's commitment to research has been rewarded with a 500 percent increase in funding over the past ten years. Inquiries to Montana Tech should be directed to 1-800-445-Tech or the [Montana Tech webpage](#).

Affiliated

Fees

[Paying Your Registration Bill](#)

[Refund Policy](#)

[Withdrawal Policy](#)

General

The student expense information provided in this catalog is based upon the rates for the 2014-15 academic year as submitted to and approved by The Montana Board of Regents of the Montana University System. The Board of Regents reserves the right to adjust fees at any time. Current information may be obtained by contacting Business Services, Lommasson Center, University of Montana-Missoula, Missoula, Montana 59812. The phone number is 406-243-2223, email address um.statements@mso.umont.edu or visit the [Business Services website](#).

Paying Your Registration Bill

A student's registration is not complete until it is "paid". Paying the registration bill confirms registration of the courses listed on the registration bill and the student's acceptance of the associated tuition and fee charges. **Even if financial aid and/or scholarships cover the full cost of the registration bill, you must still complete your registration by clicking the "Pay Registration Bill" button in CyberBear. FAILURE TO PAY YOUR REGISTRATION BILL WILL RESULT IN THE CANCELLATION OF CLASSES FOR THE SEMESTER.** Foreign and Canadian checks are not accepted. Credit card payment is accepted using VISA and MasterCard. Payment may be completed electronically in the student's CyberBear account. Please see the published payment deadlines on the [Business Services website](#) or the [Registrar's Calendar web page](#).

Fee Schedule

The tuition and mandatory fee schedules are posted on the [Business Services tuition and fees web page](#). Different fee schedules apply to each type of student – undergraduate lower/upper, Missoula College, graduate first/advanced, graduate TA/RA first/advanced, law fall/spring, WUE undergraduate lower/upper, WUE Missoula College, post-baccalaureate, distance undergraduate lower/upper, distance Missoula College, distance graduate first/advanced, distance post-baccalaureate. The full schedule of fees and fee definitions are available at [Business Services tuition and fees web page](#) or by calling Business Services at 406-243-2223. Students enrolled at 12 or more credits are assessed at the same rate. Student enrolled less than 12 credits are assessed per credit. Students enrolled for 6 credits or fewer have the option of paying an additional amount to cover the ASUM activity fee, campus recreation fee, health service fee and athletic fee.

Audited courses are assessed the same fees as courses taken for credit.

Delivery of Student Credit Balance Refunds

The University of Montana processes all student credit balance refunds electronically to deposit to a bank account (checking or savings) selected by the student. The bank account may be an existing account or the student is eligible to open an online bank account through Higher One. Each student will receive a UM Refund Choice Card (mailed in a bright green envelope) that they will use to access the UM contracted third-party system to make their choice on the [Business Services refund web page](#). The student will need to make their choice only once unless they change or close their bank account. The card should be kept in a secure place in case the student needs to make changes to their current choice. Even if a student does not expect to receive refunds due to financial aid, it is still important to select a preference. For instance a student may have a credit balance if classes are dropped or they withdraw that would require refunding to them.

A student's refund may be delayed if the student has not completed the setup of their electronic delivery choice.

Fee Schedule

The tuition and mandatory fee schedules are posted on the [Business Services tuition and fees web page](#) or call Business Services at 406-243-2223. Different tuition/fee schedules apply to each type of student (i.e. undergraduate lower/upper, WUE main campus/MC, MC, post baccalaureate, graduate first/advanced, distance only and law. The Board of Regents reserves the right to adjust fees at any time.

Students enrolled for 6 credits or fewer have the option of paying an additional amount to cover the Activity Fee, Campus Recreation Fee, Health Service Fee and Athletic Fee. Please see the Fee Definitions on the [Business Services Fee definition web page](#) for details about these fees. Audited courses are assessed the same fees as courses taken for credit.

A Distance Learning fee is assessed on all online courses to partially defray costs associated with courses delivered online over the World Wide Web. On line courses are assessed an additional fee of \$48.00 per credit. If a student is registered for all distance classes, they have the option to request a change to a distance only student. Distance Only students are not assessed some of the mandatory fees that apply to students enrolled in face-to-face courses. The student needs to complete the request which can be found on the [UM Online website](#).

The Board of Regents may approve additional fees at any time. Fees frequently are assessed for selected courses in subjects such as: Accounting Technology, Art, Biology, Biochemistry, Building Maintenance Engineering, Business, Chemistry, Computer Technology, Culinary Arts, Curriculum and Instruction, Dance, Diesel Equipment Technology, Drama, Educational Leadership, Electronics Technology, Forestry, Geology, Health and Human Performance, Heavy Equipment Operation, Journalism, Legal Studies, Mathematics, Metals Processes, Microbiology, Military Science, Music, Nursing, Pharmacy, Physical Therapy, Resource Conservation, Respiratory Therapy, Science, Secretarial Technology, Small Engines, Surgical Technology, Truck, Welding, and Wildlife Biology. This listing may not be all-inclusive and does not preclude a specific fee from being assessed.

Special fees are assessed for extended field trips in various departments.

An Educational Service Fee is charged for the off-campus M.B.A. and M.P.A. programs.

A fee is charged for cooperative education internships.

Purchase of supplies, equipment, or tools may be required by certain programs.

Law School Fees

The proposed 2014-15 School of Law fees for 15 credits are approximately \$3,237 for autumn and \$3,212 for spring for an in-state student and \$11,175 for autumn and \$11,150 for spring for an out-of-state student. The Health Service fee is included. Health Insurance coverage is available to students for an additional charge.

Law Special Fees

All persons who apply for admission to the School of Law must pay an acceptance fee of \$300.00 (\$150.00 is refundable if written notice is received by the due date if student does not want to attend) which is applied toward payment of fees upon entering and attending the School of Law in the semester for which application was made.

In addition to the above fees, Law School students must pay an additional \$145.00 per credit per semester. The amount is applied to instructional costs.

All law students are assessed a \$25.00 law activity fee during autumn. An additional academic facilities fee of \$50 per semester plus \$1.25 per credit hour is also assessed.

Continuing Education and Summer Programs

Fees, room and board costs for Summer Programs and fees for registration in Continuing Education are contained in separate publications. These publications can be obtained by contacting the School of Extended and Lifelong Learning and Summer Programs 406-243-2900, University of Montana-Missoula, Missoula, MT 59812 or by visiting the [School for Extended and Lifelong Learning website](#).

Refund Policy

Refund for Dropped Classes

Students who have paid their registration bill may drop classes through the first fifteen days of the Autumn and Spring semesters. Adjustments of the associated tuition & fees and financial aid will be made to their student account during that time. **Beginning with the sixteenth class day, there is no refund for classes dropped and there is a \$10 fee for each class dropped.** Students who finalized with financial aid should always check

with the Financial Aid office before dropping classes to make sure they fully understand the financial impacts as dropping classes may result in the student having to immediately repay grant aid they received or make them ineligible to receive aid that has not been disbursed yet.

Refund for Withdrawal from the University

If a student decides to withdraw from classes after finalizing the registration bill, the student should contact the University of Montana Registrar's Office in Griz Central, located in the Lommasson Center, and complete a withdrawal form to begin the official withdrawal process**. This procedure will enable the University to prorate the fees assessed based upon the official date of withdrawal.

Students who desire to continue the Blue Cross Health Insurance must contact the Curry Health Center prior to withdrawal. Otherwise, the insurance premiums will automatically be refunded and coverage will be lost.

For students receiving Federal financial aid, they must be attending classes to remain eligible for Federal Financial Aid. If a student drops courses, stops attending classes, never starts attending a class or withdraws from the University of Montana, the University and/or the student may be required to return federal funds awarded to the student. **It is very important for students receiving Federal financial aid to contact Business Services at 406-243-2223 prior to withdrawing.** If a student officially withdraws during the first fifteen days of class, the tuition and fees will be re-assessed for the semester based upon the official date of withdrawal. A student's official withdrawal date is determined by:

- the date the student began the institution's withdrawal process or officially notified the institution of intent to withdraw; or
- the midpoint of the period for a student who leaves without notifying the institution; or
- the last date of attendance by the student at a documented academically related activity.

Students who withdraw from the University for the Spring or Autumn semesters after finalizing the registration bill will receive pro-rated assessment of tuition and fees according to the following schedule.

	Before classes begin	1st Week	2nd Week	3rd Week	4th week or Later
Registration	none	none	none	none	none
Tuition/Fees	100%	90%	75%	50%	none
Blue Cross Ins. **	100%	100%	100%	100%	none
Other Fees	varies	varies	varies	varies	varies

Charges for room and board will be re-assessed on a pro-rated basis. During the final two weeks of the semester, room charges will not be re-assessed. Student who do not formally and completely withdraw are not eligible for a refund. The University of Montana will reassess the tuition and fees for students using the Deferred Payment Plan if the student officially withdraws during the first fifteen days of a semester. However, the student may still owe a balance to the University.

Return of Title IV Funds (Federal Financial Aid)

The University of Montana Refund Policy exists for calculating the refund of institutional charges when a student withdraws. The federal "Return of Title IV Funds" formula dictates the amount of Federal Title IV aid that must be returned to the federal government by the University and the student. The federal formula is applicable to a student receiving Title IV Funds if that student withdraws on or before the 60% point of time in the semester. The student may also receive a refund of some institutional charges through the University of Montana's refund policy.

The federal formula requires a return of Title IV aid if the student received federal financial assistance in the form of a Federal Pell Grant, TEACH Grant, Federal Supplemental Educational Opportunity Grant (SEOG), Federal Perkins Loan, Federal Direct Loan (subsidized or unsubsidized), or Federal PLUS loans and the student withdraws

on or before completing 60% of the semester. The percentage of Title IV aid to be returned is equal to the number of calendar days remaining in the semester (effective on the official withdrawal date) divided by the number of calendar days in the semester (scheduled academic breaks of five consecutive days or more are excluded). After all Title IV aid return requirements have been satisfied, remaining credit balances will first be applied to satisfy outstanding University tuition, fees, and institutional charges. Any remaining credit balances will then be refunded to the student. Once you have completed more than 60% of the semester, you have earned all (100%) of your assistance.

If you withdraw from the University of Montana before completing 60% of the semester, you may have to repay any unearned financial aid funds that were already disbursed to you. Please contact staff in The University's Business Services, located in Griz Central or call 406-243-2223, if you have any questions about refund of tuition and fees or the calculation of the return of federal financial aid PRIOR TO WITHDRAWING.

Distribution Priority for Return of Title IV Funds

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal Perkins Loan
4. Federal Graduate PLUS Loan
5. Federal Parent PLUS Loan
6. Federal Pell Grant Program
7. Federal SEOG Program
8. TEACH Grant
9. State, Private, or Institutional Aid
10. The Student

Hardship Withdrawal Policy

A hardship withdrawal may be granted to a student who experienced a catastrophic unanticipated condition or event after the fifteenth class day of a semester, if the condition prevents the student from completing academic course work. If medical, this must be documented by a health care provider. A medical hardship withdrawal will only be granted in cases of extreme hardship resulting from a serious or life threatening medical condition. In order for a student to petition to receive a hardship withdrawal from The University of Montana, the student must contact the Registrar's Office or Business Services Office to start the hardship withdrawal process. Upon approval of a hardship withdrawal, the Registrar's Office will enter the appropriate withdrawal information on the student's academic record. Each student's circumstances are different, and the Hardship Withdrawal Committee will determine the criteria for awarding a hardship withdrawal. At minimum, the student must meet the following criteria:

1. Is a degree seeking student, and
2. Is either a resident or non-resident student, and
3. Is a continuing student, and
4. Is maintaining satisfactory progress based upon The University of Montana's academic regulations.

Business Services will calculate the tuition credit amount for all approved hardship withdrawals and will notify the Financial Aid Office.

Students withdrawing during the first fifteen class days of a semester for medical reasons should contact the Curry Health Center in order to maintain the health insurance coverage. Otherwise, the medical insurance premiums will be automatically refunded and coverage will be lost.

The hardship withdrawal process is not the appropriate venue to resolve or petition academic matters. Such concerns must be addressed in the student's respective department, school, or college. In addition, the hardship withdrawal process is not an alternative means to drop classes after the normal drop date, to remove unwanted grades, or preclude resulting academic/financial aid actions (warning, probation, suspension, etc.)

Other Costs and Policies

Late Registration

A student who does not complete registration, including payment of tuition & fees in CyberBear, by the fifth class day is assessed a late registration fee of \$80.00. After the fifteenth class day, a petition is required to register and, if approved, an additional \$80.00 will be assessed for a total late fee of \$160.00.

Returned Checks

A charge of \$25.00 will be assessed on checks (paper or electronic) returned from the bank. Any paper or electronic check tendered in payment of registration fees and not honored by the bank upon which it is drawn may result in cancellation of a student's registration. The student will be assessed the late registration fee of \$80.00 maximum in addition to the \$25.00 service charge.

Fee Policy on Drop/Adds

Students must pay for all courses for which they are enrolled at registration. However, within the first fifteen class days, they may drop or add courses. The courses for which students are enrolled on the fifteenth class day will determine any fee adjustments (see fee schedule) or financial aid adjustments. Beginning the sixteenth class day, courses dropped will not result in a reduction of fees but courses added will increase credit hour enrollment and may result in an additional charge. Payment is due within 10 days of the day courses are added.

CyberBear will not allow a student to drop all courses. Dropping all courses is considered a withdrawal from the University. Please refer to the Withdrawal Policy section in the catalog for information on how to withdraw and the associated Refund Policy.

Drop/Add Processing Fee

A \$10.00 processing fee will be charged for each course that is added or dropped after the fifteenth instructional day. See the summer class schedule for summer session deadlines.

Deferred Payment Plan

The University of Montana offers a payment plan to help students and their families pay their tuition, mandatory fees, room and board.

Eligibility is based on the following criteria:

1. Making payments as scheduled
2. Maintaining Satisfactory Academic Progress
3. Adequate financial resources to repay the loan
4. Use all UM Financial Aid offered
5. Fully complete and sign all required documents

The plan provides for the payment of at least one fourth of the total fees along with a \$30.00 administrative charge at the time of registration, payment of one fourth approximately 30 days after registration and payment of the full balance approximately 90 days after registration.

Registration, tuition and mandatory fees less any Financial Aid may be deferred. Student insurance and non-mandatory/course fees may not be deferred.

Deferred Payment Plan (DPP) applications must be submitted via CyberBear. The instructions (at right) will lead you to the DPP application. Be prepared to fill out the necessary application forms including parent and spouse information and two references. Your application will be reviewed by Business Services within 3 business days and you will be notified by UMConnect on the status of your application.

The signing and adherence to the terms and conditions of a promissory note will be required and no fees may be deferred by any person who owes the University any fees, fines, loans or other charges or who has previously deferred fees and failed to make timely payments. A \$15.00 fee will be assessed each time a payment is late.

This plan is not available for the summer session.

Monthly Bill Statements

Monthly bill statements will be mailed to the student's current mailing address displayed in CyberBear. In addition, an electronic notification will be e-mailed to their official University of Montana e-mail account. It is the student's responsibility to check their mail and official University of Montana e-mail account for these statements

and notices. Payments for billed amounts are due by the due date indicated on the statements and electronic message. Failure to make timely payments will result in an interest charge assessed on balances not paid in full by the following monthly billing. Payments can be made (1) online in CyberBear; (2) at the cashiers station located in Griz Central (2nd floor Lommasson Center); or by mailing payments to Student Accounts, Business Services, The University of Montana, 32 Campus Drive #2304, Missoula, MT 59812-2304.

Non Payment

A student who owes regular fees and charges including room and board or has an overdue debt owed to the University for any fees, fines, or other charges will not be able to register, secure any transcript or record, or access any University facilities or services until the full amount due has been paid or satisfactorily resolved with Business Services. Interest may be charged at the rate of 10% on the balance due from the day after the due date until the full amount has been paid and any attorney's fees or other costs or charges necessary for the collection of the amount owed may be added to the balance due.

Determination of In-State Fee Status

The Montana University System classifies all students as either in-state or out-of-state. This classification affects admission decisions and fee determinations. The basic rules for making the classification are found in Board of Regents' Policy. It is each student's responsibility to secure and review a copy of the policy. Failure to be aware of the rules will not be cause for granting any exceptions to them. A copy of the policy is available from the Admissions Office or the Registrar's Office. It is important to bear in mind that each residency determination is based on the unique set of facts found in each individual's case. Students participating in the Western Undergraduate Exchange or the National Student Exchange programs are not eligible to gain residency. If you have questions concerning your particular case, be sure to contact the unit to which you are applying for admission or at which you are already enrolled. Generally, the Admissions Office or the Registrar's Office will be able to assist you.

With certain exceptions, in order to be eligible for in-state status, a person must meet a 12-month durational residency test. You will have to demonstrate a bona fide intent to become a Montana resident. The 12-month period does not start until some act indicative of intent to establish residency is taken. Mere presence in Montana, enrollment at a unit or rental agreements will not serve to start this period. Sufficient acts to start the period are registration to vote, obtaining a Montana driver's license, registration of a motor vehicle in Montana, purchase of a home in Montana or filing of a resident Montana tax return. The 12-months must be completed by the 15th instructional day to qualify for that term.

Your actions during the 12 month waiting period will be used to determine whether you are in the state as a bona fide resident or merely for educational purposes. The decision on your residency will not generally depend on just one factor. The following are the things you need to do that will support a claim of bona fide residency.

1. Register to vote if you are a voter
2. License a vehicle if you operate one in Montana
3. Obtain a driver's license if you drive
4. Be physically present in Montana, not out of the state of Montana, for more than a total of 30 days
5. Can Not be claimed as a tax exemption by residents of another state or file taxes as a resident of another state
6. Provide at least 51% of your own financial support (this means you will need to document to us that you have contributed approximately \$6000 towards your support during the twelve month waiting period)
7. File a Montana resident income tax return (this is important for all who claim residency in Montana, regardless of the amount of earnings)
8. Only register for six (6) credits or less per semester (including summer school) during the twelve month waiting period. Registering for more than 6 credits creates a strong presumption that you are here for educational purposes, and may disqualify you from achieving in-state status.

Be certain to secure the Board of Regents residency Policy and questionnaire from the Registrar's Office in the Lommasson Center 201 or at the Registration Counter in Griz Central . At the end of your twelve month waiting period you must complete the residency questionnaire and attach copies of your driver's license, vehicle registration, voter's registration and proof of your earnings for the twelve months and return it to the Registrar's Office for review. This documentation can be submitted to the Registrar's Office up to 30 days in advance of the petitioners start date and not later than the 15th instructional day of the semester for which the status is sought. When a student petitions or meets the requirements after the 15th instructional day, a change in classification, if

granted, will not be retroactive and will become effective for the next term. Reclassification is not automatic and will not occur unless the individual so petitions. It is the student's responsibility to meet any filing deadlines that are imposed by the appropriate unit of the System. All students should check with the appropriate office to determine the time limits for filing. The appeal process is given in the Regents' policy.

Costs of On-Campus Services

»Housing and Dining Services

Students living in University residence halls are required to contract for a meal plan with Dining Services. Room and board rates are the same for in-state and out-of-state students. Occupants may select any meal plan to obtain the number of meals preferred and choose from a variety of room options.

Students who are approved to move out of the residence halls and terminate their meal plan contract will receive a prorated refund based upon the days remaining in the semester less the cancellation fee.

Residence Halls

Rates subject to change

2014-2015 Autumn/Spring Semester room rates in University residence halls are:

Residence Hall	Room Type				
	Double Room	Triple Room	Single Room	3-Person Pod	4-Person Suite
Aber Hall	\$1,747	NA	NA	NA	NA
Craig Hall	\$1,872	\$1,747	NA	NA	NA
Duniway Hall	\$1,747	NA	\$2,156	NA	NA
Elrod Hall	\$1,747	\$1,747	Standard - \$1,991 Large - \$2,156	NA	NA
Jesse Hall	\$1,747	NA	NA	NA	NA
Knowles Hall	\$1,747	\$1,747	NA	NA	NA
Miller Hall	\$1,747	NA	\$2,277	\$2,277	NA
Pantzer Hall	NA	NA	\$2,461	NA	\$2,461
Turner Hall	\$1,872	NA	\$1,991	NA	NA

Rates include \$6.00 per semester social fee.

Early arrival prior to opening day costs an additional \$20.00 per day.

»Dining Services

Dining Services meal plan prices 2012-2013 academic year.

*The prices below are subject to approval by the Board of Regents and may change.

Meal Plan	Autumn/Spring Semester
All Campus	\$2,148.00
Food Zoo Plus	\$1,938.00
Food Zoo	\$1,833.00

Students living in residence halls are required to contract for one of the two meal plans. All meal plans are available to off-campus students, faculty and staff.

Lewis and Clark Village

Rent is \$452.00 per month per person regardless of which size apartment you are assigned to. Each resident will be responsible for their own rent payment. Residents may choose to pay either by the semester or by the month. Rent includes a furnished apartment with all utilities paid including cable TV. You must make your own arrangements for telephone service.

»University Villages

Rates subject to change

University Villages housing is available. An application together with \$25 processing fee should be submitted to Residence Life Office, 101 Turner Hall, Missoula, MT 59812. A \$300 deposit will be required when apartment is assigned.

Housing Apartment Rates (monthly)

Apartment Type	University Village Building		
	Craighead and Sisson	Elliot	Toole
	(All Utilities paid)	(Tenant pays Heat & Elec.)	(Tenant pays Heat & Elec.)
Studio	\$567.00	\$361.00	\$454.00
1-Bedroom	\$630.00	\$430.00	\$599.00
2-Bedroom	\$759.00	\$533.00	\$724.00
3-Bedroom	\$852.00	\$593.00	\$819.00
4-Bedroom	\$897.00	None	None

NOTE: These rates are monthly and effective July 1, 2014 through June 30, 2015. All rates include cable TV, water, garbage, and sewer. Tenants are responsible for telephone service and utilities.

Vehicle Registration Fee

All vehicles parking on campus must display current campus vehicle registration between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday year round. Students, staff or faculty may purchase window or hanger decals for \$185.00 per year. Students have the option of purchasing semester decals for \$92.50. Reserved parking is available on a first come, first serve basis for \$555.00 a year. Car pools of three or more commuting drivers may register for \$10.00 per person for the year.

Motorcycles are issued decals at \$35.00 per year. Day passes (all day parking) for \$3.00 per day may be purchased from the Office of Public Safety or the University Center and are valid in all "A" decal required lots only. Hourly pay parking is available for \$1.00 per hour. The above prices are subject to change pending approval by the Board of Regents.

Partial refunds on decal are available only through the 15th class day. No refunds will be given on motorcycle, car pool or half semester vehicle registrations.

If a vehicle is sold, transferred or destroyed, the parking decal must be removed and returned to the Office of Public Safety for replacement. There is a \$10 replacement fee for all decals lost, stolen or not returned.

More information can be found at the [UM Police parking web page](#).

Other Campus Services

On campus there are other services provided such as the swimming pool, laundry facilities, locker rental, a full service bookstore, prescription pharmacy, testing programs, etc. The rates charged for these services are too varied to present in this publication. If more information is required concerning these services, contact the department providing the service.

»**Veterans' Benefits for Education Assistance Under Public Law 95-202 and Public Law 815**

For Veteran information visit the [UM Veterans website](#).

Financial Aid

Financial aid services are available from two campus locations: the South Avenue location of the Missoula College (MC), and Financial Aid Station located on the second floor of the Lommasson Center Building in Griz Central. Students specific information including the status of the student's aid application is available in [CyberBear](#). General financial aid information including forms, policies and scholarship information is available at the [Financial Aid Office website](#).

Missoula College students:

[Enrollment Services-Financial Aid Office](#)

909 South Avenue West
Missoula, MT 59801
(406) 243-7886
Fax (406) 243-7901

All students:

[Enrollment Services-Financial Aid](#)
[Lommasson Center - Griz Central](#)
Missoula, MT 59812-1254
(406)243-5373
Fax (406) 243-4930
Both offices are fully accessible.

Notice: Any policy is subject to change without advance notice if required by federal or state law, Board of Regents, or Enrollment Services-Financial Aid Office.

Acceptance to UM

Students must be accepted for admission (or readmission) to the University in a degree seeking program before financial aid requests are considered. Students accepted into non-degree categories are not eligible for any financial aid.

Presidential Leadership Scholarships

This award is open to incoming freshmen who have demonstrated high academic achievements, leadership and promise for success through their high school experiences. The award is renewable for four years based on meeting eligibility requirements. The application is available from Enrollment Services-Admissions, the Davidson Honors College, and high school counselors in Montana. The application is also available on-line on the [Davidson Honors College website](#). The application deadline is December 31.

Campus-Wide Scholarships

The University offers a campus-wide scholarship program. Students should apply each year as most scholarships are awarded on an annual basis. Students holding a UM General renewable scholarship will have their awards automatically renewed if they continue to meet the eligibility criteria so need not submit an application again in subsequent years..

Requests for applications for continuing UM students, beginning November 1st, may be directed to the Enrollment Services-Financial Aid Office. The application is also located on line on the [Financial Aid Office website](#). The filing deadline is February 1. Students are notified in March.

New, incoming students who have applied for admission to UM by December 31 will be considered for any scholarships that may be applicable. Notification will be done in March.

The Western Undergraduate Exchange (WUE) scholarship may be available for applicants from participating states. Application for a WUE scholarship is accomplished by applying for admissions to UM. Contact Enrollment Services-Admissions for further information.

Departmental Scholarships

Many departments, including the Missoula College, offer scholarships based on skill or academic potential. Students should contact their major departments for deadlines and more information.

Financial Aid Application

All students who wish to receive any federal funds, including federal parent loans, need based or most non-need based assistance, must file the Free Application for Federal Student Aid (FAFSA). The application is available on the [Federal Student Aid \(FAFSA\) website](#). Students whose FAFSAs are received and processed by the Department of Education by February 15, and who complete all other documentation requirements are given priority for limited funds. Those who complete requirements later are considered only for federal loan programs and federal Pell Grants.

Determination of Eligibility

Eligibility for need-based financial aid is determined by subtracting the Expected Family Contribution (as determined from filing the FAFSA), scholarships, and other educational assistance from private or public agencies from the Cost of Attendance.

Financial Aid Package

Packages of need-based aid can include a combination of grants, loans and work-study. Students using the FAFSA automatically apply for all possibilities with one application. The types of aid offered will include federal subsidized and unsubsidized student loans for graduate or undergraduate students and federal Pell Grants for undergraduates if qualified. For those who file the FAFSA early and complete all requirements for additional documentation promptly, additional campus aid will be considered. This aid includes federal and state grants for undergraduate students. Federal Perkins loans and either federal or state work study will be considered for all early filers for both degree-seeking undergraduates and graduate students.

Non-need based aid, in the form of unsubsidized federal loans, for students and parents of dependent students will be considered for those families who file the FAFSA and accept these loans.

Distribution of Aid

All financial aid is awarded by the Enrollment Services-Financial Aid Office and distributed through Business Services, usually by crediting aid to the student's account. Aid is disbursed beginning the week before classes to students who have accepted their aid, submitted all required documents weeks in advance of the date and have finalized their registration in Cyberbear. Loans may be canceled under certain conditions if the student no longer desires the debt. Students who are offered work study must obtain employment and complete additional paperwork at the Enrollment Services-Financial Aid Office. Students who work are paid bi-weekly based on the timecard submitted by students and the supervisors.

Additional Requirements for Loans

In order to meet federal requirements, students who receive a federal student loan at the University of Montana must complete an entrance interview requirement and sign a promissory note before a loan will be disbursed. Instructions for entrance and exit counseling and the promissory notes are available on the [Enrollment Services-Financial Aid Office website](#) for the University of Montana-Missoula. Select the "Loans" link.

Study Abroad and Financial Aid

Students who desire to study abroad and who enroll in courses that are approved by The University of Montana should contact the Enrollment Services-Financial Aid Office. Instructions will be provided for using financial aid with this type of study.

»Other Requirements and Guidelines for Retaining Financial Aid

Financial aid for full-time is based on maintaining a minimum of twelve (12) credits each term.

Students enrolled for less than full-time may receive financial aid. Most grants will be pro-rated based on credit load. Loans are not pro-rated but require a minimum of six credits.

Students enrolling for fewer than six credits are not considered for financial aid with two exceptions; (1) undergraduates who are seeking their first degree may be eligible for a reduced federal Pell Grant, and (2) tuition waivers may be available for those who qualify.

Students can only receive aid for credits that are required for their degree programs. If a student chooses to repeat a course for which they previously received a passing grade that course can only be counted toward their aid enrollment status one more time.

Employment

The Enrollment Services-Financial Aid Office coordinates federal and state work study programs. Open positions are posted on the electronic job board located on the [Career Services Student Employment web page](#).

Non-work study student employment positions are also posted electronically at [Career Services Student Employment web page](#).

Satisfactory Progress

Any student receiving financial aid is required to make satisfactory academic progress in a program leading to a degree. Students must maintain a minimum cumulative grade point average (GPA) and complete a minimum of 70% of all credits attempted. The minimum GPA for undergraduate, Law and Pharmacy students is a 2.0. Physical Therapy doctoral students need to maintain at least a 2.5 GPS. Graduate students need to maintain at least a 3.0 GPA.

A student must also be able to complete their degree within 150% of the length of their program measured in credits attempted. For instance, a student pursuing a 120 credit bachelor's degree would need to complete their degree prior to attempting 180 credits.

Complete information is available in the Enrollment Services-Financial Aid Office or at the [Financial Aid Office website](#). Select the "Maintaining eligibility" link.

Short Term Loans

Limited short term loan money may be available to registered students who are eligible and submit complete applications. Among other conditions the student must have pending financial aid that will result in a refund to the student to qualify for the loan.

»Tuition Waivers

The Montana Board of Regents has authorized the waiver of tuition for certain categories of students. Applications for any of the tuition waivers listed must be made in writing to the Enrollment Services-Financial Aid Office. The request must be made prior to the start of the semester in which students expect the waiver.

Minimum academic standards are necessary to receive tuition waivers. Other requirements and limitations may apply. Contact the Enrollment Services-Financial Aid Office for application forms or more information.

Montana Veterans Tuition Waiver

- bonafide resident of the State of Montana for fee purposes
- Honorable Discharge
- at one time qualified for veterans benefits under Title 38 of the U.S. Code, but are no longer eligible
- served during a time of war as determined by the Attorney General (World War II, 12-7-41 to 9-2-45; Korean War, 6-22-50 to 1-31-55; Vietnam War, 1-1-64 to 5-7-75; or post-Vietnam world conflicts under certain conditions. Contact the Enrollment Services-Financial Aid Office for further information.)

»American Indian Student Tuition Waivers

- resident of the State of Montana for one year immediately prior to enrollment at The University of Montana-Missoula
- documentation proving at least one-quarter degree blood
- meet admissions guidelines of the University
- must have financial need as determined by the Enrollment Services-Financial Aid Office
- meet satisfactory academic progress according to the standards of the Enrollment Services-Financial Aid Office

»Senior Citizens Tuition Waiver

- permanent resident of the State of Montana
- 65 years of age or older

»University of Montana Employees

- instate resident
- employed at least three-quarter time on the date of registration and for the entire semester
- must be after probationary employment period
- approval from department head & Human Resources every semester

Montana University System Honors Scholarship

- awarded by Board of Regents to top graduating high school seniors in Montana
- student must submit form received from the Regents to The University of Montana Enrollment Services-Financial Aid Office for activation of this waiver

Other

There are several other tuition waivers including war orphans, MUS employees' families, surviving dependents of a Montana National Guard Member, and surviving spouse or children of any Montana firefighter or peace officer killed in the line of duty. Contact the Enrollment Services-Financial Aid Office for details.

»Department of Military Science

All students are afforded the opportunity to apply for two, three and four year scholarships provided by Army ROTC. The scholarships pay for all mandatory tuition and fees, a monthly stipend and \$450.00 per semester for books. The monthly stipend for scholarship students is \$300.00 in the freshman year; \$350.00 in the sophomore year; \$450.00 in the junior year and \$500.00 in the senior year.

Additional financial assistance opportunities are provided to students that are interested in joining the U.S. Army Reserve or the Montana State National Guard. These programs are referred to as the Simultaneous Membership Program, since the student is involved in the National Guard or Reserves at the same time they are involved in ROTC. These programs have financial benefits that range from \$15,000 for a two year program to \$50,000 for a four year program. These benefits are very complex and are best understood by stopping in to visit with the Military Science Enrollment Officer.

Students have the opportunity to enroll in both the basic and advance courses offered by the Department of Military Science in the College of Arts and Sciences. The Basic Course is simply the Freshman and sophomore level courses offered by Army ROTC Instructors and no financial benefits are received for enrolling unless the student is on a scholarship. The Advanced Course refers to our junior and senior level courses. All advanced course students are contracted and receive financial benefits. We welcome student involvement in Land Navigation and Drill and Conditioning courses but no benefits are provided for enrollment in these classes.

Student Services

»Housing and Dining Services

Residence Halls Community

The University of Montana-Missoula residence halls' community is a part of the University and Missoula communities. The campus is a center for educational, cultural, and social activities. Residing in residence halls places the student at the center of these activities. Our mission is to provide safe, clean, healthy and affordable living and learning facilities that fosters an inclusive community living environment for students, staff, faculty, and guests. Services provided in these facilities support and nurture educational experiences and personal development at The University of Montana. The University houses nearly 2300 students in nine residence halls on campus. The residence halls staff are resource people. Sharing ideas, observations or questions with them will benefit residents. Resident Assistants offer help and resources when students experience problems with University life. The residence hall room rate includes a furnished room with all utilities, use of laundry facilities, Internet access and cable TV.

The University of Montana-Missoula requires all freshmen and students who have earned fewer than 30 semester credits to reside in the University's residence halls. Students are required to continue residence hall living until the student earns 30 semester credits. Any student who moves into the residence halls at the beginning of the semester is required to reside in the residence hall for the entire semester. (However, students must be enrolled for at least seven credits to be eligible to live in a residence hall.) Exceptions to residence hall living are made for students who reside with their parents and for students who are married or are single parents. Other exceptions are made under special circumstances on an individual basis. Any student requesting an exception to the residency requirements must submit a request in writing, accompanied by supporting documentation, to the Director of Residence Life. Students are not released from the residency requirements until the student receives an official notification from the Director of Residence Life. Students who have earned 30 semester credits or more are not subject to the residency requirements but are encouraged to live on campus. All students living in the residence halls are required to contract for one of the on-campus meal plans.

Rooms in residence halls are provided in order of application. Freshman students required to live in Residence Halls who submit their residence hall application and \$220.00, which is a \$25 non-refundable processing fee and a \$200 prepayment, by the priority Admission deadline of March 1, will be guaranteed permanent housing assignments. Application forms and information may be obtained on the [Residence Life Office website](#).

A number of rooms have been designed to accommodate students with disabilities. Application for these rooms is made to the Residence Life Office. The Director of Residence Life or the Office of Disability Services for Students, (406) 243-2243, should be contacted to ensure the necessary accommodations are provided or visit the [Residence Life Office website](#).

»Lewis and Clark Village

(Upperclass and Graduate Housing)

Lewis and Clark is a No-Smoking apartment facility designated for single students at the University of Montana without dependents who will have accumulated at least 60 credit hours by the time they move into the apartments. The apartments are located off campus just south of Dornblaser Stadium on South Higgins Avenue. They are within easy walking or biking distance from the University and are adjacent to Park n' Ride which provides free and easy transportation to the UM campus. The apartments are furnished with all utilities paid including cable TV and Internet access.

Prospective tenants may submit applications together with a requested roommate(s). If a tenant does not have a roommate preference, the Residence Life Office will assign roommates based on like gender. As space allows we will attempt to take into consideration other preference such as age, smoking, alcohol consumption, and length of agreement.

How To Apply for Lewis and Clark Village

Applications are available on the [Residence Life Office website](#), or by calling in a request to the Residence Life Office at 406-243-2611, or sending an email message to housing@mso.umt.edu. Your application must be accompanied by \$320.00, (\$25 which is a non-refundable processing fee and a damage deposit of \$300.00).

A complete set of policies, photos and site map are available on the [Residence Life Office website](#).

»Dining Services

Winner of 22 international dining awards and home to nationally renowned chefs, University Dining Services (UDS) is dedicated to bringing you a variety of delicious, well-balanced meals at reasonable prices. Our extensive selection of dining options include: the Food Zoo, the Cascade Country Store, La Peak, Biz Buzz, Think Tank, Recess, Doc's Sandwiches, Garden City Greens, Soups N Such, Pizza Hut, Wing Street, Famous Dave's BBQ, Ui-Cha! (Vietnamese), Byte Me Burgers, Eson Gib Sushi, Casa Nina and two Jus Chilln' restaurants. All University Dining Services and Jus Chilln' locations accept cash, checks, Visa/Mastercard, UMoney and appropriate meal plans.

The Food Zoo, located in the Lommasson Center, is our buffet style restaurant which features an ever-changing choice of entrees, homemade soups, an extensive salad bar, daily pastas and gourmet pizzas, fresh fruits, Bear Claw Bakery desserts, cooked-to-order specials, and vegetarian and vegan options.

The Cascade Country Store, located at the west end of the Lommasson Center, boasts a bright, food-court style atmosphere with pizzas, Mexican specialties, grilled favorites and a fresh deli. Soups, salads, Bear Claw Bakery pastries, a wide variety of grocery items, organic products, and health and beauty aids are just some of the options available. The expansive outside deck is a popular stop for many students.

La Peak, located in the Cascade Country Store, features Craven's gourmet coffee and espresso drinks, fresh crepes, breakfast sandwiches and Bear Claw Bakery goodies. The lodge-like atmosphere makes La Peak a great place to socialize with friends.

The University Center Food Court, located on the second floor of the University Center, features a contemporary, open atmosphere, and exceptional cuisine. Food choices include Pizza Hut, Garden City Greens, Soups N Such, Ui-Cha! (Vietnamese), Wing Street, Famous Dave's BBQ, Doc's Sandwiches, Eson Gib Sushi and the award winning Casa Nina.

Biz Buzz, located on the lower level of the Gallagher Business Building can help you jump start your day with a fresh cup of Craven's coffee, espresso, or Chai tea. They also serve delicious hot paninis, fresh baked pastries from Bear Claw Bakery, bagels, sandwiches, soups and salads.

The Think Tank, located above the Urey Lecture Hall, offers Liquid Planet gourmet coffee, espresso, Chai tea, Italian soda, ice-cold beverages, and grab and go items like sandwiches, soups, salads, and snacks. Whether you need that morning boost or a lunch on the go, the Think Tank has you covered.

Recess is our newest coffee shop. Located in the Phyllis J. Washington Education Building, Recess offers Liquid Planet gourmet coffee and espresso, Chai teas, bagels, Bear Claw Bakery pastries, sandwiches and Italian sodas. For a satisfying break between classes, stop by Recess.

There are two Jus Chilln' locations on the main campus. One is located on the first floor of the University Center. The other can be found at the Fitness & Recreation. Both restaurants feature Liquid Planet gourmet coffees, smoothies, baked goods and grab and go items. Enjoy delicious soups and sandwiches at the UC location.

Meal Plans

To ensure you have healthy and nutritious food options, The University of Montana requires students living in a residence hall to purchase a meal plan. A meal plan is a pre-paid purchase of meals for the entire semester. UM Dining Services offers two meal plans designed for students living on campus: the ALL CAMPUS and the LOMMASSON PLUS. Each plan provides a Weekly Meal Plan Fund designed to ensure that meals can be purchased for the entire semester. Food purchases are deducted from your Weekly Meal Plan Fund and may be used as quickly or as modestly as you choose. Weekly Meal Plan Funds reset every Sunday morning; unused Weekly Meal Plan Funds are NOT carried forward from one week to the next. For full details, visit the [UM Dining Services website](#) and click on "Meal Plans" or call 406-243-6325. The ALL CAMPUS Meal Plan provides campus-wide dining flexibility and is accepted at all Dining Services locations. The LOMMASSON PLUS Meal Plan is accepted at the Lommasson Center restaurants (*The Food Zoo, Cascade Country Store*), La Peak, and Jus' Chill'n located in the Campus Fitness and Recreation Center.

A student may convert their meal plan from ALL CAMPUS to the LOMMASSON PLUS Meal Plan only once during the first two weeks of the semester. Upgrades, from the LOMMASSON PLUS Meal Plan to the ALL CAMPUS Meal Plan, are accepted throughout the semester.

The COMMUTER MEAL PLAN is designed for students living off the main campus who want the convenience of pre-purchased campus dining. Open your COMMUTER MEAL PLAN account with as little as \$20.00. For deposits of \$50.00 or more UDS will add a 10% premium to your account. COMMUTER MEAL PLAN funds may be used at any of UDS' 14 restaurants, both Jus Chill'n locations on the main campus and the College of Technology snack bars. Make additional deposits anytime (\$20 minimum). Payment methods include cash, check, credit card UMoney and Cyberbear/student account (some restrictions apply, call 406-243-6325 for details).

For more information on meal plans and other special dining services, please contact the University Dining Services main office at (406)243-6325 or visit the [UM Dining Services website](#).

»University Village

The University has 566 apartments for married students, single students with dependents, and students with disabilities who have a live-in care attendant. All apartments are within walking distance of the campus. Units range from studio to four-bedroom apartments.

Eligibility for University Village requires at least one adult member of the household be enrolled for a minimum of seven (7) credits two of the three semesters per year. The student must be registered for at least seven (7) credits the first semester of occupancy. Priority is given to students who are married or otherwise have a legal dependent relationship with another adult; single parents with at least one (1) legal dependent living in the apartment; and single students with disabilities who require a live-in care attendant. Single students may be assigned apartments if other priority applicants do not occupy all available units.

Students residing in University Village must demonstrate satisfactory progress toward an educational degree by earning a minimum sixteen (16) credits per calendar year. After the initial year of residency, satisfactory progress is based upon credits earned during the preceding calendar year. In addition, a student or family with one or more members working toward an educational degree will have priority occupancy for a maximum of six (6) calendar years. Any exception from the above residency policies requires a written request for exception submitted to the University Village Office. The request is not approved until written consent is received from the University Village Office.

Housing is assigned according to the date of application and notification is given approximately twenty (20) days before housing becomes available. All applications must be updated every six (6) months in order for applicants to remain on the assignment list. A \$250.00 deposit must be submitted when an apartment is assigned. The deposit is refundable when the rental agreement is terminated provided the apartment rental fees are current and no damage or cleaning fees are assessed. The deposit is forfeited if the student cancels after accepting the assigned apartment.

Due to the demand for University Village housing, the University Village Housing Office should be contacted early to make reservations and obtain detailed information including an application or visit our website at the [Residence Life Office website](#). Applications must be accompanied by a \$25.00 processing fee.

»Personal Property

The University of Montana-Missoula is not responsible, by state law, for damage to, or theft of, the personal property of students on campus (for example: damage to clothing or a stereo due to fire, smoke or water). Students are encouraged to adequately insure their personal property and to protect their property by locking

their room/apartment and car and taking other simple precautions to prevent theft and damage.

Career Services

The Office of Career Services assists prospective, current and alumni students in developing viable career objectives, choosing academic majors and creating the plans necessary to achieve those goals. Assistance is also provided to students who wish to modify their career and academic goals to improve their employment options. Career Services provides a wide array of services designed to facilitate the transition from education to employment, including: career counseling and assessments; workshops on resume writing, interviewing and job search strategies; taped mock interviews; on-campus interviews with employers; Griz eRecruiting, UM's on-line recruitment system; and student employment.

Career Services maintains an extensive on-line library of current resources on general and specific career and educational options, resume, interviewing and job search reference materials and employment resources.

A variety of employment and career fairs are hosted each year to bring students and employers together to discuss volunteer, internship, research, part-time and full-time employment opportunities. The Student Employment Fair, Big Sky Career and Academic Enrichment Fair and Health Professions Fair are held each Fall semester. The Educators' Career Fair is open to teaching, administrative, school counseling, speech language pathology, and school psychology professionals and is held each spring semester.

All UM students are eligible to establish a free Griz eRecruiting account which allows students to post their resumes on the web for viewing by and referral to employers, participate in the on-campus recruiting program and view and apply for current job and internship vacancies in the online jobs database.

For additional information, contact the Office of Career Services at 154 Lommasson Center, call (406) 243-2022, e-mail: careers@umontana.edu or visit the [UM Career Services website](#).

Student Employment

Student Employment is an online job posting system for employers and online job search and application process for students. This makes it possible to post jobs for on-and off-campus, work-study, non-work-study, and volunteer employment. Student Employment works closely with Financial Aid and Student Payroll to assure students are being hired and paid within the established guidelines. Student Employment hosts a free Student Employment Fair during the first week of classes every fall. We also coordinate National Student Employment Week and the Student Employee of the Year (SEOTY) Award.

For additional information, contact the office of Student Employment at 154 Lommasson Center, call (406) 243-2239, email studentjobs@umontana.edu or visit the [UM Griz eRecruiting Student Job web page](#).

Testing Services

The Office of Testing Services is a member of the National College Testing Association and Consortium of College Testing Centers. Testing Services subscribes to the NCTA professional standards and guidelines providing the administration of educational, professional licensing and certification exams. Examples of our services include:

- National standardized academic admissions exams (ACT, GRE, GMAT, MCAT, LSAT, PCAT, MAT, TOEFL, etc.)
- Professional certification exams (PRAXIS, NREMT, PTCE, DANB, MPRE, ACSM, ACE, Microsoft Office, etc.)
- Information technology certifications (CompTIA, Adobe, Cisco, Novell, etc.)
- College credit by examination through CLEP and DSST
- Proctoring services for UM students, online, and distance learning programs

For additional information, contact Testing Services at Lommasson Center, Suite 154, call (406) 243-2175, or testingservices@umontana.edu, or the [UM Testing Services website](#).

»Internship Services

The University of Montana offers internships in most disciplines. Internships can be part- or full-time, paid or unpaid, and generally run the length of an academic semester. Internships are supervised by key faculty members and allow students to work in positions related to their academic and career goals while utilizing knowledge, theory, and skills learned in the classroom. Learning objectives complemented by faculty-assigned reflective learning projects or reports distinguish and showcase internships as essential educational experiences. Internships are available locally, state-wide, and throughout the nation in various settings, including non-profit

agencies, small businesses, multi-national corporations, and city, state, and federal government offices. International internships are also available, many through a partnership with IE3 Global Internships. More detailed information is available at Internship Services, Lommasson Center 154; (406) 243-2815; fax (406)243-5866; or visit the website at: www.umt.edu/internships.

»Disability Services for Students

Students with disabilities can expect access at the University of Montana-Missoula. Wherever possible, the University exceeds mere compliance with the civil rights laws of Section 504 of the Rehabilitation Act, the Americans with Disabilities Act, and the Montana Human Rights Act. The University's programs are readily accessible to and usable by people with disabilities. The campus assures Program access is delivered to the maximum extent feasible and in the most integrated manner possible.

Disability Services for Students, a student affairs office, leads the University's program access efforts for students. Disability Services provides and coordinates reasonable accommodations and advocates for an accessible and hospitable learning environment. We encourage self-determination and self-reliance by students with disabilities. Examples of services include priority registration, physical accessibility arrangements, academic adjustments, auxiliary aids (readers, scribes, sign language interpreters, etc.), alternative testing, conversion of print textbooks to e-text, assistive technology assistance, and other reasonable accommodations. To achieve equal access, Disability Services vigorously pursues the removal of informational, physical, and attitudinal barriers to all University programs. "Expect Access", Disability Services handbook for students, and a campus accessibility map are available on the [UM Disability Services for Students website](#).

Students with disabilities should plan ahead and get in touch with Disability Services prior to arriving on campus. For additional information, contact Disability Services for Students in Lommasson Center 154 or (406) 243-2243 (Voice/Text) or dss@umontana.edu. Please visit the [UM Disability Services for Students website](#) to find details on our services.

The UM Veteran's Education and Transition Services (VETS) Office

The University of Montana's Veteran's Office has moved to the new Veteran's Education and Transition Services (VETS) location. The VETS Office is located on the Southeast corner of the Mountain Campus at 1000 E. Beckwith Avenue, where Beckwith Ave. becomes Campus Drive. The office serves all UM veterans and their family members, including those attending the Missoula College. VETS Office hours are M-F 8 a.m. - 5 p.m.

Contact information:

UM VETS Office

1000 E. Beckwith Avenue

veterans@umontana.edu

[UM Vets Office website](#)

406-243-2744 Phone

406-243-5444 Fax

»Foreign Student and Scholar Services

The office of Foreign Student and Scholar Services (FSSS) assumes responsibility for the general welfare of foreign students at the University of Montana from admission to graduation and practical training. It provides direct support services, consultation, and liaison. The office assists in the reception and orientation of foreign students and helps with their integration into the University and community. It interprets immigration regulations and laws and assists students in maintaining legal status and obtaining benefits related to their visa status. Staff members provide advising for academic and personal concerns, cultural adjustment, financial problems, and other concerns that arise.

The staff works with the International Student Association and other student groups, as well as the Missoula International Friendship Program to sponsor cultural activities, a speaker's bureau, a community hospitality program for students, leadership opportunities for students, and the annual International Culture and Food Festival. FSSS coordinates the UM Global Partner Program, a campus peer-mentoring program. It offers educational fields trips; winter and summer break activities, as well as initial and on-going orientation and educational programs on relevant topics. FSSS manages the campus' International House, an activity center for

inter-cultural events.

Foreign Student and Scholar Services works closely with other service and advising offices on campus to optimize those services and their visibility to foreign students.

Foreign Student and Scholar Services prepares certificates or petitions for the Exchange visitor J-1 visa and advises foreign scholars who need to change or extend their visa status, travel temporarily out of the United States or bring dependents to this country. Finally, the office serves as liaison to federal agencies dealing with foreign student and scholar concerns, such as the US Citizenship and Immigration Service, Department of Labor, Department of State, Internal Revenue Service and Social Security Administration. For more information visit the [Foreign Student and Scholar Services website](#) or contact us at fsss@umontana.edu.

Office of International Programs

The Office of International Programs (OIP) promotes and provides international life-changing experiences and related educational opportunities, serving as a resource that contributes to the culture of a globally-minded community through its several different sections. The OIP is responsible for the recruitment of all international students to UM through a variety of programs including Study Abroad, Partner Programs, English Language Institute, Undergraduate Pathway (UP) Program, and Full Admissions. The OIP works with its partners to receive sponsored international students and administer their programs. The English Language Institute (ELI) department of the OIP serves international students who wish to improve their English language and academic skills in order to pursue studies at UM or another higher education institution. The OIP also offers students the exciting opportunity to study abroad in one of over 50 countries through three different UM sponsored programs: Faculty-Directed Programs, Partner Universities, and International Student Exchange Programs (ISEP). Global Gateway, an innovative educational service portal within the OIP, develops partnerships with the UM campus, local schools, and community organizations that promote cultural awareness and sharing foreign cultures, traditions, and customs. For additional information, visit OIP in the International Center, call (406) 243-2288, email oiip@umontana.edu, or visit the [International Programs website](#).

English Language Institute

UM offers an intensive English program through the English Language Institute. Students are enrolled in 20 hours of class each week. ELI's curriculum addresses the needs of international students whose scores are below UM language requirement scores of 500 ITP/ 61iBT. ELI courses also address the needs of students who want to raise their English language proficiency in order to gain admission to a university or college where English is the language of instruction. Through this program, ELI students can begin their university studies at UM in several ways. They can successfully participate in the ELI/ UM Bridge Program, show their academic readiness through ELI coursework or meet the TOEFL requirements. To find out more visit the [English Language Institute website](#).

Curry Health Center

406-243-2122

Curry Health Center provides affordable, accessible, high quality, student-centered health services to University of Montana students to enhance student learning, promote personal health and development and teach important life skills.

Curry Health Center is YOUR campus based health care center, with services designed to meet the needs of college students and the campus community.

General Information

The Curry Health Fee is paid at registration by students who enroll for seven credits or more (excluding distance only students). Students taking less than seven credits per semester may elect to pay the Health Fee at any time during the semester. The Curry Health Center provides a wide range of primary health care and health promotion services at discounted rates well below what students would generally find in the Missoula community.

Services in Wellness and Student Advocacy Resource Center (SARC) are available to all students. Services in Medical, Counseling and Dental are available only to students who pay the Curry Health Fee.

We recognize the busy nature of student schedules and seek to provide accessibility for both urgent needs and more routine care via appointments or walk-ins. We are happy to coordinate care with providers "back home" or assist with referral to community resources for problems beyond the scope of the Curry Health Center.

Medical Services

406-243-4330

Curry Health Center provides both primary health care services as well as walk-in care services to the University of Montana student population.

- Appointment & Walk-In Care
- Preventive Care
- Injury & Illness
- Women's & Men's Health
- Allergy Shots
- Saturday Clinic
- Lab & X-ray
- Traveler's Health

Counseling

406-243-4711

Counseling provides rapid access and brief therapy for University of Montana students.

- Individual & Groups
- Psychiatry
- Crisis Services

Behavioral Health Options

- Alcohol Classes
 - Out-Patient Counseling
 - Substance Use Counseling

Dental

406-243-5445

Dental care is available to students who have paid the Curry Health Fee. The Dental Clinic's primary focus is on urgent and preventative care. While urgent care is given priority, routine dental care is also provided as time allows. Charges for dental services are set at a substantially lower rate than the private sector.

Services Provided

1. Urgent dental care.
2. Fillings, root canals, simple extractions, crown and bridge procedures (as time permits).
3. Teeth cleaning, periodontal scaling, and oral hygiene instructions.
4. Routine exams and X-rays ('checkups') on a limited basis-one per year.
5. Night guards for TMJ disorders and protection from grinding.

Referrals to specialists or other dentists are provided for students whose dental needs are beyond the scope/capabilities of the clinic, e.g., oral surgery, complex root canals, orthodontics, dentures, etc. Charges incurred at private offices are the student's responsibility.

The Student Insurance plan does **not** cover dental charges.

Wellness

406-243-2809

Wellness at Curry Health Center provides health education and wellness services to students to help them stay safe and healthy, now and in the future.

- Safer Sex Resources
 - Tobacco Quit Kits
 - Personal Health Coaching

- Stress Management
- Peer Educator Training

Student Advocacy Resource Center (SARC)

406-243-5244

24- Hour Crisis 406-243-6559

Our advocates and staff provide support to anyone who has experienced sexual assault, relationship violence, stalking, and discrimination. The goal of our confidential advocacy services is to help ensure client safety and support personal autonomy, worth, dignity and power.

Our services are comprehensive and we actively listen, believe in, assist and support our clients. SARC interns and professional staff provide brief counseling services for students who have experienced sexual assault or relationship violence. Based upon your decisions and choices, we also provide referrals and connections within the justice, medical, and social service systems.

Your communications with SARC are confidential. Law enforcement, University administration, faculty, and/or family members will not be contacted by SARC unless you request us to do so. Additionally, you have the option of being completely anonymous in your interactions with SARC.

Services provided

- Drop-in Support Center and 24-hour Support Line
- Crisis Intervention and Case Management
- Academic, Medical, and Law Enforcement Advocacy
- Individual and Group Counseling

Health Services Pharmacy

406-243-5171

The Health Services Pharmacy, located in the Curry Health Center building, offers students a complete prescription service and accepts many 3rd party insurance plans at very reasonable rates. The pharmacy is operated by the School of Pharmacy in cooperation with Curry Health Center and is used for training pharmacy students under the supervision of registered pharmacists.

Insurance Billing

406-243-2844

Because of your privacy rights and concerns, Curry Health Center will not automatically bill your insurance plan for services received at Curry Health Center. If you would like to file an insurance claim for services received at Curry Health Center, you must request this through the clinic that you received services from. Curry Health Center will provide a "Walkout Statement" to you that you can send to your insurance. Because your insurance company reimburses you directly, you are responsible for paying charges incurred at Curry Health Center, not your insurance company.

Curry Health Center is not a Medicare/Medicaid provider, nor do we accept direct payments from insurance companies.

»University Center

The University Center enriches campus life by providing student-focused opportunities, programs, services, and space.

- The University Center is student-focused. We provide students from diverse backgrounds with the guidance and resources to define and participate in their own learning and development. Student learning, discovery, and engagement are at the core of our work.
- The University Center is committed to providing a broad range of opportunities that enrich the university experience. Through activities, governance, employment, and volunteerism students develop life-long leadership and professional skills.
- The University Center designs programs and activities that appeal to a wide variety of student interests. Our core values – learning, leadership, diversity, and fun – reflect our commitment to

relevant and intentional programs that enhance students' overall educational experience.

- The University Center offers a myriad of convenient services including an art gallery, hi-tech study lounge, game room, theater, conferencing services, shipping and mail center, bank and ATM's, copy center, full-service hair salon, bookstore, market, food court, and campus OneCard.
- The University Center provides an inclusive, clean, well-maintained, and environmentally-conscious space for the campus and greater community to meet, study, and interact.

Visit us online at [University Center website](#).

»Sports and Recreation

Organized sports and recreational activities are an important part of academic and leisure life at the University.

»Intercollegiate Athletics

The University of Montana-Missoula is a Division I member of the National Collegiate Athletic Association, and the Big Sky Conference. The athletic program consists of 14 varsity teams. The men's program includes competition in basketball, cross country, football (Football Championship Subdivision), indoor and outdoor track, and tennis. The women's program offers competition in basketball, cross country, tennis, indoor and outdoor track, volleyball, golf, and soccer. The teams go by the nicknames Griz and Lady Griz. Athletic scholarships are offered in all sports.

»Campus Recreation

The Campus Recreation Department offers a wide variety of services to the students, faculty and staff of The University of Montana. A comprehensive intramural sports program provides opportunities for men's, women's and co-recreational team competition and individual events. An outstanding Fitness Program offers yoga, pilates, strength training and other sports specific conditioning.

Recreational facilities include gymnasiums, weight rooms, and indoor running track, handball and racquetball courts, multipurpose fitness studios, tennis courts, indoor swimming pool, indoor climbing wall, and a golf course. Sports equipment such as balls, bats, gloves, etc. can be checked out for free and other equipment such as volleyball, nets, badminton sets, and horseshoes require a cash deposit.

The Outdoor Program offers services to students, faculty, staff and the general public, supplying information, training, and education about outdoor pursuits and sports. Classes are offered on a non-credit basis for activity credits through the Health and Human Performance Department. The Outdoor Program also organizes outdoor trips and hosts high adventure and educational films and lectures.

»University Golf Course

The University of Montana-Missoula has a picturesque nine/eighteen hole golf course open to students, faculty, and staff, as well as the general public. It is located approximately one-half mile south of the main campus.

The course has a clubhouse restaurant, driving range, putting and chipping green. The pro shop is well-stocked and club and cart rentals are available. Private lessons are offered by appointment with an assortment of rate structures.

»Grizzly Pool

The University of Montana Grizzly Pool is a 7-lane, 25-yard indoor pool. Present programs include: fitness swims, recreational swims, classes for all ages (infant to adult), life guarding and WSI classes, pool rentals, Swim Shop, and competitive skills lessons.

Facilities

»Information Technology

Information Technology (IT) is a campus service organization that provides computing and communication resources in support of the instructional, research, administrative, and public service activities of The University of Montana. IT maintains and operates complex information systems to support the University's administrative activities and offers a variety of technology support services to assist the University in using the resources and services that IT is responsible for providing. The IT organization consists of the following areas: Campus Computing, Network, Directory and Telecommunication Services, Enterprise Information Systems, and Technology Support Services.

IT Technology Support Services serves as the user interface for the IT organization and includes: IT Central, the designated initial point of contact for all user issues; three general access student computer labs; numerous free, non-credit short courses for faculty, staff, and students; multimedia classroom support and audio visual equipment rentals; and support of The University of Montana's public web presence.

Additional information about IT services and facilities may be obtained at the [IT website](#) or by contacting IT Central at 243-HELP (x4357).

»Montana Forest and Conservation Experiment Station

The Montana Forest and Conservation Experiment Station was established by the Montana Legislature in 1937 and is devoted to scientific investigation of natural resource problems. The station serves as a research unit of The Montana University System with the Dean of the College of Forestry and Conservation functioning as station director. The station seeks, through its research; demonstration; and outreach, to enhance public understanding of forestry and conservation and to contribute to responsible management of Montana's natural resources.

»The Shafizadeh Rocky Mountain Center for Wood and Carbohydrate Chemistry

The Center is a research facility in the Department of Chemistry and Biochemistry specializing in development of new chemical products from carbohydrates (monosaccharides to polysaccharide) found in grains and wood. Targeted applications include consumer products and environmentally-safe industrial products such as biodegradable synthetic polymers, pharmaceutical components, and materials for industrial processing.

»Stella Duncan Memorial Research Institute

The Institute was created initially by a bequest from an alumna of the University; her original interest was in the causes and treatment of bronchial asthma. Asthma is intimately associated with immune response, which involves Somatic Hypermutation. Our work focuses on the *in vivo* mechanism of mutagenesis associated with Somatic Hypermutation, in the tumor suppressor gene *p53*, responsible for about half of human cancers, and in other mutable systems. We have recently published a manuscript on this mechanism in the journal, *Carcinogenesis*. Our basic research in this area has led to a deeper understanding of the immune response, which could open the way for new treatments that counteract or modify hypersensitive responses occurring in allergic asthma.

»Institute for Tourism and Recreation Research

The Institute was created by the Montana University System Board of Regents in June 1987 to conduct the travel research authorized by the 1987 Legislature. The Institute is the research arm for Montana's travel and recreation industry; its mission is to conduct research that will strengthen the travel component of the state's economy.

»Wilderness Institute

The Institute seeks to encourage and support teaching, research and outreach programs focusing on wilderness. The Institute administers the Wilderness and Civilization program of interdisciplinary undergraduate education, a program leading to the Wilderness Studies minor (see the School of Forestry).

Student Rights

»Public Safety Report and Alcohol and Drug Guidelines

The health and safety of students, faculty, staff, and visitors are of paramount concern to The University of Montana. Each year the University publishes an annual report outlining on-campus security and safety information and crime statistics. The report provides important information for security awareness and crime prevention programs, emergency procedures and reporting crimes, plus law enforcement and safety services on campus.

Additionally, the booklet contains the University's policy on sexual assault and information about support services for victims of sexual assault. The booklet also includes information about the University's drug and alcohol policy, programs and support services for substance abuse, and risk management guidelines for University-related events.

The booklet is available by writing or calling the Office of Public Safety (406) 342-6131 or the Office of the Vice President for Student Affairs (406) 243-5225, The University of Montana, Missoula, Missoula, MT 59812. The information can also be accessed on the University of Montana [Student Affairs website](#) and the [University of Montana Public Safety website](#).

»Student Complaint Procedures

Under the terms of the Collective Bargaining Agreement between The University of Montana University Faculty Association and The Montana University System, there is a formal procedure for students who have a complaint against a faculty member or an administrator. Information about this procedure is available at [Vice President for Student Affairs student grievance procedure section, PDF](#), on page 113 under 21.000. The ASUM Student Resolution Officer is available to answer questions about procedures and to assist with the process. Time restrictions are important, so students should review procedures immediately if they feel they may have complaints. The Resolution Officer receives voice mail at 243-5431 or email at asum.resolutionoff@mso.umt.edu.

Services

Use the links at the lower left to navigate to pages featuring various University of Montanan services and organizations, detailed information regarding expenses, and more.

Community Services

»Bureau of Business and Economic Research

The Bureau of Business and Economic Research has been providing information about Montana's state and local economies for over 60 years and is proud to be the most comprehensive economic analysis center in the state.

House on the campus of The University of Montana-Missoula, the Bureau is the research and public service branch of the School of Business Administration. On an ongoing basis, the Bureau:

- analyzes local, state, and national economies
- provides annual income, employment and population forecasts
- conducts extensive research on forest products, manufacturing, health care and Montana Kids Count
- designs and conducts comprehensive survey research at its on-site call center
- presents annual economic outlook seminars in cities throughout Montana
- publishes the award-winning Montana Business Quarterly

»Montana Cooperative Wildlife Research Unit

The Unit investigates basic and applied problems in wildlife ecology and management. Graduate students majoring in Wildlife Biology or Biological Sciences, conduct much of the research supported through the Unit by USGS-Biological Resources Division, Montana Fish, Wildlife and Parks, and numerous other agencies and groups.

»Montana Campus Compact

The University of Montana is a member in good standing of The Montana Campus Compact. MTCC is a statewide coalition of college presidents and chancellors committed to renewing the public purposes of higher education by promoting campus-community collaborations and civic engagement activities. Since 1993, these campus leaders have represented two-and four-year, public, private, religiously affiliated, community, and tribal colleges across Montana. MTCC supports and encourages activities such as volunteering, community service, and service-learning through its programs, which include:

- MTCC Campus Corps
- Service-Learning Workshops and Faculty Development
- MTCC VISTA Project
- Compact Service Corps
- Montana Athletes in Service Award
- Careers in the Common Good Scholarships

For more information regarding MTCC member benefits and services, please contact the MTCC headquarters office at (406) 243-5177 or online at the [Montana Campus Compact website](#). For MTCC services at UM, please contact the Office for Civic Engagement at (406) 243-5531 or see their [listing](#) under The Office For Civic Engagement.

»The Office for Civic Engagement

The Office for Civic Engagement (OCE) is honored to serve as The University of Montana's primary agent of community activism and civic responsibility. It is our mission to challenge and improve lives with an ethic of service and community investment. We accomplish this by building partnerships that strengthen both the university community and a variety of nonprofit interests; empowering individuals and organizations to enhance capacity for strategic growth, program exposure, skill development and collaborations; and, enhancing professional, academic, and personal experiences through volunteerism and service learning. The OCE is a unit of the Davidson Honors College and operates as an affiliate of the statewide Montana Campus Compact (MTCC) organization (see separate listing). The OCE is located in the Davidson Honors College, room 015, (406) 243-5531 or the [Office for Civic Engagement website](#).

OCE Programs:

- Student Volunteer Programs - Throughout the school year, OCE coordinates several community service programs for students to get actively involved in the community including Service Saturdays, K-12 Tutor Programs, Alternative Breaks, Adopt-A-Family and more.
- AmeriCorps & AmeriCorps* VISTA - The OCE provides students with the opportunity to engage in national service while attending the University.
- Nonprofit Administration Programs - The OCE facilitates the Minor in Nonprofit Administration and the Nonprofit Leadership Alliance national certificate program in nonprofit administration. Both are degree enhancement programs designed to assist students to achieve skills and abilities in preparation for careers in the nonprofit sector. The OCE also coordinates the Online Professional Certificate Program in Nonprofit Administration, a series of short courses designed for busy professionals who want to hone their skills in specific areas such as grant writing, financial management and fund raising.
- Service Learning - Service learning is an innovative method of teaching and learning in which students, faculty and community partners work together to enhance student learning by applying academic knowledge in a community-based setting. The OCE works with faculty and departments to create meaningful service learning partnerships with community organizations and attain service learning designation status for their courses. Students can search for these courses using the service learning attribute in CyberBear

»Nonprofit Leadership Alliance

The University of Montana is an affiliate of the national Nonprofit Leadership Alliance (NLA). The NLA program at UM is designed to be a degree enhancement certification program that complements a student's major. The program provides students with academic and extra-curricular opportunities to gain skills and abilities in preparation for professional careers in the nonprofit sector. All Nonprofit Leadership Alliance students acquire

knowledge and skills in general nonprofit management, fund-raising principles and practices, board committee development, program planning, and grant writing. Upon completion of the NLA requirements, students receive the Certified Nonprofit Professional credential. The Office for Civic Engagement operates the Nonprofit Leadership Alliance program in addition to the minor in non-profit administration. For more information contact (406) 243-5159 or browse the [Nonprofit Leadership Alliance website](#).

Privacy and Release of Student Education Records (FERPA)

University of Montana Privacy and Release of Student Education Records

The Family Educational Rights and Privacy Act of 1974 (FERPA), as amended, and Montana law, set forth requirements designed to protect the privacy of student educational records. These laws govern access to records maintained by the Montana University System (MUS) and the release of information from those records. A notice to students that explains the rights of students with respect to records maintained by the University of Montana (UM) is provided yearly via the UM Catalog, as well at the beginning of each semester via students' official campus email addresses. It also outlines UM's procedures adopted to comply with these legal requirements. Copies of these laws, including the implementing Federal Regulations pursuant to FERPA, and this notice are available for persons to examine in the Registrar's Office, Emma Lommasson Center, Room 201, 32 Campus Drive, Missoula, MT 59812.

****See 3 January 2012 special notice from the U.S. Department of Education at the bottom of this page.***

Definitions

I. Education Record

A. The meaning of "education record" is, with certain exemptions as listed below, those records, files, documents, and other materials which contain information directly related to a student, and are maintained by any UM employee or agent.. The following categories of information are exempted and are not considered to be "education records:"

- a. Records made by UM personnel which are in the sole possession of the maker and are not accessible or revealed to any other person.
- b. Records maintained by the Office of Public Safety for law enforcement purposes.
- c. Medical and counseling records used solely for treatment.
- d. Records only related to a former student (alumni records). Records of that individual while a student continue to be considered education records.

B. All records pertaining to students which are maintained by UM offices are official UM records, and as such, remain UM property.

C. The UM Registrar's Office maintains a record of requests and disclosures of student record information except when the request is from the student whose records are requested, a UM official with a legitimate educational interest, someone requesting directory information, or related to a request from a third party with prior student consent to release the requested information. Students have the right to review this record of requests and disclosures of student record information.

II. Policy Details

Right to Inspect and Review

Students have the right to inspect and review all of their education records, except the following:

1. Financial records of parents.
2. Confidential letters and statements of recommendation placed in education records prior to January 1, 1975.

3. Confidential letters and statements of recommendations for admission, employment, or honorary recognition placed in education records after January 1, 1975, for which students have waived their right of access.

Waiver of Rights of Access

Students may waive their right of access to confidential letters and statements of recommendation. Even if a student

signs a waiver, upon request, the names of all persons making confidential recommendations will be made available to the student..UM employees or agents may not require a student to waive right of access for receipt of UM benefits or services.

Procedures for Inspection and Review

A. Requests to review records must be made separately, in writing, to each office maintaining records. That office has 45 days to respond to requests to review and inspect. However, arrangements to grant such requests will be made as expeditiously as possible.

B. Information contained in education records will be fully explained and interpreted to students by university personnel assigned to, and designated by, the appropriate office.

C. Students have the right to review only their own records. When a record contains information about more than one student, disclosure cannot include information regarding any other student.

Right to Challenge Information in Records

A. Students have a right to challenge the content of their education records if they consider the information contained therein to be inaccurate, misleading, or inappropriate.

B. This process includes an opportunity for amendment of the records or insertion of written explanations by the student into such records.

C. The right to challenge does not apply to grades unless the grade assigned was inaccurately recorded, under which condition the record will be corrected.

Procedures for Hearing to Challenge Records

A. Students challenging information in their records must submit, in writing, a request for a hearing to the appropriate office maintaining the record, listing the specific information in question and the reasons for the challenge.

B. Hearings will be conducted by a university official with no interest in the outcome of the hearing.

C. Students shall be afforded a full and fair opportunity to present evidence relevant to the reasons for the challenge, as referenced in Section IV above.

D. The hearing officer will render a decision, in writing, noting the reason and summarizing all evidence presented within a reasonable period of time after the challenge is filed.

E. Should the hearing decision favor the student, the record will be amended accordingly. Should the request be denied, an appeal may be made, in writing, and submitted to the UM Registrar within 10 days of the student's notification of the decision of the hearing officer. The appeal shall be heard by an Appeals Board of three disinterested senior university officials and a decision rendered, in writing, within a reasonable period of time.

F. Should the appeal decision favor the student, the record shall be amended accordingly. Should the request be denied, the student may choose to place a statement with the record commenting on the accuracy of the information in the record and/or setting forth any basis for inaccuracy. When disclosed to an authorized party, the record will always include the student's statement and notice of the Board's decision, as long as the student's record is maintained by UM.

Consent for Release Required

Consent must be obtained from a student for the release of information from education records, specifying what is to be released, the reasons for release, and to whom, with a copy of the record sent to the student if he or she desires.

Release Without Consent

A. The requirement for consent does not apply to the following:

1. Requests from UM faculty, staff and agents who have a legitimate education interest on a "need to know" basis, including UM student employees, if necessary to conduct official business as authorized by the Registrar. Legitimate educational interest includes performing a task related to the regular duties of the employee or agent, the student's education, the discipline of a student, a service or benefit for the student, or maintaining safety and security of the campus.
2. Requests in compliance with a lawful subpoena or judicial order.
3. Requests in connection with a student's application for or receipt of financial aid.
4. Requests by state authorities and agencies specifically exempted from the prior consent requirements to the extent permitted by law --organizations conducting studies on behalf of UM, if such studies do not permit the personal identification of students to any persons other than to representatives of such organizations and if the personal identification data is destroyed when no longer needed. **See additional information at the bottom of this page.*
5. Information submitted to accrediting organizations.
6. In the case of emergencies, UM may release information from education records to appropriate persons in connection with an emergency, if the knowledge of such information is necessary to protect the health or safety of a student or other persons.
7. To authorized federal officials who have need to audit and evaluate federally-supported programs. **See additional information at the bottom of this page.*
8. To the extent otherwise permitted by law, the results of any disciplinary proceeding conducted by UM against an alleged perpetrator of a crime of violence to the alleged victim of that crime.
9. Requests for directory information (see item VIII).

B. UM reserves the right to verify the accuracy of any information contained in what purports to be an official university document (e.g. a transcript or diploma) or is provided to a third party. In addition, degrees (any honors, majors, minors and specializations) are treated as directory information as noted in VIII below, since they are conferred in a public ceremony.

Directory Information

A. UM has designated the following information about students as public (directory) information, which may be released to the public subject to B below:

1. Student name
2. Addresses (including campus e-mail address)
3. Telephone number
4. Major field of study
5. Dates of attendance
6. Full-Time/Part-Time Status
7. Date of graduation and degree(s) received
8. School or College
9. Major(s)
10. Class
11. Academic awards or honors
12. Student photograph and video images
13. Electronic Personal Identifier (e.g. NETID)
14. Any other UM student records information students have publicly disclosed about themselves regarding their University of Montana educational activities.

B. Students have the right to have the above directory information withheld from the public if they so desire. Each student who wants all directory information to be withheld (including items to be published in the Student Directory) shall so indicate by completing a *UM Confidentiality Request Form* which can be obtained from the Registrar's Office website. At least three days should be allowed for processing.

C. UM receives many inquiries for directory information from a variety of sources, including friends, parents, relatives, prospective employers, other institutions of higher education, honor societies, licensing agencies, government agencies, and the news media. Each student is advised to carefully consider the consequences of a

decision to withhold directory information. UM, in all good faith, will not release directory information requested to be withheld, and any requests from persons or organizations outside UM will be refused unless the student provides written consent for the release.

D. UM publishes certain student directory information on the web via the UM Online Directory. This public information contains name, email address, and phone number., A student must notify the Registrar's Office pursuant to VIII B above to keep directory information from being made public.

Complaints, Concerns or Suggestions

Students who believe that the institution has not fully honored their privacy rights under FERPA may file a written complaint with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, DC 20202-4605. The Family Policy Compliance Office investigates each timely complaint to determine whether the educational agency or institution has failed to comply with the provisions of FERPA. A timely complaint is defined as an allegation that is submitted within 180 days of the date of the alleged violation or of the date that the complainant knew or reasonably should have known of the alleged violation.

III. Procedure

Type, Location, and Custodian of Student Records

UM does not maintain education records in one central office. Education records are maintained in the respective colleges and schools (including placement offices as applicable), the Graduate School, and the Registrar's Office. Other education records are maintained in the Enrollment Services Office (Admissions) (for newly enrolled students until the sixth week of attendance -- applicants are excluded), Office of The Vice-President for Student Affairs (disciplinary records), Financial Aid Office (financial and related information, student employment), Athletic Department (intercollegiate sports), International Students Office, Office of the Provost/Vice-President for Academic Affairs (academic misconduct) and other offices. Questions regarding individual student records may be addressed to either the UM Registrar or the appropriate office.

Resources

U.S. Department of Education, 1-800-872-5327

[U.S. Department of Education website](#)

Montana Code Annotated (MCA) Title 20, Chapter 25, Part 5.

*FERPA Annual Notice to Reflect Possible Federal and State Data Collection and Use

As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records — including your Social Security Number, grades, or other private information — may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

Organizations

»Alumni Association

The University of Montana Alumni Association, established in 1901 by Eloise Knowles, represents over 85,000 graduates, former students and friends across the world. The mission of the Association, with offices in Brantly Hall, is to "identify and serve the needs of this University, its alumni, students and friends." The Alumni Association sponsors and helps coordinate Homecoming, Charter Day, Distinguished Alumni Awards, Senior Recognition Day, Scholarships, Internships and Commencement Reunions. The Association also co-sponsors with Career Services the Ask-An-Alum program, which connects alumni with currently enrolled students who are exploring career options. Visit the [Alumni website](#) for more information.

»Associated Students of the University of Montana (ASUM)

Associated Students of University of Montana (ASUM) Student Government

The Associated Students of University of Montana is the representative body for students to voice their comments and concerns, create new programs, volunteer on committees and fund student groups on campus. As the voice for UM students, the ASUM Senate meets weekly to discuss important topics affecting students. ASUM offers a great many services to students that have paid the student activity fee. For more information, please contact ASUM at 243-2451, the [ASUM website](#), or stop by the ASUM office at UC 105.

ASUM Child Care Preschool and Family Resources

The ASUM Childcare Preschool and Family Resources operates five Child Care and early education centers. Child Care is available to students, faculty and staff. The centers are open for children 18 months --6 years. The program provides referrals to private residences providing child care for children ages new born to 12 year as well as a variety of family resources. For more information, please contact us at 243-2542, the [ASUM Child Care Preschool and Family Resources website](#), or stop by the Child Care office at UC 119.

ASUM Legal Services

ASUM Legal Services provide limited, low-cost legal services to activity fee paying students at The University of Montana/COT. For more information, please contact us at 243-6213, the [ASUM Legal Services website](#), or stop by ASUM Legal at UC 112.

ASUM Off-Campus Renter Center

The Renter Center provides counseling for student renters experiencing issues with their landlord, encourages positive neighborhood relationships, assists students with finding housing, and advocates for renters. Additionally, the agency maintains the Off-Campus Housing Finder located on the agency website. For more information, please contact us at 243-2017, the [ASUM Off-Campus Renter Center website](#), or stop by the Off-Campus Renter Center at UC 105.

ASUM Transportation

Getting to campus and finding a parking place can be challenging, so why not explore other ways of commuting. The ASUM Office of Transportation has 3 different park n ride shuttles and one late night bus. Service from south/Higgins area is every 5-10 minutes; service from E. Broadway is every 10 minutes and from the Missoula College is every 15-20 minutes. You can park free and take the shuttle free. It gets you close to your destination on campus – closer than if you drive and park. Service starts at 7:25 each day and ends between 6:20 and 7:05 depending on which shuttle you take. Schedules are on line on the [ASUM Transportation website](#) or are available at many places on campus or on the bus. The late night bus runs from 7:05 p.m. until 2:30 a.m. on Thursday, Friday and Saturday and until midnight on Monday, Tuesday and Wednesday.

More options for hassle-free commuting are Mountain Line (free with your Griz card), 2 bike check out programs, or interest free bike loans.

Stop by UC 114 for more information.

KBGA Radio

KBGA College Radio, 89.9 FM, is the student-run, college radio station for The University of Montana. Also available streaming online on the [KBGA Radio website](#), we provide a diverse format of music and talk programming 24 hours a day. We are a non-commercial, educational station, so everyone is welcome to become a DJ. For more information, please contact us at 243-6759, the [KBGA Radio website](#), or stop by the KBGA office at UC 208.

Montana Kaimin

The Montana Kaimin is the University's student-run newspaper. Published since 1899, it has worked hard to serve, entertain and inform students with issues that are important to them. Publication begins the first week of school and is printed Tuesday – Friday during fall and spring semesters. Check us out on our website for more information and past editions. For more information, please contact us at 243-6646, at the [Montana Kaimin website](#), or stop by the Kaimin's office at the Don Anderson Hall 207.

UM Productions

UM Productions is a student-run/student-funded organization whose goal is to bring quality events to The University of Montana and the Missoula community. UM Productions strives to provide students with hands-on experiences and employment opportunities and bring concerts and events that are focused on diversity with a strong dedication to the arts. Check out our website for upcoming events and job opportunities. For more information please contact us at 243-4981, on the [UM Productions website](#), or stop by the office at UC 104.

Student Political Action Office

The Student Political Action office is a resource for students who have a desire to participate in the political process at the local, state and federal levels. Through a student committee, the SPA office works with students through a committee to represent student interests by working with City Council, the State Legislature and the Montana Delegation. For more information, please contact us at 243-2451, the [Student Political Action Committee website](#), or stop by the ASUM office UC 105.

ASUM Student Resolution Officer

The Student Resolution Officer is your representative for handling student complaints against a faculty member or university administrator that cannot be resolved informally. The Student Resolution Office advocates for students in a three-step dispute resolution process. For more information, please contact the Resolution Officer at 243-5431, the [ASUM Student Resolution Officer website](#), or stop by the ASUM office at UC 105.

ASUM Student Clubs and Organizations

ASUM recognizes and offers funding for over 200 student organizations and special interest clubs. Find out about a student group that interests you and the many benefits student groups receive by checking out the [ASUM website](#) or stopping by the ASUM office at UC 105.

»Fraternities and Sororities

The Greek Community of The University of Montana provides a comprehensive educational, social, and living experience for members through the promotion of friendship, leadership, personal development, academics, and services to the University and the Missoula community. The Greek members donate their time and support to over 50 recognized philanthropies. Additionally, they involve themselves in a wide variety of campus leadership organizations, such as Residence Life Staff, PRO's, ASUM Senate, Advocates, Peer Advising, and Mortar Board.

The Greek system has six (6) national fraternities (Sigma Alpha Epsilon, Sigma Chi, Sigma Nu, Kappa Sigma and Sigma Phi Epsilon) and four national sororities (Alpha Phi, Delta Gamma, Kappa Alpha Theta and Kappa Kappa Gamma). Information about Greeks can be obtained in the Office of Greek Life (UC 209B), or by visiting the [greek life website](#), or calling 243-2005.

Peace Corps

Peace Corps service is a life-defining leadership experience. The Peace Corps is a 27-month commitment during which volunteers provide technical assistance in six program areas: education, agriculture, environment, health, youth and community development, business and information and communications technology. Peace Corps volunteers live, learn, and work with a community in one of more than 70 countries overseas.

The Peace Corps Office provides support to students and community members interested in pursuing service with the United States Peace Corps. During walk-in hours and scheduled appointments, Returned Peace Corps Volunteers provide guidance about the application process, as well answer questions about their first-hand experiences living, learning and working with a community overseas. In addition, Peace Corps staff table on-campus and in the community, visit classrooms, and host information sessions, application workshops, and Returned Peace Corps Volunteer panels. For additional information, please visit the Peace Corps Campus Representative at 154 Lommasson Center, call (406) 243-2839, e-mail: peacecorps@umontana.edu or visit the [Peace Corps website](#).

Office for Student Success

The mission of the Office for Student Success (OSS) is to help students successfully transition to college, progress academically and ultimately become graduates of the University of Montana. OSS initiates and leads collaboration with academic departments, state and local organizations and administrative units across campus to define, implement and assess programs that support students academically, financially and socially.

OSS delivers direct support services to students in the form of academic advising, math and writing tutoring, and freshman/sophomore programming. The Undergraduate Advising Center and the Writing Center are administered by the OSS.

Undergraduate Advising Center

The Undergraduate Advising Center is a university service staffed by professional advisors and peer advising assistants committed to helping undergraduate students achieve a successful college experience. The UAC programs guide students as they transition to college, assisting them in clarifying academic goals and exploring majors.

Advisors in the UAC work with both faculty and full-time advisors in each of the Colleges to assist students in making decisions about major areas of study and to ensure smooth transitions to and from majors. Working collaboratively, the full-time advisors of the Center consult with academic departments to provide new and creative opportunities for students to explore majors and careers that align with their abilities, interests, and strengths.

UAC advisors are the advisor of record for first year students who plan to major in Business, Pre-Nursing, Psychology, or Communication Studies and all students who have not yet declared a major.

The Writing Center

The Writing Center administers programs to help undergraduate and graduate students in all disciplines become more independent, versatile, and effective writers, readers, and thinkers. Writing Center tutors engage students in structured discussions about writing, challenging them to develop as writers and thinkers who contribute to local and global conversations. Focused on the development of the writer, tutors help students to recognize their strengths and weaknesses as communicators and to practice strategies appropriate to various writing contexts.

The Writing Center also collaborates with faculty to positively impact student performance. These collaborations include delivery of discipline-specific writing workshops across the curriculum and professional development opportunities such as workshops on how to design writing assignments and how to provide students with

effective feedback on their writing. In an effort to support all writers at the University of Montana, the Writing Center also supports faculty and staff writers by providing one-to-one consultations on their professional writing projects.

Four Bear Four-Year Graduation Plan

The Four Bear Four Year Graduation program is designed for students committed to completing their degree at the University of Montana within four years. Four Bear participants are provided with registration priority after signing the Four Bear contract in the first year. The program pays tuition and mandatory fees past the planned graduation time provided the student has met all of the requirements for continued participation. Pharmacy is an exception to the four-year plan; students are given five or six years to complete this degree.

Most department sections in the catalog include a suggested four-year course of study to complete a major. Four-Bear students must meet with their advisors in order to customize a plan to fit individual circumstances and academic.

Registrar's Office

University of Montana Catalog

Lommasson Center 201

Phone: (406) 243-2995

Fax: (406) 243-4807